"Improving survival in the UK: A stratified approach to Gynaecological Cancers"

PROGRAMME AND BOOK OF ABSTRACTS

BGCS2018

5th–6th July 2018
QEII Conference Centre,
Westminster, London

BRITISH GYNAECOLOGICAL CANCER SOCIETY ANNUAL SCIENTIFIC MEETING

In conjunction with National Cancer Research Institute (NCRI) Gynaecological Cancer Group and NFGON

BRITISH GYNAECOLOGICAL CANCER SOCIETY

NCRI National Cancer Research Institute

NFGON THE NATIONAL FORUM OF GYNAECOLOGICAL ONCOLOGY NURSES

Sharing Evidence
from real world data

Sharing Experience
from current clinical practice

Front-line treatment of advanced ovarian cancer: How Avastin (bevacizumab) Real World Evidence could enhance our current practice?

New Avastin real world evidence: What have we learnt?

Dr. Pauline Wimberger

Director of the Clinic and Polyclinic for Gynaecology and Obstetrics, University Hospital Dresden, Germany.

A case for change: Evolving our clinical practice in light of new data

Dr. Marcia Hall

Consultant in Medical Oncology, Mount Vernon Cancer Centre, UK.

Roche Sponsored Symposium at BGCS 2018

QEII Centre, Westminster 4th Floor, Rutherford Room

Thurs 5th July 2018 13:00 - 14:00

You can also meet us at the Roche booth no.1 in the exhibition area on the 5th & 6th of July 2018. We look forward to welcoming you.

Roche Gynaecological Cancer Team

AVASTIN®
bevacizumab

Prescribing information can be found on the following page.
Roche Products Ltd have organised and funded this promotional symposium, as part of their Platinum Sponsorship of BGCS 2018.

RXUKAVAS00263b | June 2018

PRESCRIBING INFORMATION

Refer to Avastin Summary of Product Characteristics (SmPC) for full prescribing information.

AVASTIN® (bevacizumab) 25mg/ml concentrate for solution for infusion

Indications: Metastatic carcinoma of the colon or rectum (mCRC) in combination with fluoropyrimidine-based chemotherapy. First-line treatment of metastatic breast cancer (mBC) in combination with paclitaxel. First-line treatment of mBC in combination with capecitabine for patients unsuitable for treatment with other chemotherapy options, including taxanes or anthracyclines, and who have not received adjuvant taxane or anthracycline regimens within the last year. First-line treatment of unresectable advanced, metastatic or recurrent non-small cell lung cancer, other than predominantly squamous cell histology, in addition to platinum-based chemotherapy. First-line treatment of advanced and/or metastatic renal cell cancer in combination with interferon alfa-2a. Front-line treatment of advanced (FIGO stages III B, III C and IV) epithelial ovarian, fallopian tube, or primary peritoneal cancer in combination with carboplatin and paclitaxel. Treatment of adult patients with first recurrence of platinum-sensitive epithelial ovarian, fallopian tube or primary peritoneal cancer who have not received prior bevacizumab or other VEGF inhibitors or VEGF receptor-targeted agents, in combination with carboplatin and gemcitabine or in combination with carboplatin and paclitaxel. Treatment of adult patients with platinum-resistant recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer who received no more than two prior chemotherapy regimens and who have not received prior therapy with bevacizumab or other VEGF inhibitors or VEGF receptor–targeted agents, in combination with paclitaxel, topotecan or pegylated liposomal doxorubicin. Treatment of adult patients with persistent, recurrent, or metastatic carcinoma of the cervix in combination with paclitaxel and cisplatin or alternatively, paclitaxel and topotecan in patients who cannot receive platinum therapy.

Dosage and Administration: Single-use vials (25mg/ml bevacizumab) as 100mg/4ml or 400mg/16ml. Physicians experienced in antineoplastic medicines should supervise administration. *Recommended dose*; *Colorectal cancer*: 5mg/kg or 10mg/kg every 2 weeks or 7.5mg/kg or 15mg/kg every 3 weeks, until disease progression. *Breast cancer*: 10mg/kg every 2 weeks or 15mg/kg every 3 weeks, until disease progression. *Lung cancer*: 7.5mg/kg or 15mg/kg every 3 weeks in addition to platinum-based chemotherapy for up to 6 cycles, then as monotherapy until disease progression. *Renal cell cancer*: 10mg/kg every 2 weeks, until disease progression. *Ovarian cancer, front-line*: 15mg/kg every 3 weeks in addition to carboplatin and paclitaxel chemotherapy for up to 6 cycles, then as monotherapy until disease progression or for a maximum of 15 months. *Ovarian cancer, platinum-sensitive recurrent disease*: 15mg/kg every 3 weeks in addition to carboplatin and gemcitabine for 6-10 cycles or carboplatin and paclitaxel for 6-8 cycles, then as monotherapy until disease progression. *Ovarian cancer, platinum-resistant recurrent disease*: 10mg/kg every 2 weeks in addition to paclitaxel, topotecan (given weekly) or pegylated liposomal doxorubicin or 15mg/kg every 3 weeks with topotecan (given on days 1-5, every 3 weeks) until disease progression. *Cervical cancer*: 15 mg/kg every 3 weeks in combination with paclitaxel and cisplatin or paclitaxel and topotecan until disease progression.
Administration times; initial dose: 90 minute IV infusion; *second dose*: 60 minute IV infusion if initial dose well tolerated; *subsequent doses*: 30 minute IV infusion if second dose well tolerated. Do not administer as IV push or bolus or mix with glucose. Dose reduction for adverse reactions not recommended. If indicated, discontinue or temporarily suspend therapy. Not approved in patients under the age of 18 years. No dose adjustment in the elderly.

Contraindications: Hypersensitivity to bevacizumab, Chinese Hamster Ovary cell products, recombinant human or humanised antibodies or any excipients. Pregnancy.

Precautions: To improve traceability, trade name and batch number of administered product should be clearly recorded in patient file. *Gastrointestinal (GI) and gall bladder perforation*: intra-abdominal inflammatory process may cause increased risk in metastatic colorectal cancer patients; permanently discontinue in patients developing GI perforation. Patients treated for cervical cancer are at increased risk of fistulae between the vagina and the GI tract. Prior radiation is a major risk factor for the development of GI-vaginal fistulae. *Fistulae*: permanently discontinue in tracheo-esophageal fistula or any Grade 4 fistula, consider discontinuation in non-GI fistula. *Wound healing*: do not initiate for at least 28 days following major surgery or until surgical wound has healed; withhold for elective surgery. Rarely necrotising fasciitis, usually secondary to wound healing complications, GI perforation or fistula formation; discontinue Avastin and promptly initiate treatment. *Hypertension*: control pre-existing hypertension prior to initiation; diuretics not recommended for hypertension control with cisplatin; monitor blood pressure during therapy and treat as per SmPC; permanently discontinue if medically significant hypertension remains uncontrolled or for hypertensive crisis/encephalopathy. *Posterior Reversible Encephalopathy Syndrome (PRES)*: should PRES develop, confirm by imaging, treat symptoms and discontinue Avastin; PRES signs include: seizures, headache, altered mental status, visual disturbance or cortical blindness with/without associated hypertension. *Proteinuria*: test prior to and monitor during treatment; permanently discontinue if Grade 4 proteinuria develops (nephrotic syndrome). *Arterial thromboembolism* including cerebrovascular accidents, transient ischaemic attacks and myocardial infarctions, especially if prior history, diabetes or elderly: permanently discontinue if arterial thromboembolic reactions develop. *Venous thromboembolism* including pulmonary embolism: discontinue in Grade 4 thromboembolic reactions and monitor where Grade ≤ 3. Risk may increase in combination with paclitaxel and cisplatin. *Haemorrhage, especially tumour-associated haemorrhage*: discontinue permanently if Grade 3/4; caution in patients with congenital bleeding diathesis, acquired coagulopathy or during anticoagulant therapy. *Patients with CNS metastases*: monitor and discontinue treatment if intracranial bleeding occurs. *Serious/fatal pulmonary haemorrhage/haemoptysis in non-small cell lung cancer*: do not use where recent significant pulmonary haemorrhage/haemoptysis (> 2.5ml of red blood). *Congestive Heart Failure (CHF)*: caution in patients with clinically significant cardiovascular disease or pre-existing CHF. *Neutropenia*: fatal infection with or without severe neutropenia in combination with myelotoxic chemotherapy. *Hypersensitivity reactions/infusion reactions:* close observation recommended during and following bevacizumab administration; if a reaction occurs, discontinue infusion and administer appropriate medical therapies; systematic premedication not warranted. *Osteonecrosis of the jaw (ONJ)*: has been reported; consider dental examination and preventive dentistry before starting Avastin; caution when Avastin and bisphosphonates are administered simultaneously or sequentially, avoid invasive dental procedures if possible. Non-mandibular osteonecrosis has been observed in paediatric patients. *Ovarian failure:* may occur; consider fertility preservation strategies in women of child-bearing potential.

Drug Interactions: Risk of microangiopathic haemolytic anaemia when combined with sunitinib malate (50mg daily). Reversible on discontinuation of both agents. Infection with or without severe neutropenia (including some fatalities), mainly with platinum or taxane-based therapies for metastatic or recurrent non-small cell lung cancer and mBC. Safety and efficacy with concomitant radiotherapy not established. EGFR monoclonal antibodies should not be administered in combination with Avastin in mCRC; risk of decreased efficacy and increased toxicity.

Fertility, Pregnancy and Lactation: Women of childbearing potential must use effective contraception during treatment and for 6 months after last dose. Foetal abnormalities observed with Avastin alone or with known embryotoxic chemotherapeutics. Discontinue breast-feeding during treatment and for 6 months after last dose.

Adverse Reactions: For full listings please refer to the Avastin SmPC. Avastin may exacerbate adverse reactions commonly seen with chemotherapy. *Denotes reactions that have been associated with fatal outcomes. *Very common adverse reactions:* febrile neutropenia, leucopenia, neutropenia*, thrombocytopenia, anorexia, hypomagnesaemia, hyponatraemia, peripheral sensory neuropathy, dysarthria, headache, dysgeusia, eye disorder, lacrimation increased, hypertension, venous thromboembolism*, dyspnoea, rhinitis, epistaxis, cough, rectal haemorrhage, stomatitis, constipation, diarrhoea, nausea, vomiting, abdominal pain, wound healing complications*, exfoliative dermatitis, dry skin, skin discolouration, arthralgia, myalgia, proteinuria, ovarian failure, asthenia, fatigue, pyrexia, pain, mucosal inflammation, weight decreased. *Common adverse reactions*: sepsis, abscess, cellulitis, infection, urinary tract infection, anaemia, lymphopenia, hypersensitivity, infusion reactions, dehydration, cerebrovascular accident, syncope, somnolence, CHF, supraventricular tachycardia, arterial thromboembolism*, haemorrhage, deep vein thrombosis, pulmonary haemorrhage*/haemoptysis*, pulmonary embolism, hypoxia, dysphonia, GI perforation*, intestinal perforation*, ileus, intestinal obstruction, recto-vaginal fistulae, GI disorder, proctalgia, palmar-plantar erythrodysaesthesia syndrome, fistula, muscular weakness, back pain, pelvic pain, lethargy. *Selected rare/very rare adverse events:* necrotising fasciitis*, hypertensive encephalopathy*. *Selected adverse events of unknown frequency:* renal thrombotic microangiopathy, pulmonary hypertension, nasal septum perforation, GI ulcer, gallbladder perforation. Any of the above may become serious. *The most serious adverse reactions were*: GI perforations, haemorrhage including pulmonary haemorrhage/haemoptysis (which is more common in non-small cell lung cancer patients), arterial thromboembolism. *Elderly:* increased risk of arterial thromboembolic events; Grade 3-4 leucopenia and thrombocytopenia; and all Grade neutropenia, diarrhoea, nausea, headache, fatigue. A higher incidence of hypertension, alopecia, mucosal inflammation, peripheral sensory neuropathy and proteinuria was also observed in clinical trials. Laboratory abnormalities – refer to SmPC.

Legal Category: POM

Presentation and Basic NHS Cost: Pack of one 100mg vial: £242.66. Pack of one 400mg vial: £924.40. Excluding VAT

Marketing Authorisation Numbers: 100mg/4ml: EU/1/04/300/001; 400mg/16ml: EU/1/04/300/002

Marketing Authorisation Holder: Roche Registration Limited, 6 Falcon Way, Shire Park, Welwyn Garden City, AL7 1TW, United Kingdom. Registered in England No. 3028626

Avastin is a registered trade mark

Date of Preparation: May 2017

RXUKMEDI00221(1)

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product.

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard.

Adverse events should also be reported to Roche Products Ltd. Please contact Roche Drug Safety Centre by emailing welwyn.uk_dsc@roche.com or calling +44(0)1707 367554.

As Avastin is a biological medicine and should be prescribed by both nonproprietary and brand name. The brand name and batch number of the dispensed product should be recorded on the patient's prescription, case record and other appropriate clinical systems.

Roche Products Ltd have organised and funded this promotional symposium, as part of their Platinum Sponsorship of BGCS 2018.

RXUKAVAS00263b | June 2018

Contents

Welcome,

On behalf of the Organising and Scientific Committee, we want to welcome you all the 2018 British Gynaecological Cancer Society Conference.

Our primary aim for the conference this year is to highlight areas where the Gynae-oncology MDT can work towards achieving a stratified approach to gynaecological cancer management throughout the UK, with the ultimate goal of improving survival outcomes for patients.

This conference is all about working cohesively; academic centres and district general hospitals, sponsors and charities. We want all attendees to leave the conference feeling like they have gained the information and inspiration they need to advance practice and evolve the clinical landscape. By providing the tools for open dialogue and a platform for contributions from all delegates we can move forward into a new phase of treatment and care. Please make sure to download our conference app where you can engage with each other and use the conference social wall to share your highlight of the conference on the exhibition media screens.

We also want to actively encourage you all to engage with our exhibitors and sponsors at the conference; their support is invaluable and without them, meetings like this wouldn't be possible.

We have taken a number of steps this year to ensure that the conference in incredibly forward thinking, both with regards to the exhibitions and the scientific programme. With discussion on novel therapeutics, innovative procedures and data from studies conducted across the UK, we hope that you all leave this conference with the knowledge and motivation to work towards advancing gynaecological oncology.

Mr Tim Mould
University College
Hospitals London

Dr Rebecca Kristeleit
Cancer Institute
University College London

In collaboration with:

NCRI National Cancer Research Institute
Partners in cancer research

NFGON THE NATIONAL FORUM OF GYNAECOLOGICAL ONCOLOGY NURSES

Conference Organisers:

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ISO.

Scientific Programme

BGCS 2018 – Thursday 5th July

Time	Session	Location
7:30-9:30	Registration	
8:20-9:20	The Evolution of Surgical Staging Endometrial Cancer Image Guided Precision Surgery with Enhanced Pathology *Meeting sponsored by Stryker*	Rutherford
8:20-9:20	Cervical Cancer Control in the UK now and in the future *Meeting sponsored by MSD*	Wesley
9:30-9:40	Welcome and introduction *Mr Tim Mould and Dr Rebecca Kristeleit*	Mountbatten
9:40-11:00	**Surgical cancer techniques**	Mountbatten
9:40-10:00	Advanced surgical procedures for recurrent cancer *Prof David Cibula, Charles University Hospital, Prague*	
10:00-10:20	Should sentinel node procedures be used in every case of endometrial cancer? *Dr Pernille Jensen, University of Southern Denmark*	
10:20-10:40	Continent vs incontinent urinary diversion techniques *Dr Nadeem Abu-Rustum, Memorial Sloan Kettering*	
10:40-11:00	Surgical treatment of early cervical cancer – minimal access or open? *Dr Christina Fotopoulou, Imperial College Healthcare, London*	
11:00-11:30	Coffee break	
11:30-13:00	**Treating relapsed disease**	Mountbatten
11:30-11:50	Complete surgical resection in relapsed disease: Insights from desktop 3 *Dr Andreas Du Bois, Kliniken Essen-Mitte Essen, Germany*	
11:50-12:10	Why do ovarian cancers relapse? *Dr James Brenton, Cancer Research UK Cambridge Institute*	
12:10-12:30	Treatment of relapsed ovarian cancer *Dr Rosalind Glasspool, University of Glasgow*	
12:30-12:50	Genetic mutations guiding treatment *Prof Chris Lord, Institute of Cancer Research*	
12:50-13:00	Panel Discussion	

BGCS 2018 – Thursday 5th July

Time	Session	Location
13:00-14:10	Lunch and poster viewing	Exhibition
13:05-14:05	Front-line treatment of advanced ovarian cancer; How Avastin (bevacizumab) Real World Evidence could enhance our current practice? *Meeting sponsored by Roche*	Rutherford
14:10-15:10	**NCRI session**	Mountbatten
	Update on ICON8 and other portfolio trials *Prof Iain McNeish, Imperial College London*	
	Ovarian cancer in the NCRI CSG *Dr Rosalind Glasspool, University of Glasgow*	
	Cervical and vulval cancer in the NCRI CSG *Dr Emma Hudson, Velindre Cancer Centre*	
	Endometrial cancer in the NCRI CSG *Prof Richard Edmondson, The University of Manchester*	
15:10-15:30		Mountbatten
	A randomised study for sentinel nodes in cervical cancer *Dr Fabrice Lécuru, Chirurgie Cancérologique Gynécologique et du Sein*	
14:10-15:45	**PARALLEL SESSION: Unit Leads**	Rutherford
14:10-14:30	Histopathology of borderline tumours *Dr Naveena Singh, Barts Health NHS Trust, London*	
14:30-14:50	Surgical management of borderline tumours *Prof Omer Devaja, Maidstone and Tunbridge Wells NHSFT*	
14:50-15:10	Tubal cancer screening *Mr Adam Rosenthal, University College London Hospital*	
15:10-15:30	Uterine transplant in endometrial cancer *Mr Richard Smith, Imperial College Healthcare NHS Trust, London*	
15:30-15:45	Results of a BGCS Cancer Unit Lead Clinician Survey *Mr Partha Sengupta, University Hospital of North Durham*	
15:30-16:00	Coffee break and poster viewing	Exhibition
16:00-17:10	**Tumours with poor response to standard systemic therapies**	Mountbatten
16:00-16:20	Targeting HPV in gynaecological cancers *Dr Rowan Miller, University College London Hospital*	
16:20-16:40	Metastatic granulosa cell tumours *Prof Isabelle Ray-Coquard, CLCC Léon Bérard, France*	
16:40-17:10	Low grade ovarian cancer – clinical and molecular aspects *Dr Douglas Levine, NYU Langone Medical Center*	
17:15-18:15	British Gynaecological Cancer Society AGM	Mountbatten
End of day 1		
19:00-00:00	Conference dinner (tickets must be booked in advance)	

Scientific Programme

BGCS 2018 – Friday 6th July

Time	Session	Location
7:30-8:50	Registration	
8:15-9:15	Retroperitoneal anatomy and presentation of complex surgical cases *Meeting sponsored by Medtronic*	Burns
8:15-9:15	How to integrate PARP inhibitor maintenance treatment into clinical practice *Meeting sponsored by Tesaro*	Wesley
9:15-10:35	**New opportunities for therapies**	Mountbatten
9:15-9:35	Micro satellite instability – practical applications in treatment *Dr Yvette Drew, Northern Institute of Cancer Research, Newcastle*	
9:35-9:55	Should HIPEC be part of standard care in the UK? *Dr Ranjit Manchanda, Barts Health NHS Trust*	
9:55-10:15	DNA damage modulators and radiosensitisation *Prof Anthony Chalmers, University of Glasgow*	
10:15-10:35	Combining PARP and anti-angiogenesis in gynaecological cancers *Dr Isabelle Ray-Coquard, CLCC Léon Bérard, France*	
10:35-11:10	Coffee break and poster viewing	Exhibition
11:10-12:20	**Proffered papers**	Mountbatten
11:10-11:20	Taking the uncertainty out of surgery: the Advanced Ovarian Cancer Pathway (AOCP) – *Presentation by Christine Ang, Northern Gynaecological Oncology Centre*	
11:20-11:30	Exploring the role of DUSP1 inhibition in chemo-resistant ovarian carcinoma cell lines – *Presentation by Giulia Falgari, University of Surrey*	
11:30-11:40	Improving the sensitivity for non-invasive diagnosis of high-grade serous ovarian cancer – *Presentation by Elizabeth Moore, Addenbrookes Hospital*	
11:40-11:50	Natural Killer (NK) cells augment activity of oncolytic adenovirus in ovarian cancer via NK receptor DNAM-1 *Presentation by Elaine Leung, University of Glasgow*	
11:50-12:00	Dietary Management of inoperable bowel obstruction in patients with advanced ovarian , primary peritoneal and fallopian tube carcinoma *Presentation by Agnieszka Michael, Royal Surrey County Hospital*	
12:00-12:10	Advanced Stage (IIIC/IV) Endometrial Cancer: The role of cytoreduction and determinants of survival *Presentation by Savithri Rajkumar, Guy's and St Thomas's Hospital*	
12:10-12:20	Human Factors within Gynaecology Oncology: Evaluation of a BGCS commission course *Presentation by Anna Collins, University Hospitals Leicester*	
12:20-13:40	Lunch and poster viewing	Exhibition

BGCS 2018 – Friday 6th July

Time	Session	Location
12:40-13:30	What's your perspective on PARP inhibitors? Meeting sponsored by AstraZeneca	Rutherford
13:40-15:00	**Prevention of malignancy**	Mountbatten
13:40-14:00	Aspirin for cancer prevention *Prof Ruth Langley, MRC Clinical Trials Unit at University College London*	
14:00-14:20	STIC and telomeres *Dr Naveena Singh, Barts Health NHS Trust, London*	
14:20-14:40	Extended genetic testing and GYN cancer risk *Dr Zoe Kemp, The Royal Marsden Hospital, London*	
14:40-15:00	Early detection of tubo-ovarian cancer – novel strategies *Prof Martin Widschwendter, University College London*	
15:00-15:20	Coffee break	Exhibition
15.20-16:00	Breaking News Session – SGO, ASCO, ESMO Highlights from ASCO 2018 Data from the LACC study Survey of attitudes to surgery in early cervical cancer *Prof Jonathan Ledermann, University College London Hospital and Dr Christina Fotopoulou, Imperial College Healthcare, London*	Mountbatten
16:00-16.40	**Final Thoughts**	Mountbatten
16:00-16:20	"The Danish Model" - Improving cancer survival in Denmark *Dr Lene Lundvall, Copenhagen University Hospital*	
16:20-16:40	Discrepancy of care across the UK *Prof Sean Kehoe, University College Birmingham*	
16:40-17:00	Presentation of prizes Mr Andy Nordin, BGCS President	Mountbatten
Close of conference		

SCCOHT Symposium, Wesley Room

BGCS 2018 – Thursday 5th July

Time	Session
09:30-09:45	Registration
09.45-10.00	Pre-session networking
10.00-11.45	**Opening of the Small Cell Ovarian Cancer Hypercalcemic Type Symposium (SCCOHT)**
10:00-10:15	Welcome and introduction to the Small Cell Ovarian Cancer Hypercalcemic Type Symposium (SCCOHT) Dr Marc Tischkowitz, University of Cambridge
10:15-10:45	Pathological Aspects of SCCOHT Prof Glenn McCluggage, Belfast Health and Social Care Trust
10:45-11:15	Unexpected role for Immuno-oncology in SCCOHT Dr Douglas Levine, NYU Langone Medical Center
11:15-11:45	Coffee break
11:45-13:15	**Part 2 of the SCCOHT Symposium**
11:45-12:15	Uncovering druggable vulnerabilities of SCCOHT through functional genetics Dr Sidong Huang, McGill University, Canada
12:15-12:45	De-BAFling the role of SMARCA4 mutations in SCCOHT development and the potential for therapeutic interventions Prof Bernard Weissman, University of North Carolina at Chapel Hill, USA
12:45-13:15	Solving the genetics of SCCOHT Prof William Foulkes, McGill University Health Centre, Canada
13.15-13.45	Interviews with the speakers
13:45-14:45	Lunch
14:45-15:45	Closed doors meeting
End of session	

NFGON Symposium, Rutherford Room

BGCS 2018 – Friday 6th July

Time	Session
09:00-09:30	Registration
09:30-09:40	Welcome to the NFGON Symposium *Helen Manderville, President NFGON and Gynaecology Oncology Clinical Nurse Specialist, Gateshead Health NHS Foundation Trust*
09.40-10.10	Sex and survivorship after gynaecological cancer *Julia Pugh, Macmillan Clinical Nurse Specialist* *Christie NHS Foundation Trust*
10.10-10.40	Health and Well Being Events *Anuska Randolph-Stevens, Macmillan Support Worker and PhD Researcher in Health Psychology* *The Royal Marsden NHS Foundation Trust and University of Surrey*
10.40-11.00	Coffee
11.00-11.30	Patient initiated follow-up in gynaecological oncology *Nafisa Patel, Gynaecology Oncology Clinical Nurse Specialist, University Hospitals of Leicester*
11.30-12.00	Using co-production to improve pre and post-operative care for women undergoing radical vulval surgery *Julie Dodds, Macmillan Support Nurse, Gateshead Health NHS Foundation Trust*
12.00-12.40	"Share your experiences" *Interactive Around the country Discussions*
End of symposium	

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Relationships are vital to the success of our business, and we are committed to being a trusted partner to the UK cancer community

TOGETHER WE CAN MAKE A DIFFERENCE

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General Information

Catering

Breakfast and lunch will be provided on both days of the conference as well as refreshments throughout the day. Food will also be provided at all sponsored breakfast and lunch time meetings.

Conference App

Download the conference app from App Store or Play Store. Download the AttendeeHub app and then search for BGCS 2018

Please log in and verify your account using your name and email address

Conference Dinner

Thursday 5th July, 19:00 – 00:00

Cinnamon Kitchen and Anise Bar,
9 Devonshire Square, London EC2M 4YL

The conference dinner will include a drinks reception with canapes and a three-course dinner. You are required to have purchased tickets in advance. If you would like to purchase a ticket please enquire at the reception desk

Certificates of Attendance

In order to receive a Certificate of Attendance, please ensure you complete the on-line delegate survey that is sent to you at the end of the conference. Alternatively please complete the survey found on the conference app.

Cloakrooms

Cloakrooms are located on the ground floor of the conference centre. Please ask at the conference reception or main venue reception for directions.

Exhibition

Please make sure to visit our exhibition area where you are able to engage with sponsors exhibitors and all delegates

Thursday 5th June: 9:00 – 18:00
Friday 6th July: 09:00 – 16:30

Insurance

The Conference Organisers cannot accept liability for personal injuries or for loss or damage to property belonging to delegates, either during, or as a result of the meeting.

Registration

All delegates are required to register for the conference. You will receive a delegate badge and all relevant materials for the conference upon your arrival

Social Media

Stay connected whilst at BGCS. You will be able to add your twitter account on the by logging into your app profile and adding your social media accounts.

#BGCS2018

Social Wall

We want to encourage you all to join in on the social feed by posting your pictures and highlights from the conference. Simply select the activity feed on the app and getting posting. All content will be displayed on the media walls within the exhibition hall.

Floor Plan

4th Floor – Sponsored meetings and parallel sessions

G
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6

passenger lifts
AV control room
toilets
goods lift
fire exit
pillar

Floor Plan

5th Floor – Exhibition area

G
1
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6

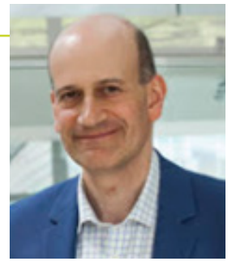
passenger lifts
AV control room
toilets
goods lift
fire exit
pillar

Floor Plan

6th Floor – Main Plenary

Invited Speakers

Mr Adam Rosenthal



Consultant Gynaecologist and Gynaecological Oncologist, University College London Hospitals NHS Foundation Trust

Adam has been a Consultant at UCLH since 2014 where he leads the Trust's cervical screening program. He is also a member of the Familial Cancer Clinic team, providing risk-reducing surgery to women at high risk of gynaecological cancer. He is clinical lead on the UK Familial Ovarian Cancer Screening Study (UKFOCSS) and PI on the Avoiding Late Diagnosis in Ovarian Cancer (ALDO) project.

He is also a medical advisor to The Eve Appeal and Ovacome and has been the Gynaecological Oncology representative on the UK Cancer Genetics Group Steering committee. He has published extensively on ovarian cancer screening and the molecular biology of gynaecological cancer in journals including the Lancet and the Journal of Clinical Oncology.

Mr Alistair CJ Windsor

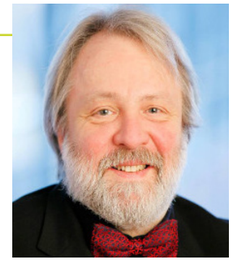
Consultant Colorectal Surgeon, University College London Hospitals NHS Foundation Trust

Alastair Windsor trained at St Mary's Hospital in London. Having spent three years working in sepsis and organ failure research at the Medical College of Virginia, USA, he returned as Lecturer and then Senior Lecturer and Honorary Consultant Surgeon to the Academic Surgical Unit at St James' University Hospital, Leeds. A continued research and clinical interest in sepsis and nutrition provided an opportunity to join the staff at St Mark's Hospital in London as colorectal surgeon and surgeon to the intestinal failure unit.

He has now moved to join the staff as Consultant Surgeon to University College Hospital London, and Honorary Senior Lecturer at the University College London. Since moving from St Mark's he has retained an expertise and busy tertiary referral practice focused on the management of the surgical abdominal catastrophe, which includes to a large extent the management of enterocutaneous fistulae, open abdomens and complex inflammatory bowel disease. With the emerging subspecialty of Abdominal Wall Reconstruction, he has also developed a national referral practice for the management of complex abdominal wall hernias.

In addition, in 2016 he organised the first international abdominal wall conference, in Europe 'AWR Europe', a successful three-day meeting dedicated to the global management of abdominal wall defects. As an active member of the BSG, ECCO, a founder member of Surgical ECCO he has been involved in development of both UK and European guidelines on the management of IBD. He has over one hundred and twenty publications and book chapters, and remains a committed surgical trainer. His research now focuses on improved abdominal wall reconstruction techniques, surgical outcomes and enhanced surgical recovery.

Prof. Andreas du Bois



Consultant Gynaecologist and Professor of Gynaecological Oncology, Kliniken Essen Mitte

Andreas du Bois, MD, PhD, is the director of the Department of Gynecology & Gynecologic Oncology at the Kliniken Essen Mitte(KEM) in Essen, Germany. He was born 1956, was married and is a widower since 2014, he has 3 children and currently 7 grandchildren.

Professor du Bois received his medical degree from the Albert Ludwigs University of Freiburg Faculty of Medicine in 1987, performed his residency and registered as a fellow in Gynaecology & Obstetrics in 1993. He completed his habilitation and was awarded *venia legendi* in Gynaecology from the University of Freiburg in 1997. Additionally, he was awarded *venia legendi* in Gynaecology from the University of Mainz in 2002.

Prior to assuming his current appointment at the KEM in 2010, for 11 years Dr du Bois was the chair of the Department of Gynecology and Gynecologic Oncology at the Horst Schmidt Klinik (HSK) in Wiesbaden, Germany.

Professor du Bois is a member of many medical societies, including the European Society of Gynecologic Oncology (ESGO), the International Society of Gynecologic Cancer (ISGC), the American Society of Clinical Oncology (ASCO), and the German Cancer Society (DKG). He served as officer / council member in ESGO and Gynecologic Cancer Intergroup (GCIG) and was chair of the 3rd International Ovarian Cancer Consensus Conference (2004). He is co-founder and past-president of the European Network of Gynecologic Oncology Trial groups (ENGOT) and founder and one of the chairpersons of AGO Study Group (formerly AGO-OVAR). He was the chair and/or initiator of many of the pivotal trials of the AGO in ovarian cancer among them the trials defining carboplatin-paclitaxel as frontline standard regimen, carboplatin-gemcitabine as 2ndline standard regimen, and almost all of the large surgical trials (LION on lymphadenectomy, ROBOT on borderline tumors, and the DESKTOP I-III series evaluating surgery for recurrent ovarian cancer).

Professor du Bois has authored more than 450 scientific articles, reviews, and book chapters. Status January 2018 he had more than 16,000 citations and an h-index of 58. He served as editor / member of the editorial board in the past and/or present of Journal of Clinical Oncology, Gynecologic Oncology, International Journal of Gynecological Cancer, and others.

Professor du Bois was awarded the Young Investigator Award of the Multinational Association of Supportive Care in Cancer (1995), the Arthur Walpole Prize of the German Cancer Society (2006), the Ernst-Wertheim-Prizes of the Austrian Gynecological Oncology Society (2006), the Quality of Life Research Award funded by Elli-Lilly (2006), and the MDAnderson Madrid lifetime award (2016). In 2016 he was appointed Adjunct Professor University Vienna, *Honorary Clinical Professor* at the Centre for Experimental Cancer Medicine Queen Mary University of London, and was appointed *Honorary Doctor (Dr. h.c.)* of the Faculty of Medicine at Lund University in Sweden.

Prof. Andrzej Komorowski

Associate Professor of Surgery, Maria-Sklodowska-Curie Institute of Oncology

Professor Komorowski graduated from Jagiellonian University School of Medicine, Cracow, Poland in 1997, trained in General Surgery and Surgical Oncology in the Second Department of Surgery of Jagiellonian University and in the Maria Sklodowska-Curie Memorial Cancer Centre in Cracow. He trained in Liver Surgery in Chang Gung Memorial Hospital in Kaohsiung, Taiwan.

From 2006 to 2013, he was a Consultant in General Surgery in Seville, Jerez de la Frontera and Sanlucar de Barrameda in Spain. Professor Komorowski is currently Deputy Head of the Department of Surgical Oncology in the Maria Sklodowska-Curie Memorial Cancer Centre in Cracow, Poland. He is also author of the textbook “Laparoscopic surgery. Substantial ergonomy”.

Prof. Anthony J Chalmers

Chair and Professor of Clinical Oncology, University of Glasgow

Prof. Anthony Chalmers is Chair of Clinical Oncology at the University of Glasgow. In addition to his neuro-oncology clinical practice he runs the Translational Radiation Biology laboratory in the Institute for Cancer Sciences and is Chief Investigator of a series of early phase clinical trials in glioblastoma. His research aims to improve outcomes for cancer patients by combining radiotherapy with molecular targeted drugs.

He is Chair of CTRad, founder of the UK Radiotherapy-Drug Combinations Consortium (RaDCom) and a Scientific Committee member of the European Association for Neuro-Oncology (EANO) and the European Society for Radiation Oncology (ESTRO).

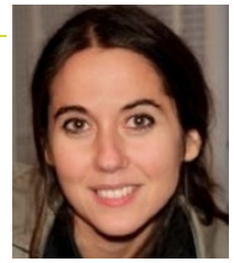
Prof. Chris Lord

Team Leader of CRUK Gene Function Laboratory and Reader in Cancer Genomics and Therapeutics, The Institute of Cancer Research

Professor Lord completed his D.Phil., working on complex disease genetics at the Wellcome Trust Centre for Human Genetics, University of Oxford. Chris carried out post-doctoral work at the CIMR, University of Cambridge, and with Alan Ashworth at the ICR, London, before becoming a principle investigator at the ICR.

Applying concepts such as synthetic lethality and non-oncogene addiction provide one route to identifying novel approaches to treating cancer. PARP inhibitors have provided the first clinical demonstration of synthetic lethality. Identifying, understanding and exploiting PARP inhibitor and other synthetic lethal effects remains the focus of Prof. Lord’s work. This work includes efforts to identify the molecular features that predict response to therapy, identifying drug combination strategies that can maximise efficacy and understanding how drug resistance emerges.

Prof. Christina Fotopoulou



Consultant Gynaecological Oncologist, Imperial College Healthcare Trust

Professor Christina Fotopoulou trained in obstetrics and gynaecology and subspecialised in gynaecological oncology at Charité University Hospital of Berlin in the surgical and systemic treatment of women with advanced gynaecological malignancies. She is since 2013, a Consultant Gynaecological Oncologist in the Imperial College London Healthcare Trust in Queen Charlotte's Hospital in London, and is a Principle Investigator of the Ovarian Cancer Action Research Centre, UK. She also holds a chair at the Charité University of Berlin.

She has been the Vice Director of the Clinic for Gynaecology at the Charité in Berlin, one of the largest reference and accredited centres for gynaecological cancer in Europe, as well as the Principal Coordinator of the European Competence Center for Ovarian Cancer.

Her principal area of expertise lies in exenterative procedures for advanced forms of pelvic malignancies, in the cytoreductive procedures for primary or relapsed ovarian cancer and the investigation of predictive and prognostic biomarkers of surgical and clinical outcomes. Her further area of focus is bioengineering and implementation of novel bioengineering methods in cytoreductive surgery for advanced ovarian cancer.

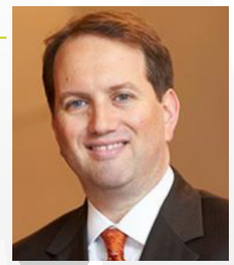
She is the lead of the guidelines group of the British Gynaecological Cancer Society, member of the QA Committee for Ovarian Cancer surgery of ESGO and member of the German AGO-Ovarian Cancer Steering Group and Guidelines. She is on the editorial board and reviewer of numerous international gynaecological and oncological journals and is a member of various international oncological committees, including BGCS, ASCO, ESGO, IGCS, ESMO, ENGOT, AGO, SGO and NOGGO.

Dr David Cibula

Professor at Charles University Hospital, Department of Obstetrics and Gynaecology

Prof. David Cibula is based at Charles University in Prague. He was president of the European Society of Gynaecological Oncology (ESGO) from 2015-2017. His publishing history of over 300 papers encompasses many topics, including cancer epigenetics, ovarian cancer, endometrial cancer, and guidelines for cervical cancer management. He has also been involved in clinical trials for various treatments in ovarian cancer.

Dr Douglas A Levine

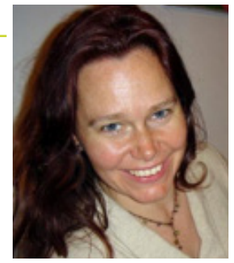


Consultant Gynaecological Oncologist, New York University Langone Health

Douglas A. Levine is Director of the Gynecologic Oncology Division at Perlmutter Cancer Center of New York University Langone Health in New York City. He received his M.D. from Mount Sinai School of Medicine and completed his residency at Mount Sinai Medical Center and a fellowship at Memorial Sloan Kettering. In addition to his clinical practice, Dr. Levine is the current Head of the Gynecology Research Laboratory, where he studies cancer prevention, precision medicine, and rare tumors with unmet needs.

He serves as the translational scientist on many national clinical trials determining what genomic alterations are associated with response to targeted therapies. He discovered universal mutations in SMARCA4 that drive small cell carcinoma of the ovary, hypercalcemic type. Dr. Levine has an outstanding level of expertise and leadership in ovarian and endometrial cancer research and a deep commitment to women's health.

Dr Emma Hudson



Consultant Clinical Oncologist at the Velindre Cancer Centre, Cardiff

Dr Emma Hudson is a Consultant Clinical Oncologist at the Velindre Cancer Centre, where she specialises in gynaecological oncology. In addition to this, Dr Hudson is a member of the NCRI Gynaecological CSG, and is currently the Chair of the Cervix and Vulva subgroup.

Her recent publications include co-authorship of a paper on the findings from a Phase II trial on the use of cediranib combined with carboplatin and paclitaxel in the treatment of metastatic or recurrent cervical cancer.

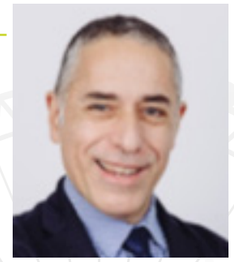
Dr Fernando Lapuente

Consultant Gynaecological Surgeon, MD Anderson Cancer Center.

Dr Lapuente is a leading expert in General Surgery, who has accumulated many years of experience practicing in different hospitals and private centers in Madrid. After more than 20 years practicing professionally, he has specialised in Gynaecological Surgery, sub-specialising in Gynaecological Oncology, peritoneal carcinomatosis and laparoscopy.

Dr Lapuente completed his undergraduate studies (Bachelor of Medicine and Surgery) at The Autonomous University of Madrid in 1986. He then specialised in General Surgery and Gastroenterology in 1992, followed by a Doctor of Medicine qualification from the San Pablo CEU University in 2017. Dr Lapuente is currently a Consultant Gynaecological Surgeon at the MD Anderson Cancer Center, and an Associate Professor of Surgical Pathology in the Faculty of Medicine at the San Pablo CEU University.

Dr Fabrice Lecuru

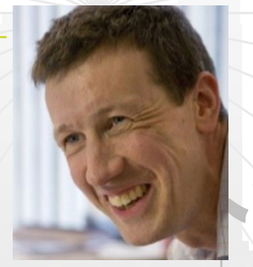


Head of Department (Gynecologic and Breast Oncologic Surgery) Georges Pompidou European Hospital, Paris

Dr Lecuru is the Head of the Gynaecologic and Breast Oncologic Surgery Department at Georges Pompidou European Hospital in Paris.

He completed his residency at Lille II School of Medicine in 1991 and Fellowship at Necker School of Medicine in 1996. Dr Lecuru is a Primary Investigator in the SENTICOL I and SENTICOL III studies and is currently a member of ASCO, Society of Gynaecologic Oncoloft, GINECO Group and ESMO. He is also a member of the administrative council for the French Society of Gynaecologic Oncology and French Society of Pelvic Surgery.

Prof. Iain McNeish



Professor of Oncology and Head of the Division of Cancer, Imperial College London

Iain McNeish is Professor of Oncology and Head of the Division of Cancer at Imperial College London within the Department of Surgery and Cancer. He is also the Director of the Ovarian Cancer Action Research Centre and Cancer theme lead in the Imperial NIHR Biomedical Research Centre (BRC). Externally, he is Chair of the NCRI Gynaecological CSG. His research focuses on ovarian cancer, specifically developing improved therapies through improved understanding of disease biology.

Prof. Isabelle Ray-Coquard

Professor of Medical Oncology, Centre Leon Bérard

Prof. Ray-Coquard obtained her medical degree in 1997 specializing in oncology. In 2003 she received her PhD from the Université Claude Bernard for her research on the factors that determine medical practices in oncology. She also received Master's degrees in medical economy in 1996 and in statistics in 1995. From 2008 to 2013, she has served as Chairman of the gynaecologic group for clinical trials of the French National Cancer Institute (INCA) and she is currently the Network Director of the national observatory dedicated to rare ovarian cancer (www.ovaire-rare.org), a network funded by the INCA commission and dedicated to the management of all rare ovarian cancer.

At the Groupe d'investigateurs national evaluation des cancers de l'ovaire (GINECO), she has been active in the translational research advisory committee, the scientific committee, and as a chairman of endometrial cancer subgroup and the rare tumors committee. Since 2002, she is also developing translational research dedicated to ovarian cancer with the INSERM within the CRCL directed by A Puisieux within the CLB campus, and more directly with the research Team 11 of CRCL. Since 2009, she is the chairman of the rare cancer working group from GCIG (gynaecological cancer intergroup) dedicated to clinical trials in the field of all gynaecological cancers.

She is an active member of a number of professional groups, including the American Society of Clinical Oncology, the American Association for Cancer Research, the Connective Tissue Oncology Society, the French Society of Cancer, the European Association of Cancer Research, the EORTC organisation and the European Society of Medical Oncology.

Dr James D Brenton

Consultant Medical Oncologist and Senior Group Leader, Cancer Research UK

James D. Brenton is a medical oncologist and senior group leader at the Cancer Research UK (CR-UK) Cambridge Institute, University of Cambridge. He leads the Functional Genomics of Ovarian Cancer Laboratory and is joint lead for the CR-UK Cambridge Cancer Ovarian Cancer programme. He trained in medical oncology at the Royal Marsden Hospital, Princess Margaret Hospital, Toronto and the Department of Oncology, University of Cambridge. His PhD work was carried out at the Wellcome Trust/Cancer Research UK Gurdon Institute of Cancer and Developmental Biology and he was a Cancer Research UK Senior Clinical Research Fellow from 2001–2006 at the Hutchison/MRC Research Centre. He was elected as a Fellow of the European Academy of Cancer Sciences in 2015.

His research focuses on the identification of predictive genomic biomarkers for therapy in ovarian cancer and identifying mechanisms of drug resistance. His group was the first to show that mutations in the TP53 gene are ubiquitous in the commonest form of ovarian cancer and he has used this discovery to develop personalized circulating tumour DNA assays to measure treatment response in ovarian cancer and to understand intratumoural heterogeneity in ovarian cancer.

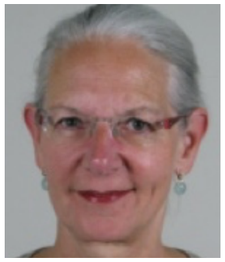
He is a founding member of the international Ovarian Tumor Tissue Analysis (OTTA) Consortium and is a member of the SGCTG Protocol Review Committee and the CR-UK Clinical Fellows Mentor Panel. He is the Cancer lead for the East of England NHS Genomic Medicine Centre and the ovarian cancer domain for the Genomics England Clinical Interpretation Partnership.

Prof. Jonathan Ledermann

Professor of Medical Oncology and Director of Cancer Research, University College London Cancer Institute

Jonathan Ledermann joined UCL and UCL Hospitals in 1990. He is Professor of Medical Oncology in the UCL Cancer Institute and Director of Cancer Research UK and UCL Cancer Trials Centre. He is an Honorary Consultant in Medical Oncology UCL Hospitals. He trained in Internal Medicine and Medical Oncology in London and in Toronto, Canada. He specialises in Gynaecological Cancer treatment and research and has led many national and international clinical trials. He has held many leadership positions in National and International Research Organisations and is currently chair of the Rare Tumour Group in the Gynaecological Cancer InterGroup, chair of the non-surgical subgroup of the British Gynaecological Cancer Society and on the Council of the European Society for Gynecologic Oncology. He was formerly a member of the EMA Specialist Advisory Committee for Oncology and chair of the ESMO Gynaecological Cancer Educational Faculty. He is a member of the NHS England Chemotherapy Reference Group and is on the Editorial Board of several cancer journals. He has published widely on his research and given lectures at many international meetings

Dr Lene Lundvall



Consultant and Head of Department at Department of Gynaecology at The Juliane Marie Centre, Rigshospitalet, Copenhagen University Hospital

Dr Lene Lunvall is a consultant and Head of Department at the Department of Gynaecology at The Juliane Marie Centre, Rigshospitalet, Copenhagen University Hospital. She teaches gynaecology, gynaecological oncology and advanced surgery at the University of Copenhagen. Her research interests include gynaecological oncology with an emphasis on tumour markers, and she has published papers on clinical trials in ovarian and cervical cancer.

She has been member of the board of directors for the Danish Multidisciplinary Cancer Group (DMCG) since 2010, and the leader of the Danish Gynaecological Cancer Group (DGCG) since 2009.

Prof. Martin Widschwendter

Head of the UCL Department of Women's Cancer and UCLH Consultant Gynaecological Oncology Surgeon, University College London

Prof Martin Widschwendter MD, FRCOG is Head of the UCL Department of Women's Cancer and UCLH Consultant Gynaecological Oncology Surgeon at University College London

In 2001, having completed his Ob/Gyn-training in Austria, Martin worked at the Norris Comprehensive Cancer Centre, LA, USA and spent three years as lead clinician of a large breast centre before embarking on a career at UCL/UCLH from 2005 where he undertook sub-speciality training in gynaecological oncology. He has established a research centre focusing on early detection, risk prediction and prevention of breast and gynaecological cancers and is PI for EpiFemCare, FORECEE and BRCA UNITE and recently received an ERC Advanced Grant to study cell non-autonomous factors in BRCA carriers. Martin has authored >170 papers, been quoted >12,400 times and his H-Index is 54.

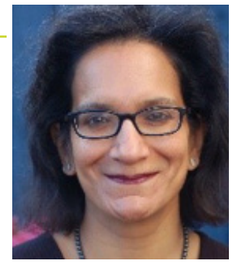
Dr Nadeem R Abu-Rustum

Chief of Gynaecological Oncology, Memorial Sloan Kettering Cancer Centre

Nadeem R. Abu-Rustum, M.D. is the Chief of the Gynecologic Oncology Service in the Department of Surgery at Memorial Sloan Kettering Cancer Center in New York. He is the Avon Chair in Gynecologic Oncology and Professor at Weill Cornell Medical College and is the Vice-Chair for Technology Development at Memorial Sloan Kettering Cancer Center.

He completed his Residency in Obstetrics and Gynecology at the Greater Baltimore Medical Center in Baltimore Maryland and a Fellowship in Gynecologic Oncology at Memorial Sloan Kettering Cancer Center. He has authored or co-authored more than 200 publications and is co-author to numerous book chapters and three textbooks in gynecologic oncology. He is in full-time practice of gynecologic oncology at Memorial Sloan Kettering Cancer Center in New York.

Dr Naveena Singh



Consultant Pathologist, Barts Health NHS Trust

Dr Naveena Singh is a Consultant Pathologist at Barts Health NHS Trust in London, and an Honorary Clinical Reader at Queen Mary University of London. She is the current President of the British Association of Gynaecological Pathologists. Her teaching and research interests focus on improving accuracy in all areas of gynaecological histopathology reporting. She has co-authored RCPath datasets, and is the co-series editor of a textbook series Essentials of Diagnostic Gynecological Pathology. She is an invited participant of the current ESGO-ESMO ovarian cancer guideline consensus group. Her evidence-based criteria for primary site assignment and chemotherapy response scoring in tubo-ovarian high-grade serous carcinoma, are incorporated into international guidelines.

Prof. Omer Devaja

Consultant Gynaecological Oncology Surgeon, Maidstone and Tunbridge Wells Healthcare NHS Trust

Professor Devaja is a Consultant Gynaecological Oncology Surgeon at Maidstone and Tunbridge Wells Healthcare NHS Trust

He completed his training in Obstetrics and Gynaecology in the South East region and did his sub-specialisation in Gynaecological Oncology in St Thomas' Hospital. He completed his PhD in the molecular biology of ovarian and endometrial carcinoma at St Thomas' Hospital and the Imperial Cancer Research Fund (ICRF) in 2000.

Professor Devaja is a British Society of Colposcopy and Cervical Pathology (BSCCP) accredited colposcopist. He has a keen interest in laparoscopic surgery and completed a visiting fellowship in Laparoscopic Surgery at the University Hospital Quebec Canada. His research interests include the development of laparoscopic surgical techniques, and sentinel node detection in vulval and cervical carcinoma endometrial carcinoma.

Dr Partha Sengupta

Consultant in Gynaecology and Obstetrics, Lead Clinician for Gynaecological Cancer and Colposcopy, County Durham and Darlington NHS Foundation Trust

Dr Partha is a Consultant Gynaecologist and Obstetrician, and Lead Gynaecological Cancer Clinician at the University Hospital of North Durham.

He has an MSc from the University of Surrey in Advanced Gynaecological Endoscopy, is a BSCCP accredited colposcopist, and works in various gynaecological surgical disciplines, vulval disease and gynaecological research. He was a collaborator in the ROCkeTS Study Group which worked to validate new risk scores in women with symptoms of suspected ovarian cancer.

Prof. Pernille Tine Jensen

Professor of Gynaecology and Obstetrics, Syddansk Universitet

Certified sub-specialized in Gynecological Cancer Surgery with 10 years' experience in advanced ovarian-, cervical,- and endometrial cancer surgery. Recruited to Odense University Hospital in 2011 to start a robotic gynecological cancer program; today leading the greatest gynecological cancer robotic center in Denmark. The center operates all early stage endometrial and cervical cancer by robotic assisted laparoscopy besides performing staging procedures in borderline and early stage ovarian cancer.

Leader of a Robotic Frontline research program with 6 PhD students investigating clinical and translational aspects of robotic surgery: e.g. sentinel node mapping in cervical and endometrial cancer, costs related to robotic implementation, musculoskeletal pain after minimally invasive surgery besides image integration, skill simulation, lymph drain models and automatic execution of surgical tasks.

Dr Ranjit Manchanda

Consultant Gynaecological Oncologist and Clinical Senior Lecturer, Barts Health NHS Trust

Ranjit Manchanda is a Clinical Senior Lecturer at Barts Cancer Institute, QMUL, and Consultant Gynaecological Oncologist at Barts/Royal London Hospital, UK. Ranjit's research interests are focused around population-based germline testing and precision medicine approaches for risk prediction, stratification, as well as targeted screening/cancer prevention and related health economics issues.

He is the research lead and PI on the PROMISE-Pilot, GCaPPS, PROTECTOR and SIGNPOST studies. His clinical interests include ovarian cancer debulking surgery, complex laparoscopic surgery and management of familial gynaecological cancers. He is a member of the IGCS Education Steering Committee and BGCS International Subcommittee. He has served as the President of the ENYGO as well as a member of the ESGO Council (2011-2013).

Dr Rebecca Kristeleit

Consultant Medical Oncologist and Clinical Senior Lecturer, University College London Hospitals NHS Foundation Trust

Dr Rebecca Kristeleit is a Clinical Senior Lecturer at University College London and Consultant Medical Oncologist at UCLH. She is currently the Chair of the BGCS Scientific Committee and a member of the NCRI endometrial cancer subgroup.

Her main research area of interest are early phase trials and translational research in solid tumours with a focus on gynaecological malignancies. She received an ECMC award for her involvement in translation projects and is also PI on a number of ongoing clinical trials the TRIOC trial studying TroVax in ovarian cancer.

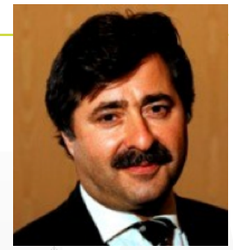
Prof Richard Edmondson

Professor of Gynaecological Oncology, University of Manchester

Richard Edmondson is Professor of Gynaecological Oncology at the University of Manchester. He undertook his medical training at the University of Newcastle before going on to complete his surgical training in New Zealand and at Queen Elizabeth Hospital in Gateshead.

His research focusses on using ex vivo models of ovarian cancer to develop predictive tools to help identify patients who will respond to both novel and conventional chemotherapy agents. In addition, he leads a programme in Manchester to develop the infrastructure needed to deliver advanced therapeutics including adoptive T cell therapy with the aim of making these novel therapies available to UK patients.

Mr Richard Smith



Consultant Gynaecologist, Imperial College Healthcare

Mr Richard Smith is a Consultant Gynaecologist at Imperial College Healthcare NHS Trust. He trained as a doctor in Glasgow and in London, obtaining his MRCOG in 1988 and graduating with an MD from the University of Glasgow on cervical cancer, immunity and infection in 1992. Thereafter, he worked as lecturer and senior lecturer at Charing Cross and Westminster Medical School. He then became Director of Gynaecology at Chelsea and Westminster Hospital and became visiting associate professor at NYU Medical Centre in New York. Subsequently, he was made an adjunct associate professor at NYU Medical Centre. He has a long running interest in doctor / patient communication and is the series editor for a series of books entitled Patient Pictures which has sold 240,000 copies. He is also editor of the Atlas of Gynaecological Oncological surgery which is now in its second edition. He has written a number of other books and also has 50 peer review publications.

Mr Smith's current research interests include fertility sparing surgery for women with cancer and he is also the leader of the UK uterine transplantation research team.

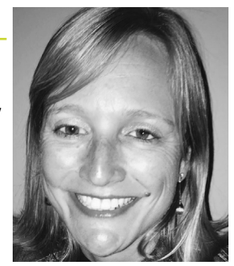
Dr Rosalind Glasspool

Consultant Medical Oncologist and NRS Senior Fellow, Beatson West of Scotland Cancer Centre

Ros Glasspool is a consultant medical oncologist and NRS senior fellow at the Beatson West of Scotland Cancer Centre in Glasgow and honorary clinical senior lecturer at Glasgow University. She is chair of the NCRI ovarian cancer clinical studies sub-group, ovarian cancer trial co-ordinator for the Scottish Gynaecological Cancer Trials Group (SGCTG), co-chair of the European Network of Gynaecological Trials (ENGOT) phase I/II group and a member of the rare tumour group and chair of the GCIG meta-analysis group.

She was an undergraduate in Oxford and London and moved to Glasgow for specialist oncology training which included a Cancer Research UK PhD fellowship. She took up a consultant post at the Beatson in 2006 where she combines clinical work with clinical research investigating novel therapies in ovarian cancer.

Dr Rowan Miller



Consultant Medical Oncologist, University College London

Dr Rowan Miller is a Consultant Medical Oncologist specializing in gynae-oncology and early phase clinical trials at University College London and St Bartholomew's Hospitals. Her research interests include novel therapies for gynaecological cancer and utilising genomics and biomarkers to guide therapy in patients, particularly in early-phase clinical trials.

Dr Miller completed her undergraduate training at the University of Oxford and clinical training at Guy's and St Thomas' Hospitals, London. She trained in Medical Oncology at University College London and was subsequently awarded a Cancer Research UK Fellowship and attained a PhD from the Institute of Cancer Research. Following her PhD, Dr Miller completed a fellowship at Dana Farber Cancer Institute, Harvard University.

Dr Miller is involved in a number of clinical trials and basic science research projects across the two academic centres and is a member of the ESMO Personalized Medicine and Translational Research Committee.

Prof. Ruth Langley

Consultant Medical Oncologist, University College London Hospitals NHS Foundation Trust

Ruth Langley is a medical oncologist with a particular interest in the design and management of oncology clinical trials. She has worked in a number of tumour areas including colorectal, lung and gastro-oesophageal cancer coordinating a series of trials and associated translational studies. She has also led the investigation of the use of transdermal oestrogen as a treatment for prostate cancer.

A major focus of her recent work has been the development of an international trial to assess the effect of aspirin as an adjuvant agent in several common solid tumours (Add-Aspirin). She has an honorary clinical consultant contract at the Brighton and Sussex University Hospital.

Prof. Sean Kehoe

Lawson-Tait Professor of Gynaecological Cancer, Sandwell and West Birmingham Hospitals NHS Trust

Professor Kehoe is a Lawson Tait Professor of Gynaecological Cancer at the University of Birmingham. He is also a Senior Research Fellow at St Peters College Oxford and a member of various committees including the FIGO Cancer Committee, RCOG and the IDEAL Collaboration Oxford. He also holds the role of Chair of Chair of Gynaecological Cancer for the National Cancer Registry and Analysis Service, Public Health England.

His research interests include gynaecological cancers, clinical trials and evidence-based medicine.

Mr Tim Mould

Consultant Gynaecological Oncologist, University College London Hospitals

Consultant Gynaecological Oncologist at University College London Hospitals since 2000. Honorary Senior Lecturer at UCL with over 30 peer review publications, 10 chapters and a text book on cancer surgery. C.I. for the STATEC multicentre international trial investigating lymph node surgery in endometrial cancer.

He led the North London Gynaecological Cancer Network from 2001 to 2008, and was Gynaecological Pathway Director for London Cancer between 2012 and 2017. Divisional Clinical director for Women's Health at UCLH from 2009 to 2012 and Lead for Colposcopy at UCLH 2009 to 2015.

Council member for BGCS for a number of years from 2011, chair of the BGCS annual conference committee 2012 and 2018.

Dr Yvette Drew

Consultant Medical Oncologist and Senior Lecturer, The Newcastle upon Tyne Hospitals NHS Foundation Trust

Dr Drew was appointed to the post of Senior Lecturer and Honorary Consultant in Medical Oncology in 2014. She undertook specialist medical oncology training at the Beatson West of Scotland Cancer Centre, Glasgow and the Northern Centre for Cancer Care, Newcastle. This included completion of a CRUK-funded PhD fellowship investigating the role of PARP inhibitors in Homologous Recombination deficient ovarian cancer in 2010. Her current post is split between systemic management of gynaecological cancers and the development of novel therapies through early phase clinical trials.

Dr Drew is Deputy Lead for the Newcastle Experimental Cancer Medicines Centre for early phase clinical trials delivery and an associate member of both the NCRI Ovarian and Endometrial clinical studies sub-groups. Research interests are the targeting DNA repair pathways as treatment for cancer and she has played a key role in both the preclinical and clinical development of PARP inhibitors.

Dr Zoe Kemp

Consultant in Oncogenetics and Clinical Research Lead for Cancer Genetics, The Royal Marsden NHS Foundation Trust

Dr Zoe Kemp is a Consultant in Oncogenetics and Clinical Research Lead for Cancer Genetics at the Royal Marsden.

She completed specialist training in Medical Oncology at University College London and a PhD in Genetics at the London Research Institute (CRUK).

Her twin interests of oncology and genetic predisposition to cancer led her to the Royal Marsden where she works both in the Cancer Genetics and Breast Units. Here she seeks to increase patient access to testing for cancer predisposition genes including through the Mainstreaming Cancer Genetics model, and to use this knowledge to inform cancer treatment.

Sponsored Symposia

Thursday 5th July 08:20 – 09:20
Breakfast will be provided ahead of the meeting

Styrker-Novadaq Breakfast Meeting

The Evolution of Surgical Staging Endometrial Cancer Image Guided Precision Surgery with Enhanced Pathology

Presentation by: Dr Nadeem Abu-Rustum
Chief, Gynecology Service; Vice Chair for Technology Development, Department of Surgery; Avon Chair in Gynecologic Oncology Memorial Sloane Kettering

Thursday 5th July 08:20 – 09:20
Breakfast will be provided ahead of the meeting

MSD Breakfast Meeting

Cervical Cancer Control in the UK now and in the future

Presentation by: Professor Peter Sasieni
Deputy Director of the Centre for Cancer Prevention at Queen Mary University of London

Thursday 5th July 13:05 – 14:05
Lunch will be provided within the room

Roche Lunch Symposium

Front-line treatment of advanced ovarian cancer; How Avastin (bevacizumab) Real World Evidence could enhance our current practice?

New Avastin real world evidence: What have we learnt
Dr. Pauline Wimberger
Director of the Clinic and Polyclinic for Gynaecology and Obstetrics, University Hospital Dresden, Germany

A case for change: Evolving our clinical practice in light of new data
Dr. Marcia Hall, Consultant in Medical Oncology, Mount Vernon Cancer Centre, UK.

Friday 6th July 08:15 – 09:15
Breakfast will be provided ahead of the meeting

Medtronic Breakfast Meeting

Retroperitoneal anatomy and presentation of complex surgical cases

Mr Ali Kucukmetin
Consultant Gynaecologist, Queen Elizabeth Hospital Gateshead

Friday 6th July 08:15 – 09:15
Breakfast will be provided ahead of the meeting

Tesaro Breakfast Meeting

How to integrate PARP inhibitor maintenance treatment into clinical practice

Review of current clinical evidence on maintenance treatment with PARP inhibitors in the UK Who to treat, when to treat and how to treat with a PARP inhibitor
Dr Susana Banerjee, Consultant Medical Oncologist, The Royal Marsden NHS Foundation Trust

How to integrate PARP inhibitor maintenance into clinical practice - a multidisciplinary approach
Emily Davies, Clinical Nurse Specialist, The Royal Marsden NHS Foundation Trust

Friday 6th July 12:40 – 13:40
Lunch will be provided within the room

AstraZeneca and MSD Promotional Lunchtime Symposium

What's your perspective on PARP inhibitors? An interactive discussion on the practicalities of ovarian cancer treatment in 2018

Panel: Prof. Richard Edmondson, Dr Jonathan Krell, Prof. Iain McNeish, Ms Lynn Buckley
Welcome and introductions
Prof. Richard Edmondson, Clinical Professor in Gynaecological Oncology, The University of Manchester

Transforming treatment of ovarian cancer: evolution of therapies in the past 5 years
Dr Jonathan Krell, Consultant Medical Oncologist, Imperial College Healthcare NHS Trust

See me, treat me, maintain me: selecting patients for PARP inhibitor treatment in 2018
Prof. Iain McNeish, Consultant Medical Oncologist, Imperial College Healthcare NHS Trust

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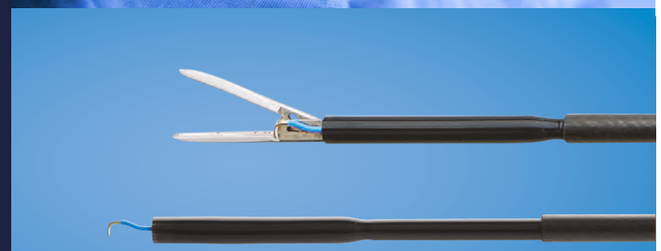

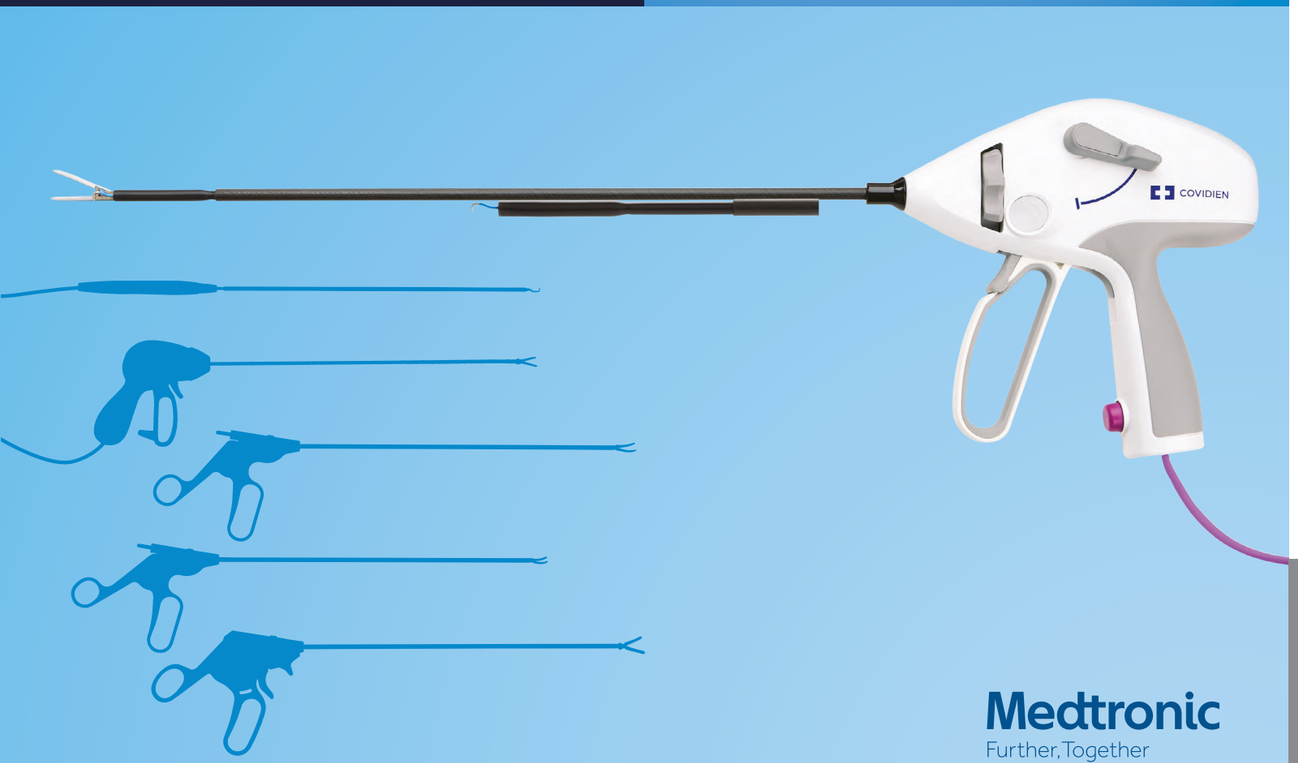

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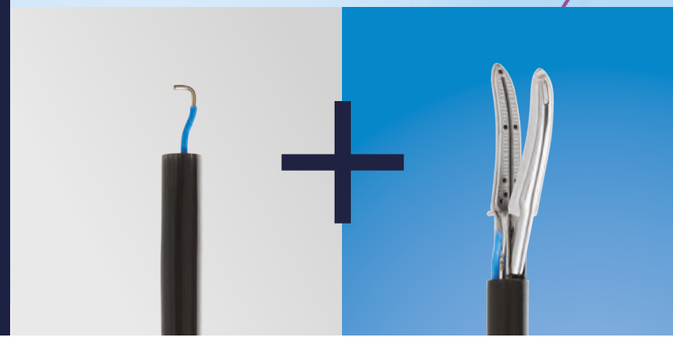

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1. Based on internal test report #RE00041188, Independent surgeon feedback collected during cadaver and porcine labs. October 2015 and February 2016.
2. Tebala GD. Three-port laparoscopic cholecystectomy by harmonic dissection without cystic duct and artery clipping. Am J Surg. 2006;191(5):718-720.
3. Based on internal test report #RE000032739, Independent surgeon feedback collected during cadaver and porcine lab. February 2016.
4. Based on internal test report #R0064457 Rev C, Verification report – LigaSure™ renal bench burst pressure evaluation of the Valleylab™ FT10.
5. Based on internal test report #R0043562 Rev B, Verification report – Emerald generator burst pressure evaluation on fresh renal and pulmonary arteries.

† 17 out of 17 surgeons evaluated agreed.

‡ 29 out of 29 surgeons evaluated agreed.

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Contact: Sejal Varu, Sejal.Varu@astrazeneca.com

Address: Capability Green, Luton, LU1 3LU

Website: https://www.astrazeneca.co.uk

AstraZeneca is a global, science-led biopharmaceutical business, with a deep-rooted heritage in oncology, that works to advance cancer treatment and patient care through innovative research and drug development; focussing on the four main scientific platforms of immuno-oncology, the genetic drivers of cancer and resistance, DNA damage repair and antibody drug conjugates.

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Contact: Karen Reynolds, medinfo.uk@roche.com

Address: Hexagon Place, 6 Falcon Way, Welwyn Garden City, Herts, AL7 1TW, UK

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Contact: Colin Simpson, Colin.simpson@medtronic.com

Address: 8 Hatters Lane, Watford, WD18 8WW

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Contact: Jack Worts, jack.worts@merck.com

For more than a century, MSD, a leading global biopharmaceutical company, has been inventing for life, bringing forward medicines and vaccines for many of the world's most challenging diseases. MSD is a trade name of Merck & Co., Inc., with headquarters in Kenilworth, N.J., U.S.A. Through our prescription medicines, vaccines, biologic therapies and animal health products, we work with customers and operate in more than 140 countries to deliver innovative health solutions. We also demonstrate our commitment to increasing access to health care through far-reaching policies, programs and partnerships. Today, MSD continues to be at the forefront of research to advance the prevention and treatment of diseases that threaten people and communities around the world - including cancer, cardio-metabolic diseases, emerging animal diseases, Alzheimer's disease and infectious diseases including HIV and Ebola. For more information, visitwww.msd.com and connect with us on Twitter, LinkedIn and YouTube.

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Contact: Ben Greaves, ben.greaves@stryker.com

Stryker are extremely proud Gold sponsors of the BGCS. We share collective purpose to help improve standards, promote training and to encourage the sharing of best practice within minimal access gynaecological surgery.

In recent years SLN detection has formed a critical part of accurately staging gynaecological malignancy. Bilateral (optimal) mapping is vital to accurately stage the disease state. Data shows fluorescence imaging using ICG technology has excellent optimal mapping detection rates. Applications include cervical, endometrial and vulva cancers. Since Stryker's acquisition of Novadaq in 2017, we are delighted to be able to offer the market leading ICG technology solution, used in gynaecological SLN detection.

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We very much look forward to meeting you at this year's BGCS symposium. We encourage you to visit our exhibition stand, to experience the Stryker / Novadaq Fluorescence Imaging capabilities.

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Contact: contact-ukinor@tesarobio.com

Address: TESARO UK LIMITED, 1 Chalfont Park, Gerrards Cross, SL9 0BG

TESARO is a biopharmaceutical company devoted to providing transformative therapies to people facing cancer. We strive to accelerate progress by responsibly developing innovative cancer treatments in areas of unmet need, putting patients at the heart of everything we do.

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Website: https://www.intuitivesurgical.com

Address: Intuitive Surgical Ltd, 16-18 Station Road Chapeltown, Sheffield S35 2XH,

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Welcome to ConMed; a worldwide organisation specialising in the development and supply of high quality surgical products for enhanced patient care.

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Clovis Oncology

Address: 3-4 Devonshire Street, London

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IGEA Medical

Contact: Jennifer Moser, j.moser@igeamedical.com

Address: Suites 1 and 2 Parkhill Business Annex, Walton Road, Wetherby, West Yorkshire, LS22 5D2

Website: www.igeamedical.co.uk

For over 12 years, through a commitment to research and innovation, IGEA has partnered with leading scientific institutions across Europe and developed an innovative approach to treating cutaneous and sub-cutaneous tumours (cancers affecting the skin and below the skin’s surface) via the technique of clinical electroporation and electrochemotherapy using the IGEA CLINIPORATORTM device.

Exhibitors

Aquilant Ltd

contactus@aquilantsurgical.com

Address: Units B1-B2, Bond Close, Basingstoke, Hants, RG24 8PZ

Website: www.Aquilant.net

Aquilant brings innovative, clinically effective surgical products to the private and NHS sectors. Predominately working within the Gynaecology, Obstetrics and General Surgery disciplines, many of our brands have become well recognised.

ecancer

Contact: Lara Finan, lara@ecancer.org

Address: 13 King Square Avenue, Bristol, BS2 8HU, UK

Website: https://ecancer.org

ecancer is a not-for-profit, independent educational organisation providing content free to the global oncology community. We publish ecancer.org, a vast online resource developed to support healthcare professionals improve their clinical practice with the goal of improving patient care and outcomes. The site includes an open-access journal, news, video and e-learning.

The Eve Appeal

Contact: Tracie Miles, Tracie.miles@eveappeal.org.uk

Address: 15B Berghem Mews, Blythe Road, London, W14 0HN

Website: www.eveappeal.org.uk

We were set up to save womens’ lives by funding ground-breaking research focused on developing effective methods of risk prediction, earlier detection and developing screening for these women-only cancers. Our charity has grown and developed in parallel with our core research team, the Department of Women’s Cancer at University College London (UCL), taking place in 31 institutions across 15 countries. We have played a crucial role in providing seed funding, core infrastructure funding and project funding in addition to campaigning to raise awareness of women-specific cancers.

The world-leading research that we fund is ambitious and challenging but our vision is simple: A future where fewer women develop and more women survive gynaecological cancers. We also provide a specialist gynaecological cancer information service, and develop and implement initiatives to drive public awareness of gynaecological oncology.

Everything Genetic Ltd

Contact: James Price, James@everythinggeneticltd.co.uk

Address: 20-22 Wenlock Road, London, N1 7GU

Website: www.everythinggeneticltd.co.uk

Healthcare is becoming increasingly sophisticated, and there is no longer one drug or treatment for a disease or condition. Geneticists have established that the most effective treatments are those tailored to an individual’s DNA - it’s often called ‘precision medicine.’

At Everything Genetic Ltd, we believe everyone has the right to benefit from these advances, so we offer a number of tests to help identify these tailored solutions. We even go back a stage, using hereditary testing like Color Genomics via our partner company ‘BRCATESTUK’ to establish whether people are likely to experience certain conditions in their lifetime - so they can plan and ensure they have regular check-ups.

Exhibitors

Jo's Cervical Cancer Trust

Contact: Rebecca Shoosmith, Rebecca@jostrust.org.uk

Address: CAN Mezzanine, 7-14 Great Dover Street, London, SE1 4YR

Website: www.jostrust.org.uk

Jo's Cervical Cancer Trust is the UK's only charity dedicated to those affected by cervical cancer and cervical abnormalities. We offer a range of online and face to face support and information including: information materials, a helpline 0808 802 8000, online forum and an Ask The Expert service.

Olympus

Contact: Danielle Browning, Danielle.Browning@olympus.co.uk

Address: KeyMed House, Stock Road, Southend-on-Sea, Essex, SS2 5QH

Website: www.olympus.co.uk/medical/en/Home/

Olympus is a pioneer in developing advanced technologies for performing minimally invasive gynaecologic surgeries and hysteroscopies. By using our expertise in technological innovation to create products for gynecologists, Olympus has set the bar for improved safety, quality, and productivity.

OncoDNA S.A

Contact: Sandrine Rubay, s.rubay@oncodna.com

Address: Rue Louis Breguet 1, 6041 Gosselies – BELGIUM

Website: www.oncodna.com

OncoDNA helps oncologists select better treatments for patients. It combines advanced, comprehensive testing of disease biomarkers with a cancer treatment knowledge database which continuously 'learns' from scientific and medical advances. Four analyses are available: OncoDEEP®, OncoSTRAT&GO®, OncoTRACE™ and OncoSELECT®. Results report and follow-up data are accessible on the OncoSHARE® platform.

Ovacome

Contact: Victoria Clare, v.clare@ovacome.org.uk

Address: 52-54 Featherstone Street, EC1Y8RT

Website: www.ovacome.org.uk

Ovacome is the national ovarian cancer support charity. We support 18,000 people affected by ovarian cancer each year: those diagnosed with the disease as well as family members. We provide a range of services including phone support and a 24 hour web based support service. We also run support groups across the UK.

Ovarian Cancer Action

Contact: Ross Little, ross@ovarian.org.uk

Address: 8/12 Camden High Street, London, NW1 0JH

Website: www.ovarian.org.uk

We're Ovarian Cancer Action – a UK charity dedicated to beating the sixth most common cancer in women. We want to empower women, to give them a voice, and to create a better future for everyone affected by this disease. We're here to champion the cause and bring people together to overcome a disease that strikes at the heart of what it means to be a woman by funding research that saves lives, raising awareness and campaigning for change.

Sigmacon (UK) Ltd

Contact: Nik Levey, niklevey@sigmacon.co.uk

Address: Heriots Wood, The Common, Stanmore, Middlesex HA7 3HT

Website: www.sigmacon.co.uk

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Target Ovarian Cancer

Contact: Lizzy Rodgers, info@targetovariancancer.org.uk

Address: 2 Angel Gate, London, EC1V 2PT

Website: www.targetovariancancer.org.uk

Target Ovarian Cancer is the UK's leading ovarian cancer charity. We work to improve early diagnosis, fund life-saving research, and provide much-needed support to women with ovarian cancer.

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PRESCRIBING INFORMATION: Refer to Summary of Product Characteristics before prescribing
PRESENTATION: Single dose pre-filled syringe containing 0.5 mL of suspension. Each dose contains highly purified virus-like particles (VLPs) of the major capsid L1 protein of Human Papillomavirus (HPV). These are type 6 (30 µg), type 11 (40 µg), type 16 (60 µg), type 18 (40 µg), type 31 (20 µg), type 33 (20 µg), type 45 (20 µg), type 52 (20 µg) and type 58 (20 µg). **USES:** From the age of 9 years to prevent premalignant lesions and cancers affecting the cervix, vulva, vagina and anus caused by vaccine-specific HPV-types and genital warts (condyloma acuminata) caused by specific HPV types. Use in accordance with official recommendations. **DOSAGE AND ADMINISTRATION:** ***Individuals 9 to and including 14 years of age at time of first injection:*** **2-dose schedule.** Administer the second dose between 5 and 13 months after the first one. If the second dose is administered earlier than 5 months after the first one, administer a third dose. Can be administered according to a 3-dose schedule (0, 2, 6 months). Administer the second dose at least 1 month after the first dose and the third dose at least 3 months after the second one. Give all 3 doses within a 1-year period. ***Individuals 15 years of age and older at time of first injection:*** **3-dose (0, 2, 6 months) schedule.** Administer the second dose at least 1 month after the first one and the third dose at least 3 months after the second one. Give all 3 doses within a 1-year period. If first dose given, complete the vaccination course with Gardasil 9. Need for a booster dose not established. Studies using a mixed regimen (interchangeability) of HPV vaccines were not performed for Gardasil 9. Subjects previously vaccinated with a 3-dose regimen of quadrivalent HPV types 6, 11, 16, and 18 vaccine (Gardasil), hereafter referred to as qHPV vaccine, may receive 3 doses of Gardasil 9. *Paediatric population (children <9 years of age):* safety and efficacy not established. *Population ≥ 27 years of age:* safety and efficacy not studied. Administer by intramuscular injection, preferably in the deltoid area of the upper arm or in the higher anterolateral area of the thigh. Do not inject intravascularly, subcutaneously or intradermally. **CONTRA-INDICATIONS**: Hypersensitivity to any component of the vaccine. Hypersensitivity after previous administration of Gardasil 9 or Gardasil. **PRECAUTIONS:** The decision to vaccinate an individual should take into account the risk for previous HPV exposure and potential benefit from vaccination. Ensure appropriate medical treatment and supervision are always available in case of anaphylaxis. Give with caution to individuals with thrombocytopaenia or any coagulation disorder because bleeding may occur. Syncope (fainting), sometimes associated with falling, can occur following, or even before, any vaccination, especially in adolescents as a psychogenic response to the needle injection. This can be accompanied by several neurological signs such as transient visual disturbance, paraesthesia, and tonic-clonic limb movements during recovery. Observe vaccines for approximately 15 minutes after vaccination. Procedures should be in place to avoid injury from faints. Postpone administration during acute severe febrile illness. Vaccination may not result in protection in all recipients. Only protect against diseases that are caused by HPV types targeted by the vaccine. The vaccine is for prophylactic use only and is not a substitute for routine cervical screening. There are no data on the use of Gardasil 9 in individuals with impaired immune responsiveness; safety and immunogenicity of a qHPV vaccine have been assessed in individuals aged from 7 to 12 years with HIV. Individuals with impaired immune responsiveness may not respond to Gardasil 9. Long-term follow-up studies are currently ongoing to determine the duration of protection. There are no safety, immunogenicity or efficacy data to support interchangeability of Gardasil 9 with bivalent or qHPV vaccines. *Pregnancy, lactation and fertility:* Insufficient data to recommend use during pregnancy; postpone vaccination until after completion of pregnancy. Can be given to breastfeeding women. **SIDE EFFECTS: Refer to Summary of Product Characteristics for complete information on side-effects.** *Very common*: erythema, pain and swelling at the injection site and headache. *Common*: pruritus and bruising at the injection site, dizziness, nausea, pyrexia and fatigue. The post-marketing safety experience with qHPV vaccine is relevant to Gardasil 9 since the vaccines contain L1 HPV proteins of 4 of the same HPV types (6, 11, 16, 18). The following adverse experiences have been spontaneously reported during post-approval use of qHPV vaccine and may also be seen in post-marketing experience with Gardasil 9: idiopathic thrombocytopenic purpura, acute disseminated encephalomyelitis, Guillain-Barré Syndrome and hypersensitivity reactions, including anaphylactic/anaphylactoid reactions, urticaria, bronchospasm. **PACKAGE QUANTITIES AND BASIC NHS COST**: Single dose pre-filled syringe with two separate needles: £105.00 per dose. **Marketing Authorisation number:** EU/1/15/1007/002. **MAH representative:** Merck Sharp & Dohme Ltd, Hertford Road, Hoddesdon, Hertfordshire EN11 9BU, United Kingdom. **Legal category:** POM**. Date of review of prescribing information:** September 2017.

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to MSD (Tel: 01992 467272).

HPV = human papillomavirus

References
1. Gardasil 9 Summary of Product Characteristics.
2. Hartwig S *et al. Infectious Agents and Cancer* 2017;12:19.

Merck Sharp & Dohme Limited. Registered Office:
Herford Road, Hoddesdon, Herfordshire EN11 9BU
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MSD

VACC-1259898-0000 June 2018

Oral Abstracts

BGCS 0022

Improving the sensitivity for non-invasive diagnosis of high-grade serous ovarian cancer

Elizabeth K Moore[1,2,3], Dineika Chandrananda[1,2], Helen Addley[3], Anna Piskorz[1,2], Florent Mouliere[1,2], Teodora Goranova[1,2], James Morris[1,2], Susana Ros[1,2], Mercedes Jimenez-Linan[3], Robin Crawford[3], Christine Parkinson[3,4,5], Nitzan Rosenfeld[1,2], James D Brenton[1,2,3,4,5]

[1]Cancer Research UK Cambridge Institute, Li Ka Shing Centre, Robinson Way, Cambridge [2]Cancer Research UK Cambridge Centre, Cambridge [3]Cambridge University Hospitals NHS Foundation Trust, Cambridge [4]Department of Oncology, Hutchison/MRC Research Centre, University of Cambridge, Cambridge 5 NIHR Cambridge Biomedical Research Centre, Cambridge

Introduction: Recent large scale screening studies in ovarian cancer (OC) using CA125 and transvaginal ultrasound have not shown a significant improvement in mortality. There is a need for new diagnostic biomarkers in OC.

High-grade serous ovarian cancer (HGSOC) is characterized by ubiquitous TP53 mutations and extreme genomic rearrangement. Circulating tumour DNA (ctDNA) can be detected in plasma in > 80% of women with relapsed HGSOC. However, detection of ctDNA in untreated, early stage patients is more challenging due to small disease volume and low levels of ctDNA.

We aim to assess the proportion of women with newly diagnosed HGSOC with detectable ctDNA using a combination of sequencing assays including a new, sensitive, whole genome sequencing analysis method.

Methods: Targeted sequencing for TP53 and shallow whole genome sequencing (sWGS) were performed on 148 plasma samples collected from women with newly diagnosed, untreated HGSOC.

Results: Using targeted sequencing for TP53 ctDNA can be detected in 50% of newly diagnosed HGSOC. The addition of a genome wide measure of copy number aberration (t-MAD) and in-silico size selection of DNA fragments between 90-150bp increases rates of ctDNA detection. Using the size selected t-MAD score we see a sensitivity of 80% for a specificity of 95% to discriminate HGSOC cases from healthy controls.

Conclusion: Plasma ctDNA can be detected in women with newly diagnosed HGSOC using targeted sequencing for TP53 and sWGS. By combining these low cost, high throughput sequencing assays we show that ctDNA has the potential be used in a diagnostic setting in HGSOC.

BGCS 0034

Exploring the role of DUSP1 inhibition in chemo-resistant ovarian carcinoma cell lines.

Giulia Falgari, University of Surrey

Hardev Pandha, University of Surrey

Agnieszka Michael, University of Surrey

Introduction: HTL001 is a synthetic peptide that disrupts the interaction between HOX proteins and PBX co- factors, and blocks PBX-dependent HOX functions. HOX genes are normally active during embryogenesis and later become over-expressed in several solid tumours, including ovarian carcinoma, promoting tumorigenesis and metastasis. HOX/PBX inhibition with HTL001 drives cancer cells through apoptosis. Our preliminary work shows that the treatment of ovarian cancer cell lines, PEA1 and PEA2, (platinum sensitive and resistant) with HTL001 induces a rapid spike in the gene and protein expression of DUSP1, C-FOS and ATF3. DUSP1 (Dual-specificity phosphatase-1) de-phosphorylates several MAPKs, including ERK1/2, p38 and JNK1/2 and acts as a negative regulator of several pathways involved in cell proliferation and stress response. There is evidence that DUSP1 overexpression could be responsible for intrinsic resistance of tumours to chemotherapy, radiotherapy and cytotoxic compounds. We investigated whether the use of a DUSP1 inhibitor (BCI) could enhance the apoptosis efficiency of HTL001 by targeting the negative regulation of DUSP1.

Methods: BCI was purchased from Axon Medchem. PEA1 and PEA2 cell lines were donated by Prof H. Gabra. DUSP1, C-FOS and ATF3 expression were assessed using a Qiagen RT2 profiler PCR array for apoptosis pathways and candidate targets were validated for protein expression with Western Blot. Metabolism of cells treated with HTL001, without or in combination with BCI, was performed through a MTS assay and mode of death was detected via an Annexin V assay.

Results: Treatment of PEA1 and PEA2 with HTL001 induced an overexpression of DUSP1, C-FOS and ATF3 protein. BCI was subsequently tested for its ability to inhibit DUSP1 dependent de-phosphorylation of ERK1/2, p38 and JNK1/2 kinases at the dose ineffective on cell viability and was found to be more effective in platinum-resistant PEA2 cell line. The combined treatment of BCI and HTL001 increased the level of apoptosis, in particular in the platinum resistant cell line PEA2.

Conclusion: DUSP1 works as a negative regulator of stress response towards cytotoxic agents and could be an interesting target for therapy in platinum resistant ovarian carcinoma.

BGCS 0047

Taking the uncertainty out of surgery: the Advanced Ovarian Cancer Pathway (AOCP).

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Introduction: Completeness of surgical cytoreduction in advanced ovarian cancer correlates with survival. Decision for neoadjuvant chemotherapy(NACT) depends largely on disease distribution and patient fitness.

We present the results of a one-stop advanced ovarian cancer pathway (AOCP) for women referred with disseminated disease on CT scan, to facilitate detailed assessment of fitness and radiology prior to decision-making. We also present the importance of rapid histological diagnosis amongst those selected for NACT.

Methods: Women referred to the Northern Gynaecological Oncology Centre(NGOC), Gateshead, from March 2017-April 2018 with disseminated disease on CT scan report were triaged to AOCP clinic. They were seen by a Gynaecological Oncologist, followed immediately by an Anaesthetist with cardiopulmonary exercise(CPEX) testing. Dietetic referral and grip strength were measured.

Detailed CT review was performed. In conjunction with CPEX outcome, a decision was made regarding operability.

Those not for upfront surgery had image-guided biopsies within 2 days, and histology discussed at MDT 6 days later. Cytoreduction rate and histological outcomes were recorded.

Results: 42 patients were triaged into AOCP. 10 were deemed fit and radiologically operable. The remaining 32 were either unfit or had disease in small bowel mesentery, porta hepatis, liver parenchyma or chest. Of those 10 undergoing upfront surgery, complete intra-peritoneal cytoreduction was achieved in 8 women, with 2 women having miliary residual disease(optimal cytoreduction, < 1cm). Final histology was high grade serous carcinoma tubo-ovarian origin in all women. Of those 32 having image-guided biopsy, 8 were found to have non-gynaecological malignancies and were referred expeditiously to appropriate MDTs. The remaining 24 received NACT.

Conclusion: This pilot study demonstrates the huge potential of a one-stop AOCP to accurately select women for surgery to achieve complete/optimal cytoreduction by dedicated fitness testing and radiological assessment of operability. It also allows rapid histological diagnosis for onward referral for NACT and referral to non-ovarian MDTs.

BGCS0057

Natural Killer (NK) cells augment activity of oncolytic adenovirus in ovarian cancer via NK receptor DNAM-1

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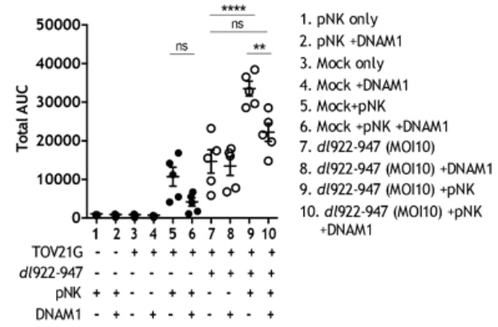
Introduction: Ovarian cancer (OC) is the deadliest gynaecological cancer- fewer than half of patients survive for more than 5 years. Oncolytic viruses (OV) infect human malignant cells and replicate selectively within them. This selective replication induces direct cytotoxicity and triggers profound immune responses, which have the potential to enhance and reduce the anti-cancer activity of the OV. In this study, we investigated the role of NK cells on the effectiveness of oncolytic adenoviruses.

Methods: Because human adenoviruses only replicate in human cells, we utilized primary NK cells from peripheral blood and ovarian cancer ascites. Oncolytic adenoviruses dl922-947 and Enadenotucirev (tested in NCT02636036 and NCT02028117 trials) were used to infect OC lines TOV21G (clear-cell) and OVCAR4 (high-grade serous). NK activation markers CD69 and CD107a (flow cytometry) and Interferon-γ (ELISA) were assessed. NK cytotoxicity was assessed by IncuCyte® Live Cell Analysis System and flow cytometry, with or without DNAM-1 antagonist (10μg/mL, MAB666). Contact-dependence of NK cytotoxicity was assessed by 0.4μm polycarbonate transwells.

Results: Our results showed that adenoviruses did not infect NK cells, but induced activation following co-culture with infected ovarian cancer cells, with significant increased CD69 (+319 units, p=0.03), CD107a (+7.0%, p=0.001) and Interferon-γ (+134.7 pg/ml, p=0.03).

This activation promoted contact-dependent anti-cancer cytotoxicity of both dl922-947 and Enadenotucirev (increase in Total Area Under the Curve= 16582 units, p=0.0008 and 8350 units, p=0.0069, respectively). Moreover, dl922-947, but not Enadenotucirev, infection upregulated DNAM-1 (mean fold-change=10.1, p=0.02). Blockade of DNAM-1 significantly reversed NK cell activity against adenovirus-infected cells (Figure 1), indicating its importance of the augmented NK cytotoxicity observed against dl922-947-infected cells.

Figure 1: Peripheral blood NK cytotoxicity against dl922-947-infected (MOI 10, 48h) TOV21G, with or without anti-DNAM-1 blockade (n=5). Total Area Under the Curve (AUC) represents the number of dead cells over time. One-way ANOVA with Tukey's multiple comparisons were used for statistical analysis (ns= not significant; **p<0.01; ****p<0.0001).



Conclusions: NK cells promoted the effectiveness of oncolytic adenovirus in ovarian cancer. A combination of OV and NK cell therapy, or inducing the expression of specific NK receptors to augment endogenous NK responses, may enhanced therapeutic potential of oncolytic adenoviruses in ovarian cancer.

BGCS0069

Dietary Management of inoperable bowel obstruction in patients with advanced ovarian , primary peritoneal and fallopian tube carcinoma

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Introduction: Inoperable bowel obstruction is reported to affect up to 50% of patients diagnosed with ovarian cancer. Patients with peritoneal metastases often present with symptoms of sub-acute bowel obstruction. Solid food can result in abdominal pain, increased incidence of nausea and vomiting, and risk of perforation. Those patients are usually inoperable as there are multiple sites of obstruction due peritoneal carinomatosis. Patients are often limited to sips of clear fluids which increases their risk of malnutrition. Nutrition support for such patients is extremely challenging. There are currently no published guidelines for the dietary

management of patients at risk of bowel obstruction, and advice varies depending on local policy. Access to TPN (total parenteral nutrition) in the community is not widely available and there is no evidence that TPN improves quality of life in this group of patients.

Methods: We have conducted an audit of ovarian cancer patients referred to a specialist dietician over the last 2 years at St Luke's Cancer Centre (SLCC). For all of those patients we have developed a structured 4 stage approach with dietary advice that depends on the severity of symptoms and risk of obstruction. Using the table, patients are advised to either increase the consistency of their diet, or return to clear fluids.

Results: Over the last 2 years 144 patients were referred to a specialised dietetic service. Of those 38 patients (26%) were diagnosed and treated for inoperable subacute and acute bowel obstruction in a conservative way and a 4 stage diet was implemented. Median age was 67 (range 30-83 years old). Most patients were heavily pre-treated with a median number of 3 lines of chemotherapy treatment (range 1-6). Only one patient presented with bowel obstruction at the time of initial diagnosis and all other patients were treated at relapse. 14 patients are still alive and the median overall survival for the whole cohort dating from the referral to the dietitian to the date of death was 7.1 months (range 1.4 -28.8months). The four stage diet is shown below and patients are educated to self-manage according to their symptoms, if the symptoms of bowel obstruction deteriorate after moving to stage 2 or above they are advised to move back down to stage 1. Many patients are managed in the outpatient setting and are in close contact with the dietetic team. The Elemental Diet stage 1 is currently tested in a prospective multicentre clinical trial called EDMONd (NCT03150992).

Dietary advice for patients at risk of bowel obstruction	
Stage 1	Clear fluids only –Elemental Diet
Stage 2	ALL thin liquids
Stage 3	Smooth or puréed foods only. Low fibre
Stage 4	Soft sloppy foods. Low fibre

Conclusions: The development of the Royal Surrey County Hospital dietary pathway will pave the way to a set of management guidelines in inoperable subacute bowel obstruction. A service evaluation with patient reported outcomes of symptoms and quality of life is planned for 2018 . A clear set of national guidelines that will be widely adopted to manage this difficult condition is of crucial importance

BGCS 0132

Advanced Stage (IIIC/IV) Endometrial Cancer: The role of cytoreduction and determinants of survival

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Introduction: Primary aim of this study was to assess the impact of optimal cytoreduction in women who had surgical treatment of advanced stage (3c/4) endometrial cancer. Secondary objective was to define demographic and surgico-pathologic variables that exerted a significant influence on survival outcomes.

Methods: Records of 45 patients with stage IIIC/IV Endometrial cancer who underwent surgery with cytoreductive intent between 2010 and 2016 were analysed. Data on disease distribution, surgical procedures, adjuvant therapy and survival times was collated. Survival curves were plotted by Kaplan Meier method and median survival estimates were compared using log rank test. Cox proportional hazards model was used to identify independent variables predictive of survival.

Results: 28 women (62.2%) had undergone Primary surgery and 17 (37.8%) received Neoadjuvant Chemotherapy prior to Delayed primary surgery. Optimal cytoreduction to </= 1 cm visible disease was achieved in 29 women (64.4%). Among 29 women who had optimal debulking, 24 had no visible disease. Median overall survival for the entire study cohort was 24 months. Median progression free survival in the optimal cytoreduction group was 16 months as opposed to 11.5 months in women who had > 1cm residual disease (p=0.02). Median overall survival was 29 months in patients who had optimal cytoreduction and 17.5 months in women who had bulky residual disease (p = 0.002). Only poor performance status (p =0.0002) and suboptimal cytoreduction (p=0.002) retained significance as predictors of poor survival on multivariate analyses.Suboptimal cytoreduction surgery, compared to optimal cytoreduction, showed a 3.30- fold increased risk of death independent of performance status and anatomic region with disease (Hazard Ratio 3.30 (95% confidence interval 1.31 to 7.48) p=0.01).

Table1: Comparison of Survival data after Primary Cytoreductive surgery /Delayed primary surgery for advanced stage (stage IIIC/IV) endometrial cancer.

Author	Tumour histology	NACT Vs PCS	FIGO stage	Optimal defn	Total patients	Optimal CR (n)	Suboptimal CR (n)	Optimal CR (%)	Optimal median OS (months)	Suboptimal median OS (months)	p-value
Chi	ALL endo	PCS	IV	</=2	55	24	21	53	31	12	<0.01
Bristow	ALL endo	PCS	IVB	</=1	65	36	29	55	34	11	0.0001
Ayhan	ALL endo	PCS	IVB	</=1	37	22	15	59	25	10	0.001
Lambrou	ALL endo	PCS	IIIC/IV	</=2	58	42	16	72	18	7	0.001
Van Wijk	ALL endo	PCS	III/IV	Nil gross vis	67	50	17	75	66% 5 yr survival	41% 5 yr survival	<0.01
Bristow	UPSC	PCS	IV	</=1	31	16	15	52	26	10	<0.001
Memar	UPSC	PCS	IIIC/IV	Nil gross vis	35	20	15	57	40	10	<0.001
Moller	UPSC	PCS	IV	</=1	49	26	23	53	15	8	>0.05
Thomas	UPSC	PCS	IIIC/IV	</=1	70	42	28	60	20	12	0.02
Vandenput	UPSC	NACT	IV	</= 1	30	24	6	80	23	12	
Shih	Endometrioid	PCS	IV	Nil gross vis	58	9	32	15.5	42.2	19	<0.001
Lee	UPSC	PCS	IV	</= 1	48	36	12	75	26.5	12.6	<0.001
GSTT STUDY	ALL endo	PCS & NACT	IIIC/IV	</=1	45	29	16	64.4	29	17.5	0.002

Conclusions: Survival analyses demonstrate superior progression free survival and Overall survival when optimal cytoreduction is achieved. Maximal cytoreduction should be the goal of surgical treatment for advanced stage Endometrial cancer.

BGCS0175

Human Factors within Gynaecology Oncology: Evaluation of a BGCS commission course

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[1]University Hospitals of Leicester NHS Trust. [2]Loughborough University. [3]Pan Birmingham Gynaecological Cancer Centre. [4]Department of Gynaecology Oncology, Cheltenham General Hospital. [5]Nottingham University Hospital NHS Trust.

Introduction: Human related errors have been shown to increase risk of near misses and death in surgery, with the total number of minor errors made increasing the likelihood of serious harm. Human Factors, also called Ergonomics, is an evidence-based scientific discipline and profession that uses a design-driven systems approach to achieve two closely related outcomes of performance and well-being.

Methods: The BGCS commission development of a training program on 'Human Factors in gynaecology oncology' in collaboration with leading UK Human Factors experts. It was delivered in a one day course which consisted of theory based lectures followed by three interactive workshops demonstrating different methods of systems based analysis (including Hierarchical Task Analysis and Accimaps) to approach clinical problems and interactive peer led discussion. Pre/post-course questionnaires to evaluate their motivations for attending the course, pre-course expectations and experiences of the course.

Results: There were 21 participants including 7 senior trainees (subspecialty and ST6+) and 12 gynaecology consultants (centre/unit). The most common reason for choosing to attend the course was 'improving patient safety' (53%), followed by 'organisational safety' (42%), 'innovation of care' (32%), 'improving healthcare efficiency' (26%) and 'improving leadership' (26%). 'A greater understanding of Human Factors issues' was the most frequently reported aim of the day (84%). All participants strongly agreed or agreed that the application of Human Factors science was directly relevant to their clinical work and 17 (81%) had thought about an issue that would change their current clinical practice during the course.

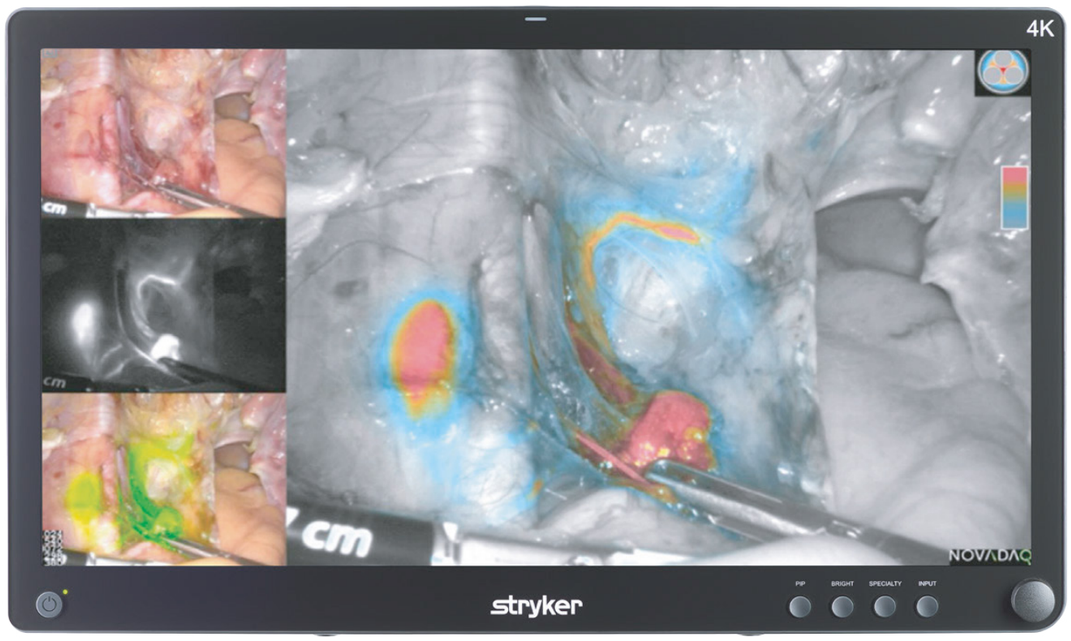
Conclusions: A desire to improve NHS quality and safety outcomes appear to be the major motivating factors for clinicians attending Human Factors training. Participants were satisfied with the delivery of the BGCS course and were likely to change clinical practice as a result of attending.

stryker

BGCS London

Dr Nadeem Abu-Rustum

The Evolution of Surgical Staging Endometrial Cancer Image Guided Precision Surgery with Enhanced Pathology



BGCS London
5th July 2018 - Rutherford Room
08:20 - 09:20am

stryker

FLUORESCENCE IMAGING:
THE PRESENT, AND THE FUTURE

Stryker 1588 & Novadaq camera platforms combine simultaneous near infra-red imaging and HD white light imaging to demonstrate real-time perfusion and lymphatic mapping, using proprietary technology.

BGCS London
5th July 2018 - Rutherford Room
08:20 - 09:20am

Poster Presentations

BGCS 0001

The experience of using 18F-Fluorodeoxyglucose PET/CT in cervical cancer staging at a regional gynae-oncology referral centre

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[1]Maidstone and Tunbridge Wells NHS Trust

Introduction: Royal College of Radiology guidelines support the use of 18F-Fluorodeoxyglucose (FDG) PET/CT in staging of locally advanced cervical cancer where radical chemoradiation is being considered or in cases with equivocal imaging. The West Kent Gynae-oncology MDT has been regularly using FDG-PET/CT in cervical cancer staging since 2014. Our aim was to review cases of cervical cancer staged with conventional MRI and CT imaging as well as FDG-PET/CT to evaluate whether the FDG-PET/CT was providing additional relevant information and the impact on patient management.

Methods: Data was collected retrospectively from a one year period between 2015 and 2016 using the pathology database to find patients with a histologically confirmed cervical malignancy. Patients subsequently referred for FDG-PET/CT were identified using the radiology RIS and PACS systems. There were 19 patients who had been staged with both FDG-PET/CT and conventional MRI and CT imaging.

The reports of each staging modality were compared to assess concordance and whether any additional information was provided by the FDG-PET/CT that would alter patient management. Key findings included nodal extent, distant metastases and synchronous tumours.

Results: Average patient age was 45 years(range 22-80 years) and the majority of patients were diagnosed with squamous cell carcinoma(79%) followed by adenocarcinoma(16%) and neuroendocrine carcinoma(5%).

CT and MRI staging correlated with the FDG-PET/CT in 84%(16/19) of cases. There were three discordant cases. All three of these cases were identified on FDG-PET/CT and were major discrepancies that significantly impacted patient management. They included FDG avid small para-aortic lymph nodes which changed the radiation field and there were two incidental diagnoses of synchronous malignancy in the breast and thyroid gland.

Conclusion: Our findings suggest that FDG-PET/CT does contribute in the management of patients with cervical cancer with additional sites of disease identified that directly affected treatment planning and also in identifying synchronous tumours.

BGCS 0002

Real-world, Single-Centre experience of Niraparib maintenance in patients with platinumsensitive, recurrent ovarian cancer

Ching Leung MB Bch BAO LRCP&SI, Caroline Chau MD BSc MRCP, Lauren Bell, CTA, Maria Hayes, Iolia Akaev BSc (Hon), Chukwumobi Ihezue, MD FRCR, Siavash Rahimi MD FRCPath, Chit Cheng Yeoh MBBS MRCP PhD.

Queen Alexandra Hospital, Cosham, Portsmouth PO6 3LY

Introduction: Niraparib is an inhibitor of poly (ADP-ribose) polymerase (PARP). The inhibition of PARP results in DNA damage, apoptosis and cell death.

The NOVA trial is a randomised phase 3 study which demonstrated significant improvement in progression-free survival for women with platinum sensitive recurrent ovarian cancer on Niraparib maintenance, regardless of their BRCA status (21.0months vs 5.5months in gBRCA mut cohort; HR 0.26, and 9.3months vs 3.9months in non-gBRCA mut cohort; HR 0.45).

Toxicities were manageable with dose interruption and/or dose reduction. In the NOVA trial, adverse reactions led to dose reduction/interruption in 69% of patients namely thrombocytopenia(41%) and anaemia (20%)]. Treatment efficacy was maintained with dose modification.

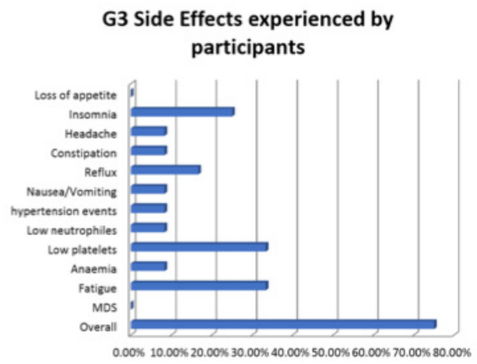
Methods: We conducted a retrospective analysis of all patients with platinum sensitive, recurrent ovarian/primary peritoneal cancer who received Niraparib maintenance therapy in Queen Alexandra Hospital, Portsmouth from July 2017 to January 2018. Data cut-off date is 10/03/2018.

Results: 10 eligible patients commenced Niraparib at 300mg/daily, 2 other started on 200mg/daily. Dose reduction was achieved within 3.78weeks of starting Niraparib if required. 9/12 patients (75%) required a dose reduction. 10/12 patients(83%) experienced side effects. 6/12 patients(50%) are still on the tablets. 5/6 patients(83%) stopped treatment due to disease progression.

Patient characteristics: median age= 65.7years, 5/12=had 2 lines, 3/12=had 3 lines, 3/12=had 4 lines, 1/12=after 5 lines, all had pre-treatment platelet count>100, median patient weight= 73 kg (6 patients <77kg), average time from last day of chemo to start of Niraparib = 8 weeks, performance status 10/12 is PS 1. CrCl>50mls/min in 10/12 patients, only 2 patients had CrCl 35-50mls/min.

Final dose of tolerable Niraparib were 17% at 300mg/daily, 50% at 200mg/daily and 33% at 100mg/daily dose.

Conclusion: Niraparib maintenance was safe and tolerable for our patients. On average, 50% of patients were on the tablets for over 4.5months (and still continuing). The commonest side effects were fatigue, low platelets, nausea/vomiting, headache and insomnia.



BGCS 0003

A large 10-year series from a single-site institution in the United Kingdom of vulva carcinoma: An audit on adherence of United Kingdom guidelines and overall survival.

Chit Cheng Yeoh, MayThit Lwin, David Pontefract, Dirk Brinkman, Robert Woolas, Francis Gardner, Natalia Povolotskaya, Siavash Rahimi; Queen Alexandra Hospital, GynaeOncology Department, Portsmouth NHS Trust, Portsmouth, United Kingdom.

Introduction: We audited if our 10-year-series in our Institution's Vulva Carcinoma adhered with the Royal College of Obstetrician and Gynaecology (RCOG) Guidelines. In United Kingdom, from 2014, the guidelines states 1) Wide local excision of primary tumour with minimum 15mm of disease free tissue is often sufficient 2) Sentinel lymph node (LN) biopsy can be done in unilateral tumour of less than 4cm and if no clinical suspicion of LN involvement 3) In bilateral tumours, only ipsilateral groin node surgery needs to be done initially. Contralateral LN dissection may be required if ipsilateral nodes are positive 4) Groin node dissection should be omitted in stage Ia SCC, BCC, verrucous tumour and melanoma 5) Patient unfit for surgery can be treated with primary radiotherapy (RT).

Methods: All Vulva Carcinoma Cancer coded from 2009-2017 was mined from database. All International Statistical Classification of Disease and related health problems - 9 Codes (ICD-9) pertaining with Vulva Cancer were to pull out the last 10 years of histologically confirmed cases in our Institution.

Results: Total of 121 patients. Mean age 74 years old (36-104 years old). Squamous cell carcinoma = 105, Melanoma = 5, Adenoid cyst = 1, Paget's = 2, Verrucous = 2, Basal cell carcinoma = 2, Sarcoma = 1, Adenocarcinoma = 3. All stages of Vulva cancer were 100% compliant with RCOG guidelines, except for Stage 1C, which achieved 62.5% compliance.

- Out of 104 vulva cancer, 32 had no indications for surgical groin LN assessment (16 patients in 1a disease + 16 patients stage 4 disease)
- 72 had indications and were offered surgical groin LN assessment.
- However, 45 out of 72 (62.5%) had surgical groin LN assessment.
- 12 out of 72 (16.7%)were declined due to co morbidities.
- 15 out of 72 (20.8%) did not wish surgical groin node assessment.

Stage	Surgery (Sx)	Radiotherapy (RT)	Sx+RT	Sx+chemo	RT+chemo	BSC
I	16					
Ib	59					
II	1					1
III	6	3	5	1	3	2
IV		1			3	2
SCC unknown staging						2
Non SCC	16					

Conclusion: WLE were offered to all vulva patients. Clear margins were achieved in 97%. RT was offered to 2% of patients as it was not possible to achieve clear margin with re-excision. All eligible patients with indications for groin LN surgical assessment had been offered nodal surgery. Of which 62.5% proceeded with LN surgery. Patients with multiple comorbidity and not fit for surgery due to their advanced staging were treated with RT alone, chemo/RT and best supportive care. Overall survival was 205.7 weeks.

BGCS 0004

Mindfulness in the treatment of recurrent ovarian cancer (MOVA); an observational pilot feasibility study.

Lauren Bell, Sam Watts, Emily Ardon-Close, Beth Giddins, Gail Davies, Verity Ford, Carole Fogg & Cheng Yeoh

Introduction: Women with ovarian cancer (OvCa) who experience disease recurrence report significant levels of depression, anxiety and psychological distress. This lowers their quality of life and impacts upon important clinical factors such as treatment compliance. Mindfulness based interventions have been shown to help to manage depression and anxiety in cancers but has never been evaluated in recurrent OvCa. This study will assess the feasibility of mindfulness as an intervention for this population.

Methods: This trial is an observation single arm mixed methods interventional pilot feasibility trial to assess issues such as the acceptability and model validity of the intervention, recruitment, retention, trial processes, treatment adherence, overall effectiveness and potential mechanisms. We will include women with recurrent OvCa after initial treatment. Intervention will be for 6 weeks with a 3-month follow-up. Outcomes measures will include: 1) Biological Measures: CA 125 and diurnal salivary cortisol levels at baseline (pre-intervention), week-6 and week-12 follow-up, 2) Quantitative Outcomes Measures: EORTC-QLQ-OV28, Hospital Anxiety and Depression Scale, Freiburg Mindfulness Inventory and Warwick/Edinburgh Mental Wellbeing Scale, all completed at baseline (pre-intervention) week-6 and at week-12 follow-up and 3) Focus groups at baseline (pre-intervention) week-6 and at week-12 follow-up.

Results: Completion of Feasibility Study in March 2017 shown patients living with OvCa are able to use Mindfulness principles in their daily activity to help channel their emotions into accepting their awareness of their senses, and promoting kindness in a positive group activity, which has led to improved measured outcome of the Quality of Life Questionnaires, and laboratory saliva cortisol.

A FOCUS group analyses the aspects which were done well in the Mindfulness Programme.

Conclusion: The MoVa study will move to the second phase of the development of a grant for randomised study for Mindfulness versus Swimming as an Activity for patients living with Ovarian Cancer.

Mindfulness was accepted and valued by almost all participants. Participants reported improved physical and mental health following the programme. Programme attendance was 89% with one missed session per patient indicating good compliance. 27/28 participants would recommend Mindfulness to fellow patients. Mindfulness may help to reduce anxiety and stress, and improve quality of life in ovarian cancer.

BGCS 0005

Post operative return to theatre following major gynae-oncology surgery

Diana Lim[1], Kenneth Lim[1], Aarti Sharma[1]

[1]Obstetrics and Gynaecology / University Hospital of Wales / United Kingdom

Introduction: This service evaluation aims to review the management and escalation of care of patients who returned to theatre (RTT) following major gynae-oncological procedures in University Hospital of Wales.

Methods: All patients who returned to theatre following any major gynae-oncological procedure in 2017 were retrospectively identified. Data were collected by reviewing case-notes.

Results: 335 major gynae-oncology operations were performed in 2017, we were interested in the RTT rate to measure our outcomes to national standards. From our rolling morbidity audit, 8 patients were identified who were re-operated due to post-operative complications following major gynae-oncology surgery. Case-notes review revealed 4 post-operative bleeding, 1 haematoma, 1 intraabdominal collection, 1 wound dehiscence and 1 bowel anastomotic leak. The most striking finding from our review was the lack of escalation to senior staff during out of hours (OOH) service. Most patients who were reviewed during OOH were only seen by the on-call senior house officer without involvement of senior staff. Senior reviews were also left for morning consultant ward rounds which led to delays in management of the unwell patients. After the initial review and implementation of treatments, patients were not reassessed for responsiveness to interventions. Blood tests that have been done were also not reviewed. In all, our RTT rate is 2.4% as compared to the national rate of 1.6%.

Conclusion: The RTT rate at our unit is higher than the national rate, which may be an aberrant result, but has been escalated through the Quality and Safety committee. The majority of post-operative patients are complex cases and delays in recognition of deterioration of patients and lack of escalation to senior staff during OOH could worsen outcomes. More emphasis on educating junior trainees in recognising serious post-operative complications are needed to enable them to escalate appropriately.

BGCS 0006

A case of peritoneal mesothelioma diagnosed following vaginal hysterectomy

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Mr William Dudill Consultant Gynaecologist Sherwood Forest Hospitals NHS Foundation Trust

Dr Samiya Ibrahim Consultant Histopathologist Sherwood Forest Hospitals NHS Foundation Trust

Introduction: Malignant mesothelioma of the peritoneum is a rare form of cancer that develops in abdominal peritoneum.

The incidence of mesothelioma has been gradually rising over the past 30 years however, peritoneal mesothelioma is much less common with pleural mesothelioma occurring in a ratio of 12:1. Factors which favour the development of peritoneal disease appear to be longer and heavier periods of exposure to asbestos. Age distribution is similar to pleural disease and there is more male preponderance.

Symptoms at presentation are non-specific and include abdominal pain, constipation, weight loss, abdominal distension, palpable masses and ascites.

Diagnosis is usually through CT scan imaging with presence of omental/mesenteric thickening and minimal ascites. Histological diagnosis is usually confirmation by fine needle aspiration of omental masses.

The evidence for treatment of peritoneal mesothelioma is limited. Chemotherapy has been shown in small case series to prolong survival with regimes based on cisplatin and include mitomycin C, doxorubicin and pemetrexed. The role of radiotherapy is unclear and associated with considerable morbidity. Debulking procedures may improve response to chemotherapy.

Prognosis for peritoneal mesothelioma is worse than for pleural mesothelioma. In one study, mean survival was 7.4 months compared with 11.4 months.

Methods: We present a case of abdominal peritoneal mesothelioma in a 75-year-old lady who originally presented with a vaginal prolapse in November 2017. Following vaginal hysterectomy for vaginal prolapse the patient developed profuse watery vaginal discharge later being confirmed as ascites. Histological analysis of the uterine specimen subsequently confirmed malignant mesothelioma of the peritoneum.

Results: Not applicable

Conclusion: Pleural mesothelioma continues to be a rare cancer. Our case highlights the unusual presentation and route to diagnosis. The non-specific symptoms of the disease were absent and diagnosis only following vaginal hysterectomy and histological confirmation. Our patient only survived 2 months and chose not to receive chemotherapy.

BGCS 0007

Oophorectomy in cervical adenocarcinoma

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Introduction: The incidence of cervical adenocarcinoma is rising and a considerable proportion of those women diagnosed are premenopausal. While ovarian conservation in squamous cell carcinoma is accepted practice, there remains considerable debate regarding the safety of ovarian preservation in the management of cervical adenocarcinoma. The incidence of ovarian metastases varies significantly in the literature from 0% to >10% with some groups demonstrating no difference in incidence between adenocarcinoma and squamous cell carcinoma. Since 5-year survival for women with early stage cervical adenocarcinoma is in excess of 80%, many women are likely to be long term survivors. Ovarian preservation may be desirable even when fertility preservation is not, since numerous studies demonstrate bilateral oophorectomy to be associated with an increase in all cause mortality, cardiovascular disease, dementia and depression. The aim of this study was to determine the incidence of ovarian metastases and outcome for women undergoing surgical management of cervical adenocarcinoma in a UK cancer centre.

Methods: This retrospective cohort study included all patients undergoing surgical management for cervical adenocarcinoma between 2000 and 2015 in a single cancer centre in the South-east region of Scotland. Patients were identified from the local pathology database. Clinical, surgicopathological and follow-up data were collated from patient health records.

Results: A total of 25 patients were identified. Median age was 44 years (range 31-58 yrs). Median follow up was 46 months (14-77 months). Ovarian metastases were identified in 2 patients (8%). Incidence by FIGO stage was 0% (0/3) for stage IA disease, 0% (0/17) for stage Ib disease and 66% (2/3) for stage II disease. The presence of ovarian metastases was not associated with a significant increased risk of disease progression or death (p=0.3). Two patients had ovarian preservation; neither developed an ovarian relapse with a mean follow up of 57.5 months.

Conclusion: Cervical adenocarcinoma was associated with a significant risk of ovarian metastases in the overall study population (8%); however, no ovarian metastases were identified in patients with ≤ FIGO stage Ib disease. These results suggest that ovarian conservation should be considered in all young women diagnosed with ≤IB cervical adenocarcinoma. Careful staging, patient selection and counselling are required. The risk of long term reduction in quality of life and increase in all cause mortality associated with oophorectomy should be considered alongside the low risk of metastatic ovarian disease.

BGCS 0008

The clinical impact of using complex molecular profiling strategies in routine oncology practice

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Introduction: Molecular profiling and functional assessment of signalling pathways of advanced solid tumours are becoming increasingly available. However, their clinical utility in guiding patients' treatment remains unknown.

Methods: Here, we assessed whether tumour molecular profiling helps physicians in therapeutic decision making by analysing the molecular profiles of 1057 advanced tumour patient samples after failing at least one standard of care treatment using a combination of next-generation sequencing (NGS), immunohistochemistry (IHC) and other specific tests.

Results: The resulting information was interpreted and specific treatments for each patient were suggested. Our data showed that NGS alone provided the oncologist with useful information in 10-50% of cases (depending on the cancer type), whereas the addition of IHC/other tests increased extensively the usefulness of the information provided. Using an internet survey, we investigated how the therapy recommendations influenced the treatment choice of the oncologist. For patients who were still alive after the provision of the molecular information (76.8%), 60.4% of their oncologists followed the report recommendations. Most treatment decisions (93.4%) were made based on the combination of NGS and IHC/other tests, and an approved drug- rather than clinical trial enrolment- was the main treatment choice. Most common reasons given by physicians to explain the non-adherence to recommendations were drug availability and cost, which remain barriers to personalised precision medicine. Finally, we observed that 27% of patients treated with the suggested therapies had an overall survival >12 months.

Conclusion: Our study demonstrates that the combination of NGS and IHC/other tests provides the most useful information in aiding treatment decisions by oncologists in routine clinical practice.

BGCS 0009

Optimised ARID1A immunohistochemistry is an accurate predictor of ARID1A mutational status in gynaecological cancers

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Introduction: ARID1A is a tumour suppressor gene that is frequently mutated in clear cell and endometrioid carcinomas of the ovary and endometrium and is an important clinical biomarker for novel treatment approaches for patients with ARID1A defects. However, the accuracy of ARID1A immunohistochemistry as a surrogate for mutation status has not fully been established for patient stratification in clinical trials. Here we tested whether ARID1A immunohistochemistry (IHC) could reliably predict ARID1A mutations identified by next- generation sequencing.

Methods: Three commercially available antibodies - EPR13501 (Abcam), D2A8U (Cell Signalling) and HPA005456 (Sigma) – were optimised for IHC using cell line models and human tissue, and screened across a cohort of 45 rare gynaecological tumours. IHC was scored independently by three pathologists using an immunoreactive score. ARID1A mutation status was assessed using 2 sequencing platforms. The concordance between ARID1A mutation and protein expression was assessed using Receiver Operator Characteristics (ROC) statistics.

Results: Overall, 21 ARID1A mutations in 14/43 assessable tumours (33%) were identified, the majority of which were predicted to be deleterious: mutations were identified in 7/18 (39%) ovarian clear cell carcinomas (OCCC), 4/7 (57%) of ovarian endometrioid carcinomas, 2/5 (40%) of endometrial carcinomas and 1/6 (17%) of carcinosarcomas. ROC analysis identified greater than 95% concordance between mutation status and IHC for all three antibodies; this allowed a cut-off immunoreactive score for ARID1A mutant status to be calculated.

Conclusion: Comprehensive assessment of concordance of ARID1A IHC and mutation status identified EPR13501, as an optimal antibody, with a 100% concordance between ARID1A mutation status and protein expression, across different gynaecological histological subtypes. It delivered the best inter-observer agreement between all pathologists, as well as a clear cost-benefit advantage. This could allow patients to be accurately stratified based on their ARID1A IHC status into early phase clinical trials.

Table: ROC curve analysis to define mutant immunoreactive score and concordance

Antibody	All gynaecological cases: ARID1A mutant score	Concordance (%)	OCCC cases ARID1A mutant score	Concordance (%)
EPR-13501	<8	100	<9	100
	100% sensitivity and 100% specificity		100% sensitivity and 100% specificity	
D2A8U	<5.5	100	<6	100
	100% sensitivity and 100% specificity		100% sensitivity and 100% specificity	
HPA-005456	<6.5	97	<6.5	100
	100% sensitivity and 96% specificity		100% sensitivity and 100% specificity	

BGCS 0010

Patient Satisfaction and Effectiveness of the Rapid Access Gynaecology Service (RAGS) Clinic

Dr Sarah Louise Smyth, Basingstoke and North Hampshire Hospitals NHS Foundation Trust

Dr Obi Onovo, Basingstoke and North Hampshire Hospitals NHS Foundation Trust

Ms Vanitha Kumar, Basingstoke and North Hampshire Hospitals NHS Foundation Trust

Introduction: The RAGS clinic offers the prompt assessment of women who have been referred urgently with possible gynaecological cancer. All patients should receive the highest standard of care in a professional and caring environment; as well as within the national standard two-week time frame. With this in mind, an assessment of effectiveness, clinical performance and patient satisfaction has been analysed.

Methods: A retrospective review of all clinic patients between January and March 2017 was performed using online hospital systems data. This noted referral times, clinical findings and case management. The anonymous questionnaire was presented to all patients attending clinic between January and February 2017. This covered clinic location and patient feedback regarding delays and clinician contact, with space for free text comments.

Results: 72 patients attended RAGS, all having TVUSS; 65% underwent biopsy. Within two weeks, 84% were reviewed, 87% obtained histology, 46% received communication regarding results, 60% underwent MRI and 40% were discussed at MDT. 2.5% were diagnosed with simple hyperplasia, 2.5% complex and 2.5% carcinoma. 25 questionnaires were completed, with 16 patients reviewed in the Diagnostic Treatment Centre and 9 in the Colposcopy Suite. Average experience was rated either good or excellent and better in the Colposcopy Suite, with increased waiting times in the DTC.

Conclusion: Significant delays were noted in communications, MRI reporting and MDT discussions and patients were dissatisfied with extended waiting times in the DTC, which may also reflect how they rated their care quality. As a result, there has been further liaison with histopathology, radiology and the administration team regarding prompt review, results reporting and communication with patients in addition to increased clinic capacity. All RAGS clinics are now performed in the Colposcopy Suite. A future assessment of clinic effectiveness and patient satisfaction of this updated service should also be planned to complete the cycle.

BGCS 0011

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BGCS 0012

Toxicities of bevacizumab in the primary treatment of ovarian cancer in the West of Scotland

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Jennifer Brown, Beatson West of Scotland Cancer Centre

Ros Glasspool, Beatson West of Scotland Cancer Centre

Introduction: Bevacizumab improves progression-free survival when used in combination with and as maintenance after chemotherapy for the first-line treatment of FIGO stage 3C and 4 epithelial ovarian cancer. It also causes specific toxicities due to its anti-vascular endothelial growth factor effect[1]. The aim of this audit was to compare the incidence of bevacizumab-induced toxicities in a real world population to that of the ICON7 trial population[1].

Methods: Patients prescribed bevacizumab for this indication outwith clinical trials from 2015 to 2018 were identified through the chemotherapy prescribing system. Electronic patient records were searched for patient demographics, disease characteristics and toxicities of interest.

Results: 71 patients were identified, 15 of whom were still undergoing maintenance bevacizumab treatment at time of data analysis. The median age at diagnosis was 66 (range 44 to 81). 31 patients (44%) developed at least grade 2 hypertension whilst receiving bevacizumab, leading to an increased proportion of patients requiring anti-hypertensive medications from baseline (54% from 32% pre-bevacizumab). 8 patients (11%) developed dipstick proteinuria. Wound complications occurred in 3 (4.3%), mucocutaneous bleeding in 3 (4.2%), VTE in 3 (4.2%), a colonic fistula in 1 (1.4%), ureteric perforation in 1 (1.4%) and ischaemic bowel in 2 patients (2.8%).

Conclusion: The incidence of hypertension and proteinuria in our population was higher than that reported in the ICON7 trial (18% and 4% respectively)[1]. Surgical, bowel and thromboembolic complications occurred at a similar rate as the ICON7 trial, although our incidence of mucocutaneous bleeding is lower. Possible reasons for the higher incidence of hypertension are older age and higher rates of comorbidities than the trial population. This study emphasizes the need for on-treatment monitoring of blood pressure and urinalysis, and proactive management of detected hypertension. It also demonstrates the importance of collecting real world data on new therapies.

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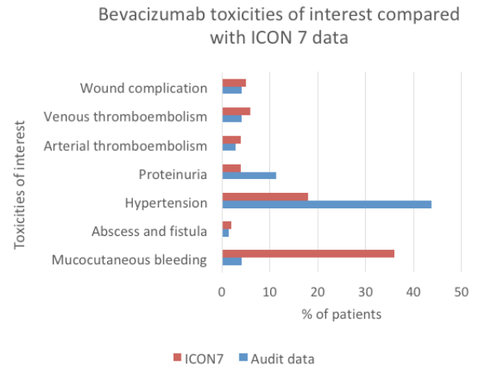

BGCS 0013

Complex atypical hyperplasia: The outcome of treatment decisions, and the use of the Myosure procedure

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Introduction: The aim was to analyse outcomes of treatment decisions of patients with a positive histopathological diagnosis of complex atypical hyperplasia (CAH) of the endometrium, and to assess a novel biopsy capture, Myosure procedure, for diagnosing CAH confined to an endometrial polyp.

Methods: Data was collated retrospectively from all women diagnosed with CAH between 2014 and 2017 at Addenbrooke's Hospital. The Myosure system was introduced during the study period for removal of polyps.

Results: During the study period there were 66 women (mean age 58.6 years) who had a diagnosis of CAH based on endometrial biopsies. All cases were reviewed at the specialist multidisciplinary team meeting. 56% (37) proceeded to definitive treatment with hysterectomy. Of those undergoing hysterectomy, 61.8% had CAH, 29.4% had endometrial carcinoma, and the remaining cases showed benign histology 8.8%. 44% (29) of women were initially managed conservatively, with the majority receiving the Mirena intrauterine system with ongoing surveillance by endometrial sampling. Of these, 5 (17.9%) women later went onto having a hysterectomy because of ongoing vaginal bleeding, not tolerating oral progestogens, or not wanting continuous endometrial biopsies. The Myosure procedure was used in eleven patients who were found to have CAH confined to a polyp. Of these patients, seven underwent an immediate hysterectomy that confirmed CAH in four of these; the rest were managed conservatively.

Conclusion: The demographics and treatment decisions of patients with CAH in our sample are in line with the literature. There is preliminary evidence supporting the use of the Myosure procedure as an accurate means of diagnosing and managing CAH confined to polyps. Studies with larger numbers are needed to determine the impact of Myosure sampling on the incidence of CAH, compared to previous methods of polypectomy.

BGCS 0014

Preventing Ovarian Cancer through early Excision of Tubes and late Ovarian Removal (PROTECTOR) Study

Faiza Gaba[1,2], Usha Menon[3], Gareth Evans[4], Naveena Singh[2], Glen McCluggage[5], Ertan Saridogan[3], Marc Tischkowitz[6,7], Robin Crawford[7], Matthew Burnell[3], Rosa Legood[8], Ranjit Manchanda[1,2] on behalf of the PROTECTOR team.

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Introduction: Aims: To evaluate the impact on sexual function, endocrine function, quality-of-life (QoL) and determine cost-effectiveness of risk reducing early salpingectomy and delayed oophorectomy (RRESDO), as a two-step ovarian cancer (OC) prevention strategy in pre-menopausal women at increased risk of OC.

Methods: Design: Multi-centre, observational cohort controlled trial with three arms: RRESDO; risk reducing salpingo-oophorectomy (RRSO); controls (no surgery). Inclusion criteria: Pre-menopausal women; >30 years; at increased risk of OC (mutation carriers or on the basis of a strong family history; completed their family (for surgical arms). Exclusion criteria: Post-menopausal women; previous bilateral salpingectomy or bilateral oophorectomy; pregnancy; previous tubal/ovarian/peritoneal malignancy; <12 months post cancer treatment; clinical suspicion of tubal/ovarian cancer at baseline. Recruitment: Through NHS cancer genetics/high-risk familial cancer clinics/general gynaecology clinics/gynaecological oncology clinics/GP surgeries/clinical referrals/supporting charities/self- referral. Primary outcome: Sexual function. Secondary outcomes: Endocrine function/menopause; regret/satisfaction; surgical morbidity; QoL/psychological health; number of intraepithelial carcinomas/invasive cancers; utility scores for early-salpingectomy; cost-effectiveness. Consenting individuals for the surgical arms will undergo a hormonal profile (FSH), ultrasound, CA125 and complete questionnaires collecting information on medical history, family history, QoL, sexual function, cancer worry, psychological well-being and satisfaction/regret. All women undergoing surgery will have cytological and histological assessment using a SEE-FIMM protocol. Post-surgery FSH levels will be tested and follow up questionnaires sent at 3 months and annually. Controls will not undergo surgery, and have their FSH levels checked and complete questionnaires at baseline and annually for three years.

Results: Study currently in set-up phase.

Conclusion: With growing evidence implicating the role of the fallopian tubes in ovarian carcinogenesis and the detrimental sequelae of surgical menopause in pre-menopausal women following RRSO, PROTECTOR is essential to investigate RRESDO as an alternative risk-reducing strategy in women who do not want to undergo oophorectomy.

BGCS 0015

The Management of Niraparib induced Nausea

Dr Clare Green, Medical Oncologist, Southampton University NHS Trust

The Phase III ENGOT-OV16/NOVA study showed a benefit of maintenance Niraparib regardless of BRCA status in recurrent platinum sensitive ovarian cancer. Toxicities seen included haematologic, gastrointestinal, fatigue and cardiovascular.

Nausea is a very common side effect, affecting approximately 74% of patients taking Niraparib. 71% of those have mild/moderate nausea (Grade 1 or 2) and 3% experience grade (G) 3 or 4 (severe or life threatening) nausea and vomiting.

Of the 14 patients treated at our institution; 2 (15%) have had no nausea, 7 (50%) had G1 nausea, 3 (30%) G2 and 2 (15%) had G3 nausea and vomiting,.

During the consultation before a patient starts Niraparib treatment, all side effects should be discussed, including the likelihood of experiencing nausea. If a patient is expecting nausea and has been informed as to how to manage it, then this lessens perceived experiences. Advising patients to take Niraparib in the evenings alongside an antiemetic (usually metoclopramide) is good practice.

For those with G3/4 nausea and vomiting, Niraparib should be stopped until symptoms subside completely or to a grade 1, manageable level. If Niraparib is restarted, the dose should be reduced by 1 dose level. For our 2 patients who experienced G3/4, symptoms developed quickly, within the first week of treatment and in one case symptoms escalated despite maximal oral antiemetic treatment.

Nausea is a common side effect of Niraparib, especially when initiating treatment. Managing patients' expectations and giving them management strategies, both to prevent nausea and to manage it if it does arise, is paramount. It is rare for a patient to experience grade 3/4 toxicity, but stopping Niraparib and giving appropriate fluids and antiemetics reverses the problem in 24- 48 hours. Restarting the drug (at a lower dose level) seems effective at reducing future side effects of this nature.

BGCS 0016

Less radical surgery for women with early stage cervical cancer: our experience on Radical Vaginal Trachelectomy and laparoscopic pelvic lymphadenectomy.

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Introduction: Cervical cancer (CC) spreads laterally to the parametrial tissue, inferiorly to the vagina and rarely superiorly to the uterine body or the fundus. Because of this, it is possible to maintain the fundus and adnexa in most small size cancers confined to the cervix and thus keep the possibility of future childbearing. We report our experience in the use of radical vaginal trachelectomy (RVT) with laparoscopic pelvic lymphadenectomy (LPL) in early stages CC.

Methods: Cohort study over a 6-year period (2011-2017) at the Ipswich hospital. Cases were matched to women with a similar stage of CC treated with RH and PL.

Results: 19 patients (group 1) underwent RVT and LPL, and 51 (group 2) had RH and PL. Mean age in group 1 was 28.5 (range 24-35) and mean follow-up 47.3 months (range 7-78). Group 1 included: 5/19 (26%) stage IA2 and 14/19 (74%) stage IB1 and among those: 12/19 (63%) cases of SCC, 6/19 (32%) of adenocarcinoma and 1/19 (5%) neuroendocrine subtype of CC. LVSI was present in 3/19 (16%), and tumour measurement was less than 2cms in 15/19 (79%) of group 1. Mean hospital stay was 2.7 days (range 2-4) and 4.8 days (range 3-8), (p-value=0.173) and complication rate was 4/19 (21%) and 7/51 (14%) (p-value 0.169), group 1 and 2 respectively. In group 1, we had 2/19 (10%) patients who required adjuvant therapy: one of those due to high-risk features on final pathology and the other due to close surgical margins, but no cases of recurrence. Overall survival of 100% was in 9/19 (47%) of patients at 5-years and in 15/19 (78%) at three years follow-up in group 1.

Conclusion: According to our experience RVT in well-selected patients is a cost-effective and safe treatment option with similar oncological outcomes to more extensive surgery for the same early stage cervical cancer.

Table 3: Differences between group 1 and group 2

	RVT +LPL	RH+PL	P-Value
Total Complications rate	4/19 (21%)	7/51 (14%)	0.413
Mean EBL (mls) (range)	181.6 (100-300)	547.9 (300-2000)	0.296
Mean inpatient hospital stay (Days) (range)	2.7 (2-4)	4.8 (3-8)	0.173
Residual tumour after surgery	3/19 (16%)	34/51 (67%)	0.500
Recurrence rate	0/19 (0%)	2/51 (4%)	0.497

RVT= Radical vaginal trachelectomy, LPL= Laparoscopic pelvic lymphadenectomy, RH= radical hysterectomy, PL= pelvic lymphadenectomy

(p-value <0.05 to be significant and calculated by using Fisher's exact test)

BGCS 0017

Can we predict tumour stage in endometrial cancer according to patients' clinical and sonographic features?

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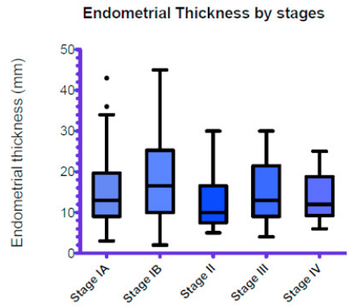
Introduction: There is evidence suggesting that high body mass index (BMI), diabetes, use of hormone replacement therapy (HRT) and Tamoxifen for breast cancer are risk factors for endometrial cancer (EC) incidence. However, few epidemiological studies have evaluated correlation between specific risk factors for EC with FIGO stage at diagnosis. We also reported association of ultrasonographic findings and stages of EC.

Methods: A single institution analysis of 339 cases of EC from 2010 to 2017 was conducted. Multivariate analysis was obtained using stepwise regression analysis.

Results: As expected, EC risk was higher in women with BMI ≥25 (BMI ≥ 25.0-29.9 with an OR 5.52 (CI 95% 3.11-9.80), BMI≥30-39.9 OR 2.51 (CI 95% 1.47-4.29) and BMI ≥40 OR 4.23 (CI 95% 2.07-8.66). In women with normal or underweight (BMI < 18.9 with OR 1.31 (0.08-21.3) and BMI ≥ 19-24.9 with OR 1.30 (95% CI 0.65-2.62), respectively. Stratified association of BMI to FIGO stages was significantly different, as women with higher BMI presented at earlier stages (p-value=0.046). Stratified analysis according to parity (p-value=0.1630), use of HRT (p-value 0.7448), Tamoxifen (p-value= 0.0733) and diabetes (p-value= 0.1665) was not statistically associated to FIGO stage. Preoperative measurement of the endometrium was less than 5 mm in 4/205 patients with stage IA, 1/85 in stage IB, 1/21 in stage III. Mean ET was 14.80 mm (range 3.0-43.0), 17.92 mm (range 2.0-45.0 mm), 12.19 (range 5.0-30.0), 16.3 mm (range 4.0-30.0) and 12.0 mm (range 6.0-25.0) in stages IA, IB, II, III and IV respectively. This difference was not statistically significant (p-value 0.1593).

Conclusion: Our results suggest that only BMI has a relation with FIGO stage, as women with higher BMI present with earlier stages. Other well-known risk factors cannot predict stage at presentation. Endometrial thickness measurements of 4-5 mm are reliable in postmenopausal women, however cannot predict the stage of EC.



BGCS 0018

Are there any advantages in evaluating EGF system receptors in non-selected patients with endometrial cancer?

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[1]Division of Gynaecological Oncology, Department of Obstetrics and Gynecology, [2]Department of Pathology, [3]Department of Obstetrics and Gynecology, University of Patras, Medical School, Rion 26500, Greece.

Introduction: The epidermal growth factor system (EGF system) has considerable role in cell proliferation, differentiation and apoptosis. Dysregulation of EGF system signalling network is involved in the pathogenesis of various diseases as well as in cancer. The expression of EGF system receptors, has not studied well in endometrial cancer. That was the main reason why, we decided to evaluate the expression of EGF system receptors in non-selected Greek patients with endometrial cancer.

Methods: Formalin-fixed paraffin-embedded tissue sections representative of the tumour, were immunostained using the biotin-streptavidin peroxidase method. For EGF system receptors immunostaining, we used: anti-EGFR polyclonal antibody sc-03 (Santa Cruz Biotechnology Inc., Santa Cruz, CA, USA) in a dilution 1:20, anti-ErbB-2 monoclonal antibody CB11 (BioGenex Laboratories Inc., San Ramon, CA, USA) in a dilution 1:100, anti-ErbB-3 polyclonal antibody sc-285 (Santa Cruz Biotechnology Inc., Santa Cruz, CA, USA) in a dilution 1:100 and anti-ErbB-4 polyclonal antibody sc-283 (Santa Cruz Biotechnology Inc., Santa Cruz, CA, USA) in a dilution 1:200.

Results: For EGFR receptor 53 cases were positive (57%) and 40 were negative (43%), while for ErbB-2 receptor 61 cases were positive (65.6%) and 32 were negative (34.4%). For ErbB-3 receptor 66 cases were positive (71%) and 27 were negative (29%), while for ErbB-4 receptor 72 cases were positive (77.4%) and 21 were negative (22.6%). There were differences in the expression of EGF system receptors, among different histologic subtypes. However, these differences were not statistically significant mainly because of the small number of papillary serous and clear cell cases.

Conclusion: EGF system receptors, should be evaluated separately in patients with type I and type II endometrial cancer. This is mainly based on the fact that these types of endometrial cancer have different pathophysiology as well as clinical behaviour.

BGCS 0019

Evaluating ErbB receptors profile in patients with type II endometrial cancer

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Introduction: ErbB receptors are trans-membrane glycoproteins with tyrosine kinase activity. Especially in cancer, they implicated in cell proliferation, transformation, angiogenesis, migration and invasion. That was the main reason why, we decided to investigate the expression of ErbB family receptors in Greek patients with type II endometrial cancer.

Methods: Formalin-fixed paraffin-embedded tissue sections representative of the tumour, were immunostained using the biotin-streptavidin peroxidase method. For ErbB receptors immunostaining, we used: anti-EGFR polyclonal antibody sc-03 (Santa Cruz Biotechnology Inc., Santa Cruz, CA, USA) in a dilution 1:20, anti-ErbB-2 monoclonal antibody CB11 (BioGenex Laboratories Inc., San Ramon, CA, USA) in a dilution 1:100, anti-ErbB-3 polyclonal antibody sc-285 (Santa Cruz Biotechnology Inc., Santa Cruz, CA, USA) in a dilution 1:100 and anti-ErbB-4 polyclonal antibody sc-283 (Santa Cruz Biotechnology Inc., Santa Cruz, CA, USA) in a dilution 1:200.

Results: For EGFR 5 cases were positive (50%) and 5 cases were negative (50%), while for ErbB-2 9 cases were positive (90%) and 1 case was negative (10%). For ErbB-3, all cases were positive (100%), while for ErbB-4 7 cases were positive (70%) and 3 cases were negative (30%). Overall, 5 cases were positive (50%) for all ErbB receptors.

During follow up, 3 patients died from their disease. All of them had papillary serous endometrial cancer and 2 of them were positive for all ErbB receptors (66.7%).

Conclusion: We had high expression levels of all ErbB receptors in patients with type II endometrial cancer. In this light, ErbB-targeted therapies may be clinically active as adjuvant therapy in well-defined subgroups of type II endometrial cancer patients with EGFR and ErbB-2 overexpression.

BGCS 0020

Addressing Waiting Times for Post Operative Radiotherapy in Gynae-Oncology Patients

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Introduction: There is a significant body of evidence suggesting delays in treatment with Radiotherapy negatively impacts on patient outcomes. Cattenno et al found that progression free survival and overall survival were significantly reduced if the time to post-operative radiotherapy (PORT) was extended past 9 weeks (63 days). Our study examined the current waiting time for PORT in gynaecological cancers in South West Wales. With an aim to identify where patient delay occurred.

Changes to the pathway were implemented and the impact was assessed.

Methods: The median time from surgery to PORT was 87 days, significantly longer than the recommended 63 days (9 weeks). We focused on improving the time from 'MDT to oncology out-patients clinic' which had a mean waiting time of 33 days. A joint gynaecological surgical and oncology clinic was developed. Where patients had the opportunity to meet with both gynaecological-surgical teams and oncology teams sequentially, thus reducing the wait between specialties. Analysis of waiting times was conducted at 3 months after implementation

Results: Analysis of patient waiting times compared the old referral system and clinic structure in 2016 to the first 3 months of the new model. The median time from MDT to Oncology OP clinic was 18.8 days in 2016 (old model) compared to 8.5 days in 2017 (new model) for all gynaecological cancers. See Graph 1 below. Overall time from surgery to radiotherapy was reduced from a peak of 87 days 2013-2015, to 55 days in the first 3 months of the new model implemented.

Conclusion: 3 month analysis suggests median treatment times from 'MDT to consent' as well as the 'overall treatment time' have been improved by developing a joint clinic structure and early input by the oncology team. We will continue to collect data and work to decrease time from 'Consent to Treatment' to minimise delays to treatment.

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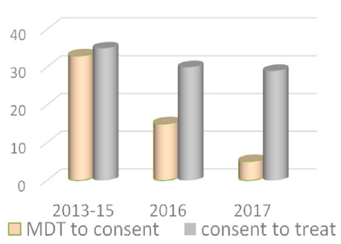
Interval Between Hysterectomy and Start of Radiation Treatment is Predictive of Recurrence in Patients with Endometrial Carcinoma. International journal of Radiation Oncology. Nov 2013. Cattaneo et al.

Graph 1: Time from MDT to consent 2013 to 2017



BGCS 0021

The Prevalence, Clinico-pathologic Characteristics, and Outcome of Neuro-endocrine Tumours in The Female Reproductive System.

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Introduction: Neuroendocrine tumours (NETs) are reportedly rare and aggressive malignancies in the female reproductive system. This study reported the prevalence and clinical outcome of NETs in a tertiary cancer centre in Singapore.

Methods: NETs diagnosed between Jan 2015 and December 2017 were identified. Histological diagnosis of NETs was determined by histo-pathological features of the tumours on H & E sections and by positive immunohistochemical staining for synaptophysin, chromogranin and CP56. The prevalence of NETs was calculated and relevant clinical and pathological information were analysed.

Results: The study period recorded 632 new cases of gynaecological cancers from the cervix (n=113), corpus uteri (n= 274), primary peritoneum/Fallopian tube/Ovary (n=229), Vulva (n=10), and vagina (n=6). There were 4 cases of NETs (Table-1): cervix (n=1), corpus uteri (n=1), and ovary (n=2). The overall prevalence of NETs was 0.63% (4/632). All the four cases of NETs were elderly women and none demonstrated paraneoplastic symptoms or hormonal dysfunctions. All the cases were mixed adenocarcinoma and NETs. Three were stage-1 cancers and one stage 4b cervical cancer. All the stage-1 cancers were relapsed free following radical surgery and 2 had received adjuvant combined systemic chemotherapy with etoposide and cisplatin (table-1 below). The case of stage-4b cervical cancer showed a remarkable response to combined intravenous etoposide and cisplatin with an objective reduction of the primary tumour diameter, on MRI imaging, from 5.8-cm to 1.7-cm after 3 cycles. The response was short-lived and the disease progressed shortly after the 6th cycles of chemotherapy.

Conclusion: Neuroendocrine tumours in the female reproductive system are very rare and present as mixed tumours with adenocarcinoma. Remarkable chemo-sensitivity to combined etoposide and cisplatin seems unsustainable and should remain an adjuvant or palliative measure. Radical surgery is the mainstay treatment for NETs, with a good disease control rate and survival in cases at early stage.

BGCS 0024

Evaluating treatment patterns, tolerance and outcomes in older women treated for epithelial ovarian cancer; a retrospective review from two UK cancer centres

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Introduction: Over 50% of all new diagnoses of ovarian cancer occur in women over the age of 65. Increasing age is associated with poorer outcomes; reasons include delayed presentation, more advanced stage, increased comorbidities, relative under-treatment as well as adverse tumour biology. Older patients are less likely to be enrolled into clinical trials and there is a consequent lack of data on tolerance and outcomes to standard care and new treatments.

Methods: The electronic patient records at two UK cancer centres were retrospectively examined. 280 patients met the following inclusion criteria: i) histologically or cytologically confirmed diagnosis of epithelial ovarian cancer ii) seen in the surgical or medical oncology teams for discussion of treatment & iii) age 65 or over at the time of diagnosis. Details of first line and subsequent treatment were collected; patients were divided into 5-year age cohorts for analysis.

Results: Increasing age was associated with poorer ECOG performance status. Stage and histological subtype distribution did not differ with age. Older women were less likely to undergo optimal cytoreductive surgery, receive combination chemotherapy or complete the planned chemotherapy course. Severe non-haematological toxicities were more common with increasing age. Women over the age of 80 had significantly worse outcomes. 1 and 5 year survival was 63% and 10% respectively in those over 80 compared to 83.5% and 37.8% in those aged 65-69. (See table 1.)

Conclusion: To our knowledge, this is the largest UK dataset reported describing real-world outcomes from first

Table 1. Demographic and clinical details, and treatment outcome of gynaecologic neuroendocrine tumours

Case No.	Age (year)	Parity	Presenting Symptoms	Tumour site	FIGO stage	Treatment-surgery	Treatment-chemotherapy	Follow-up (month)	Status
1	60	3	Abdominal mass	ovary	1c	THBSO/ OMEN/ PLND	Etoposide	34	NED
2	76	6	PMB	Endometrium	1a	THBSO/ OMEN/ PLND	Cisplatin declined	32	NED
3	61	0	Abdominal mass	ovaries	1c	THBSO/ OMEN/ PLND	Etoposide Cisplatin	30	NED
4	63	2	PMB	Cervix	4b	None	Etoposide Cisplatin	9	Dead

and subsequent line treatment for newly diagnosed ovarian cancer in older women. There is an urgent need for studies evaluating the assessment of older patients to better identify those who are at high risk of treatment-related toxicities and those most likely to benefit from therapy as well as interventions to optimise patients for treatment with the aim of improving outcomes.

BGCS 0025

Initial experience of enteral feeding post ultra-radical surgery for ovarian cancer

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Introduction: The aim was to evaluate the success rate of early enteral feeding following ultra-radical surgery.

Methods: Patients who underwent ultra-radical surgery for ovarian cancer received intraoperative triple lumen nasojejunal (NJ) feeding tube placement as standard. Enteral feeding was commenced day one post operatively, with patients allowed sips of fluid orally. Data was collected for 18 patients over 18 months, this included duration of feeding until passing flatus as a surgical marker for allowing an increase in oral intake. The primary outcome was the percentage target rate of enteral feed met each day.

Results: Eighteen patients underwent NJ feeding tube placement. Sixteen received enteral feed, for 3 patients data collection was incomplete. Two patients proceeded straight to oral diet with nutritional supplements. Six patients (46%) reached their target enteral feed rate by day 2 post operatively and five (38%) by day 3. The mean duration of NJ feeding was 6 days (range: 3-13) before progressing onto diet and supplements. The main cause of feed progression interruption was patient-related symptoms (mainly nausea) often resulting in nursing staff reducing or stopping the feed without dietetic consultation. Patients who were prescribed anti-emetics were less likely to experience delayed feed progression. Mean length of stay was 11 days (range: 3-31) with an average of 5 dietetic contacts (range: 2-13). Mean weight was 65Kg, with mean body mass index (BMI) of 24Kg/m^2.

Conclusion: Early NJ feeding following ultra-radical surgery appears to be well tolerated in this patient group. The main reasons for inadequate tolerance of feed and delayed feed progression were patient reported nausea and tube related issues such as positioning and blockages. Better nurse education regarding strategies to prevent these appears to reduce delays to feed progression.

BGCS 0026

Case series: Vulval Angiomyxoma

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Introduction: Angiomyxoma is a rare, locally infiltrative mesenchymal tumour. It is more common in women and often found on the perineum or vulva. It is managed by radical surgical excision but has a high-risk of local recurrence. Prognosis is good, but significant morbidity is associated with extensive surgery or recurrence. There are currently no guidelines for the management or post-operative follow-up of vulvar angiomyxoma.

Methods: We reviewed all cases of vulval angiomyxoma at a large central London teaching hospital over the last 5 years. Three cases of vulval angiomyxoma were identified and their clinical notes and histology were reviewed. A thorough literature search was performed to assess for recent advances in the management of vulval angiomyxoma.

Results: Case-1 presented with a painless, vulval mass which was excised with clear margins. Case-2 presented with a long-standing vulval mass, with tumour-involved margins after excision. Both cases had no evidence of recurrence after 2 years, however they remain under follow-up. Case-3 had a recurrence of her previously undiagnosed vulval angiomyxoma after 6 years, for which she required extensive surgery. Misdiagnosis of vulval angiomyxomas is thought to be common given its rarity and the large differential diagnosis of a slow-growing vulval mass. No patients were offered gonadotrophin-releasing hormone agonist therapy.

Conclusion: Vulval angiomyxoma is a rare locally aggressive tumour with a high-risk of recurrence. Treatment is with surgical excision, however the literature suggests that patients with clear margins have similar recurrence rates to those with tumour-involved margins. A high-index of suspicion is required to ensure that these slow-growing tumours are reviewed by a specialist early and not misdiagnosed. Gonadotrophin-releasing hormone agonist therapy is an emerging treatment, especially for those who are unsuitable for extensive surgery.

BGCS 0027

Site of and time to recurrence after chemoradiotherapy for cervical cancer: a population-based study

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Introduction: Radiotherapy was the mainstay for treating cervical cancer for nearly a century. However, radiotherapy has proved ineffective in controlling pelvic disease in up to 40% of cases, with the pelvis being site of relapse in 70% of patients and 85% of deaths occurring in the first 3 years, most with disease confined to the pelvis. In an effort to improve loco-regional tumour control, chemoradiotherapy was introduced in 1999 and became the standard treatment in the Grampian region. This has led to improved cure rates. Though we have seen fewer pelvic relapse we noticed a number of late distant relapses. Our aim was to assess the site and time of cancer recurrence in women treated with chemoradiotherapy for cervical cancer.

Methods: A retrospective observational cohort study of women who received chemoradiotherapy for cervical cancer in Aberdeen Royal Infirmary between February 2000 and March 2011 and were followed up until 2018.

Results: 114 women with accessible data completed chemoradiotherapy during the allocated period with mean age at treatment 54.69 years (SD=14.83, range 2283). Staging of the cancers was as follows stage IB2: n=15 (13.2%); stage II: n=45 (39.5%); stage III: n=43 (37.7%); stage IV: n=7 (6.1%). During the follow-up period 40 (35.1%) women died from cervical cancer relapse, 7 (6.1%) women from progressive disease during treatment and 4 (3.5%) women from causes other than cervical cancer. 48 (42.1%) women had recurrence after treatment. From these, 4 (8.33%) women had no available data. The sites of recurrence were: pelvic central only (n=4, 8.33%), pelvic and distant only (n=29, 60.42%), distant only (n=11, 22.92%) [high para-aortic lymph nodes (n=1, 2.1%), liver (n=6, 12.5%), lungs (n=1, 2.1%), distant lymph nodes (n=1, 2.1%), bones (n=3, 6.25%), brain (n=3, 6.25%)].

Conclusion: Final results including time to relapse and 5YS will be presented at conference.

BGCS 0028

The impact of migration on the awareness and attitudes of cervical cancer prevention in migrant Eastern European women in England

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Douglas Tincello, University of Leicester
Esther L Moss, University of Leicester

Introduction: The incidence of cervical cancer in Eastern Europe (EE) is significantly higher than Western Europe (WE) despite the introduction of screening and vaccination programs in many EE counties. The migration of women from EE has been hypothesised to contribute the rising incidence of cervical cancer in WE. The aim of this study was to explore the effect of migration to England on the knowledge of cervical cancer and screening behaviours of EE-born women.

Methods: A mixed methods study of quantitative surveys and semi-structured qualitative interviews was conducted in England and Latvia. Women were recruited from three groups, migrant EE-born women (nEE), native English-born Caucasian women (nEN) and native Latvian-born women (nLV).

Results: 489 surveys were completed and 56 interviews were conducted. Knowledge of the purpose of cervical cancer screening was lower in the nEE and nLV groups compared to the nEN($p = <0.01$), who were more likely to believe that a cervical smear test was performed as part of a routine gynaecological examination. The natural history of cervical cancer and its association with HPV infection was poorly understood resulting in some women from nEE and nLV groups requesting more frequent smears. nEE women either continued to have screening in their country of birth, have screening in England and additional smears in their country of birth and others did not participant in any form of screening. The screening behaviours and knowledge of the nEE and nLV group were similar, suggesting that there is little change following migration.

Conclusion: The screening behaviours of many nEE women appear to be governed by their pre-existing knowledge of cervical cancer and screening prior to migration. Targeted education both prior to and after migration may help to increase screening coverage.

BGCS 0029

Primary vaginal gestational trophoblastic neoplasia treated with uterine angiographic embolization and chemotherapy

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Introduction: Gestational trophoblastic neoplasia in general is a rare condition, much so is primary extrauterine gestational trophoblastic neoplasia. In the Philippines, local data showed that incidence of gestational trophoblastic neoplasia remained to be almost constant at 22.4 per 40,000 pregnancies. However, incidence of primary extrauterine gestational trophoblastic neoplasia was not mentioned. To date, there are only 2 cases of primary vaginal choriocarcinoma and 1 case of primary vulvar choriocarcinoma reported in literature.

Methods: This is a case of a 26-year old gravida 1 para 0 (0-0-1-0) who came in for profuse vaginal bleeding. Serum beta human chorionic gonadotropin (BhCG) was elevated and ultrasonographic study showed a hypervascular vaginal mass and an empty uterus. Patient was diagnosed with primary vaginal gestational trophoblastic neoplasia and was started with combination chemotherapy of Etoposide, Methotrexate, Actinomycin D, Cyclophosphamide and Vincristine (EMACO).

Results: However, during the course of chemotherapy, profuse vaginal bleeding was noted which was controlled by angiographic embolization of the uterine arteries. The patient tolerated the procedure and achieved a normal BhCG level after six cycles of EMACO.

Conclusion: Primary vaginal gestational trophoblastic neoplasia is a rare condition that warrants high index of suspicion. Combination chemotherapy with EMACO is the cornerstone of treatment. Angiographic embolization is a minimally invasive procedure that is safe and effective in managing acute haemorrhage among patients with gestational trophoblastic neoplasia.

BGCS 0030

Spontaneous uterine rupture secondary to pyometra in a cervical cancer patient: a case report

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Introduction: Pyometra, an accumulation of pus within the uterine cavity, is a rare gynaecologic disease with an incidence of 0.01-0.5% among all gynaecologic patients and 13.6% among elderly gynaecologic patients.

Methods: Pyometra in itself is rare, much so is uterine rupture occurring secondary to it. No local data reporting incidence of ruptured pyometra in the Philippines has been published.

Results: This is a case of a 63-year-old Gravida 5 Para 5 (5-0-0-4), with Cervical Endometrioid Adenocarcinoma Stage IIIB, presented with abdominal pain. Whole abdominal Computed Tomography scan revealed pneumoperitoneum. Initial assessment was pneumoperitoneum probably secondary to ruptured viscus. The patient underwent exploratory laparotomy which revealed ruptured pyometra. Subsequent management included drainage, culture guided antibiotics, radiotherapy and brachytherapy.

Conclusion: Spontaneous rupture of pyometra is a serious medical condition which requires an accurate diagnosis in order to arrive in appropriate surgical and medical management. However, pre-operative diagnosis is difficult despite the presence of advanced imaging techniques, hence high level of suspicion is warranted in identifying this condition.

BGCS 0031

A wound that failed to heal: high-grade ovarian serous carcinoma associated with chronic Schistosomiasis

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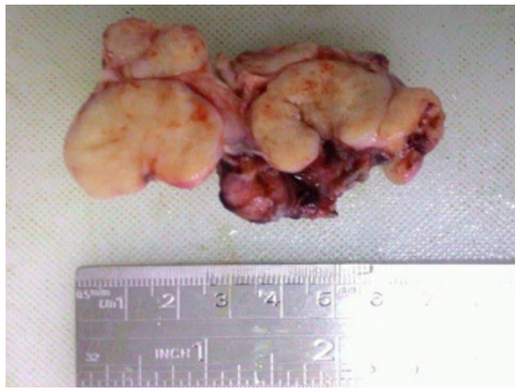
Schistosomiasis has been associated to urinary bladder, liver, colorectal and cervical cancer. However, its role in ovarian malignancy has not been described. With the premise that long- standing inflammation secondary to chronic infection predisposes to cancer by promoting an environment that cultivates genomic lesions and tumour initiation, does chronic infection with Schistosomiasis also predispose to ovarian malignancy? We presented a case of a 54 year-old with chronic Schistosoma infection, who was diagnosed with high-grade serous carcinoma of the right ovary. In this case, the infection reached the pelvic organs infesting the right fallopian tube and left ovary. With chronic inflammation, there was subsequent damage to deoxyribonucleic acid (DNA) caused by mutation and activation of oncogenes, oxidative stress from fluke-derived products and physical damage of host tissues as the parasites developed. Ultimately, these mechanisms led to tumour initiation, promotion and progression. However, only the right fallopian tube developed the cancer. Consistent with the hypothesis that premalignant lesions at the fimbriated end of the fallopian tube is the origin of high grade ovarian serous carcinoma, we supposed that the primary site of malignancy is the right fallopian tube. Based on proximity, the malignant cells could have seeded to the right ovary, leading to the high grade serous carcinoma of the patient.

The right ovary consists of a brown-red, irregularly-shaped, firm, multinodular piece of tissue measuring 4.7 x 2.5 x 3 cm. The external surface is smooth with prominent vascular markings. Section shows nodular, solid cut surfaces ranging from 0.7 to 2.8 cm in diameter.



BGCS 0032

A Systematic Review of HPV Vaccine in the Treatment of Vulval and Vaginal Intraepithelial Neoplasia

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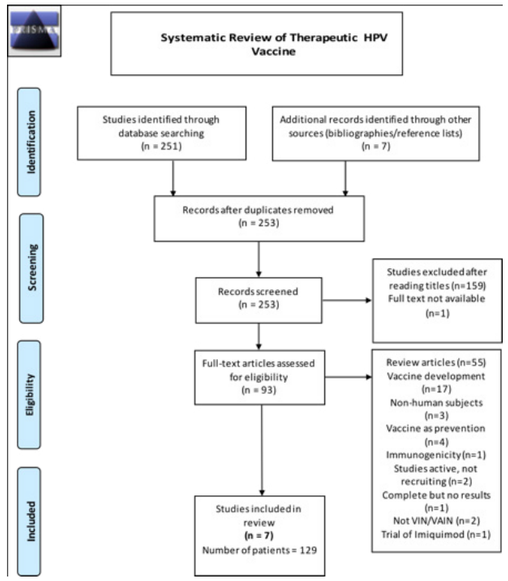
Introduction: HPV DNA is found in over 80% of VIN/VaIN. Cell-mediated immunity is required to clear established HPV infections. Current management includes surgical excision, ablation, or topical immune modulators. Regardless of modality, recurrence rates are high. The role of the HPV vaccine in secondary prevention and treatment has not yet been fully established. We present our literature review.

Methods: We included any type of study design using any form of HPV vaccine in the treatment of women with a histologically confirmed diagnosis of VIN/VaIN. We excluded studies of other lower genital tract disease, vulval/vaginal carcinoma and prophylactic use of vaccines. The outcome measures were lesion response to vaccination, symptom improvement, immune response and HPV clearance.

Database searches included Ovid Medline, Embase, Web of Science, The Cochrane Library and Clinicaltrials.gov. Search terms included HPV vaccine AND therapeutic vaccine* AND VIN OR VAIN, published in English with no defined date limit. Searches were carried out with a UCL librarian in March 2018.

Results: We identified 93 articles, 7 studies met our inclusion criteria; these were uncontrolled case series. There were no RCTs identified. Reduction in lesion size was reported by all 7 studies, symptom relief by 4, HPV clearance by 6, histological regression by 6, and immune response by 6. Lesion regression varied from no response to 83%. Symptom relief varied from no overall change to 63% becoming symptom free. HPV clearance rates varied (8-74%) and histological clearance was noted in 0-63%. Immune response to vaccination also varied (30-94%).



Conclusion: HPV vaccines are safe and well tolerated. This review suggests vaccine potential in the treatment of women with VIN and VaIN, showing effects on lesion size and symptom relief. However, the evidence is of low quality and insufficient to guide practice. Further longitudinal studies are needed to assess its use in prevention of progression to cancer.

BGCS 0033

Prognosis of epithelial ovarian cancer patients (EOC) with abdominal wall metastasis (AWM)

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Introduction: Patients with the detection of AWM in EOC are categorised as FIGO IVB irrespective of other biologic factors. We evaluated the impact of AWM on patients` overall survival (OS).

Methods: This retrospective study includes 48 patients treated at our institution between 2005 and 2015 and categorized in group A (FIGO IIIC, n=18), group B (FIGO IV-only AWM, n=20), and group C (FIGO IV- metastases other than AWM, n=10). Clinicopathological parameters and survival data were extracted from our prospectively maintained tumour registry. Survival analyses were calculated using Kaplan-Meier method and Cox regression models.

Results: The median overall survival (OS) in group A, B, and C was 37, 58, and 25 months (p <0.001) respectively. Multivariate analysis revealed that in reference with FIGO IIIC OS in patients with FIGO IV-only AWM was not significantly inferior (HR 0.84, 95%CI 0.55-1.23, p=0.340), but was superior compared with FIGO IV-metastases other than AWM (HR 1.61, 95%CI 1.25-2.04, p<0.001). Further independent prognostic factors for OS were pT-stage, nodal status, performance status, and residual tumour, respectively.

Conclusion: Prognosis of patients with AWM as the only site of distant metastasis differs significantly from other stage IV-patients. Therefore, up-staging of patients with AWM to FIGO IVB seems not be justified with respect to prognosis. A revision/clarification of the FIGO classification system should be considered to avoid unnecessary stigmatisation as FIGO IVB and to better classify these patients in their respective prognostic group.

BGCS 0035

Outcomes for ovarian cancer in patients over 80 years – surgery vs. chemotherapy

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Introduction: Ovarian cancer carries significant mortality which is more pronounced in patients over 80 years old. 70% women diagnosed with ovarian cancer over the age of 80 die within the year[1]. The decision about optimal first line management will depend on the extent of disease and co-morbidities. When performing surgery NICE recommends aiming for complete cytoreduction[2].

Methods: Aim: To determine outcomes for women with ovarian cancer over the age of 80, comparing primary surgical and chemotherapy management.

A sub-group analysis of patients over 80 years were identified from an existing data set of ovarian cancer patients from 2008 to 2016. A retrospective analysis was performed using electronic hospital records.

Results: 34 patients were identified, the median age is 84. 48% had two or more significant co-morbidities. 82.9% were diagnosed with stage 3 or 4 disease. Primary treatment was surgery (31.4%), chemotherapy (25.7%) and palliative care (42.9%). In the surgical group there was complete cyto-reduction in 45%, compared to 59% in the under 80s group. 64% experienced no complications with the most common complications being infection and CVA. None of the primary chemotherapy group underwent interval debulking surgery. Recurrence rates in the surgical group were 18.2% significantly lower than the 59.9% in the <80 year group. Recurrence rates of 66.7% in the chemotherapy group were slightly higher than the 54.0% in the <80 group. Survival to the end of 2016 was 54.5% in the surgical group, similar to the rate in under 80s (54.2%). Survival was 11.1% in the chemotherapy group, significantly lower than 31.7% in the under 80s.

Conclusion: The primary surgical group had similar survival rates to the younger patients and significantly lower rates of recurrence. This may relate to the lower stage of diseases being predominant in this group compared to the younger patients. This study is limited by the small number of patients included. However, our results support selective surgical management in this patient group.

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BGCS 0036

Papillary thyroid carcinoma presenting as an ovarian mass: a case report

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A 48 year old lady presented with heavy periods and a history of submucosal fibroids. An ultrasound scan showed an 11 cm complex cystic mass arising from the right ovary. Subsequent CT scan confirmed a septate d cyst, a small amount of free fluid with no evidence of peritoneal disease or lymphadenopathy. Ca125 was normal at 16 and Ca19-9 was <1. At laparoscopy the right ovary contained a large multicystic lesion which was not overtly malignant in appearance. Washing were sent and the omentum was biopsied and in addition a left salpingectomy was carried out.

The large cystic lesion was removed along with the tube and ovary. No malignant cells were seen on cytology of peritoneal washings. The histology of the right ovary shows features of a mature cystic teratoma (50mm) with a pre-dominant component of thyroid tissue. The thyroid tissue showed features of thyroid type papillary carcinoma. The patient has not had any current or past thyroid problems and there is no family history of thyroid cancer. Clinical examination and imaging of her thyroid was normal. Following MDT discussion the decision was made for active surveillance with TFT and thyroglobulin levels. She remains well.

Struma ovarii with papillary thyroid carcinoma is rare, representing 0.01% ovarian tumours[1]. The diagnosis is usually made using histology, in retrospect. There is not definitive consensus in management of these cases and they should be managed on a case-by-case basis. Additional pelvic surgery is rarely indicated. With incomplete excision or co-existing thyroid mass, total thyroidectomy and radio-iodine treatment may be required. Conservative management can be considered where there is wish for fertility conservation or no evidence of metastatic disease. Monitoring can include thyroglobulin levels.

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BGCS 0037

Immunohistochemical Expression of Different Sub-Types of Cytokeratins by Endometrial Stromal Sarcoma

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Introduction: Endometrial stromal sarcomas (ESS) are rare and understudied gynaecological mesenchymal neoplasms. These tumours can be confused with many other gynaecological and not-gynaecological tumours due to their variegated morphological appearance and non-specific immunohistochemical profile.

ESS can express cytokeratin (CK) and, therefore, may be misdiagnosed as carcinoma especially in extra-uterine locations and when recurrence/metastasis is present.

The aim was to analyse the expression of a broad spectrum of common CKs antibodies in a series of two types of ESS. The relationship of CKs expression with CD10, oestrogen receptor (ER), progesterone receptor (PR), and cyclin D1 was also investigated.

Methods: Immunohistochemical expression of AE1/3, CAM5.2, HMCK, MNF116, CK5, CK6, CK7, CK8/18, CK14, CK17, CK19, and CK20 in six low grade (LG) and five high grade (HG) ESS was investigated. Additionally, staining for ER, PR, CD10 and Cyclin D1 was performed. Automated Immunohistochemistry staining was performed on Bond III Immunohistostainer.

Results: Our results showed that CKs AE1/3, CM 5.2, MNF116, and CK8/18 are more expressed in LG ESS, whereas HG ESS express more AE1/3 and CM 5.2.

CD10 was positive in all LG and HG ESSs. ER ad PR expression was variable, but with more positive cases in LGESSs. Cyclin D1 was positive in all HGESSs and negative in all LGESSs.

No relationship was found between the expression of CKs and ER, PR, CD10 and Cyclin D1.

Conclusion: Among the broad spectrum of CKs, the most diagnostically useful for both LG and HG ESS were AE1/3, MNF116, CAM 5.2, and CK8/18. There was no significant difference between LG and HG ESS in terms of expression of CKs subtypes.

In problematic cases, especially in recurrences or metastases, the immunohistochemical panel of antibodies AE1/3, MNF116, CAM 5.2, and CK8/18, together with CD10, cyclin D1, ER, and PR, may be helpful in the differential diagnosis between ESS and other malignancies.

BGCS 0038

Impact of bowel preparation on rectal volume and dose parameters during adjuvant radiotherapy for endometrial cancer.

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Introduction: Adjuvant pelvic external beam radiotherapy (EBRT) is continually under investigation due to the significant morbidity that patients experience. In PORTEC3, 29% of patients who received EBRT alone developed grade 2-4 gastrointestinal toxicity. Within our institution bowel preparation with regular laxatives and microenemas before planning and treatment was introduced to reduce organ motion and toxicity. This study aims to review the impact of this bowel preparation on rectal volume and dose received.

Methods: A retrospective review was performed of patients who underwent EBRT before (1/11/15-1/3/16), and after (1/11/17-1/3/18) bowel preparation implementation. All patients received 45Gy in 25 fractions using intensity modulated radiotherapy (IMRT). The rectum was outlined as per standard protocol. Rectal volume, ant-post (AP) diameter, mean dose (Dmean), maximum dose (Dmax) and volume receiving 45Gy(V45Gy), 30Gy(30Gy), 20Gy(V30Gy) and 10Gy(V10Gy) were compared between both groups.

Results: 38 patients were reviewed. 1 was excluded as she received conformal EBRT not IMRT. 37 were analysed; 22 after ('post'), and 15 before ('pre') bowel preparation. The rectal volume was larger in 'pre' patients but the AP diameter smaller. All dose parameters were lower 'post' except for the Dmax. The largest difference was seen in the V20Gy (9% reduction) and V10Gy (10.7% reduction). No differences were statistically significant. See Table for mean, standard deviation and 95% confidence interval for all parameters.

See table overleaf.

Conclusion: Bowel preparation in this cohort of patients reduced the rectal volumes receiving radiation dose, with the largest differences seen in the volume receiving 20Gy and 10Gy. This is likely to reduce toxicity, and therefore supports the use of this simple well-tolerated intervention. These differences however are not statistically significant, and therefore further analysis of a larger cohort is necessary. It would also be of interest to review the impact of bowel preparation on rectal volume throughout treatment using routinely performed cone beam computed tomography (CBCT).

	Pre bowel prep			Post bowel prep			Absolute difference
	mean	SD	(95% CI)	mean	SD	(95% CI)	
Volume	72.7	23	(50.0-95.3)	83.8	58	(59.4-108.1)	11.1
AP diam	3.8	1.4	(3.1-4.5)	3.4	1.0	(3.0-3.8)	-0.4
Dmax	45.3	3.8	(43.4-47.3)	46.1	0.4	(45.9-46.2)	0.7
Dmean	30.3	6.7	(26.9-33.7)	28.1	6.0	(25.5-30.6)	-2.2
V45Gy	4.4	3.9	(2.4-6.3)	3.1	2.6	(2.0-4.2)	-1.2
V30Gy	58.9	21	(48.2-69.7)	56.8	14.8	(50.6-63.0)	-2.2
V20Gy	79.3	17	(70.6-88.0)	70.4	17.9	(62.9-77.8)	-9.0
V10Gy	85.2	17	(77.6-93.7)	74.5	17.7	(67.1-81.9)	-10.7

BGCS 0039

The Challenges of BRCA Testing in Ovarian Cancer: The North of England Experience

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Introduction: Approximately one in eight women with high grade serous ovarian cancer (HGSOC) have a germline (g) BRCA 1/2 gene mutation. NICE guidelines mean that all women with HGSOC meet criteria for testing. We have developed a mainstream BRCA testing service within our medical oncology clinics. However, until June 2017, there was no regional NHS funded BRCA testing in HGSOC unless patients met the >10% probability risk based on family history. The Northern region incidence of BRCA mutations in unselected OC patients was unknown. To determine this, gBRCA testing was offered to women with ovarian cancer through an AstraZeneca-funded service (AZFS) and tumour BRCA testing was accessed where possible through clinical trials. We present the BRCA results for these patients.

Methods: Retrospective review of BRCA testing between 12/2015 and 10/2017 at the Northern Centre for Cancer Care, Newcastle and James Cook Hospital, Middlesbrough. Data collected: patient demographics, histology, treatment stage at testing, family cancer history and testing funding.

Results: 199 gBRCA tests funded by the AZFS and 24 tumour BRCA tests funded as part of clinical trials. All patients accepted BRCA testing. Median age of patients 63yrs (Range 31-85). 32% of patients had no family history of BRCA related cancers. 62% and 36% of patients were tested in first line and recurrent disease setting respectively. The incidence of gBRCA mutations in the HGSOC population was 11.7% (62.5% BRCA 1 and 37.5% BRCA 2). One somatic BRCA mutation was detected.

Conclusion: This is the first report of the incidence of BRCA mutations in the HGSOC North of England cohort. Our data confirmed that testing is acceptable and feasible in OC patients. These data have been used to support the case for regional NHS funded unselected BRCA testing to women with HGSOC.

BGCS 0040

Investigating postmenopausal bleeding – 2 difficult scenarios

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Introduction: Postmenopausal bleeding is a common gynaecological problem which affects 4-11% of all women after entering the menopause and accounts for about 5% of the gynaecological outpatient clinic referrals. 1 in 10 women with PMB depending on other risk factors will have a gynaecological malignancy.

Investigation and management for the "typical" patient with postmenopausal bleeding are commonly accepted and integrated in local guidelines. But what if imaging is difficult to interpret or further investigations are unsuccessful?

Methods: Discussion of 2 different scenarios of PMB which are challenging in their management. but are becoming increasingly frequent in our outpatient clinics.

1. Unscheduled bleeding on HRT
2. PMB and history of endometrial ablation

Results: The decision how to manage PMB should always be individualised for each patient depending on symptoms, risk factors and investigations.

Regarding PMB on HRT choosing the correct type of preparation and understanding the mechanisms of abnormal bleeding during hormonal therapy are of high importance. Nevertheless, if unscheduled bleeding persists past the first 6 months endometrial assessment is necessary.

Conclusion: There is growing evidence that endometrial ablation can lead to difficulties assessing the uterine cavity. This creates a unique diagnostic challenge. Several authors therefore discussed if women with high risk of developing endometrial pathology are suitable for endometrial ablation.

Overall there are variations in gynaecological practices and a lack of a standardized diagnostic and clinical approach to the management of the above scenarios.

BGCS 0041

Early bulky cervical cancer downstaged by neoadjuvant chemotherapy to allow for fertility

sparing surgery; a meta-regression of factors favouring fertility.

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Introduction: Neoadjuvant chemotherapy (NAC) to downstage "bulky" early cervical cancer (eCC) followed by fertility sparing surgery (FSS) is a novel, yet experimental approach performed in few centres. Traditional thinking dictates that chemotherapy regimens are safe for fertility. Nonetheless, the pressure towards less invasive procedures to reduce perinatal morbidity without compromising oncologic safety is ongoing. We performed a meta-regression of potential factors favouring fertility in eCC women treated with NAC followed by FSS. We also examined whether upfront nodal assessment prior to FSS could be used to tailor NAC regimens and whether any NAC protocol would be more favourable towards successful fertility.

Methods: A systematic search of MEDLINE, EMBASE, Web of Science and Cochrane Database was performed. Studies that reported obstetric outcomes in these women were located. For the meta-regression, the list of independent variables included an indicator for 1) age 2) NAC protocol type 3) FSS (less radical surgery vs more radical surgery 4) timing of nodal assessment (upfront assessment vs assessment at the time of FSS) 5) study origin and 6) study timeliness. We extracted the relative risk [RR] of the outcome variables to enable comparison of the results across the studies.

Results: Seven studies enrolling 86 patients were included in the original meta-analysis. Univariate meta-regression did not demonstrate any statistical significance for any of the desired dichotomous variables. In multivariate meta-regression, the more radical surgical approach resulted in less favourable pregnancy and live birth rates compared to the less radical surgical approach (Table). There was a trend towards more successful fertility outcomes with age < 29 years. The timing of nodal assessment appears to make no difference on fertility performance. No superiority amongst NAC protocols when fertility becomes a priority was demonstrated.

Conclusion: When it comes to fertility, the overall meta-regression favours the less radical surgical approach.

Table: Multivariate meta-regression of potential factors favouring fertility.

Conceptions/ pregnancies	B	SE	p-value	95% C.I.	
Intercept	3.1355	1.4989	0.0364	0.1978	6.0732
Median age > 29 years old	-2.9158	1.5867	0.0661	-6.0256	0.194
NAC protocol	0.7677	0.7491	0.3054	-0.7004	2.2359
More radical vs less radical	-3.895	1.5969	0.0147	-7.0238	-0.7641
Live births	**B**	**SE**	**p-value**	**95% C.I.**	
Intercept	0.5596	0.769	0.4668	-0.9476	2.0668
Median age > 29 years old	-0.6994	0.9446	0.4591	-2.5507	1.152
NAC protocol	0.9966	0.8276	0.2285	-0.6256	2.6187
More radical vs less radical	-1.961	0.9838	0.0462	-3.8893	-0.0328

BGCS 0042

The impact of saphenous vein sparing during inguinal lymphadenectomy on post-operative morbidity in women with vulval cancer; an updated per groin meta-analysis of short-term outcomes.

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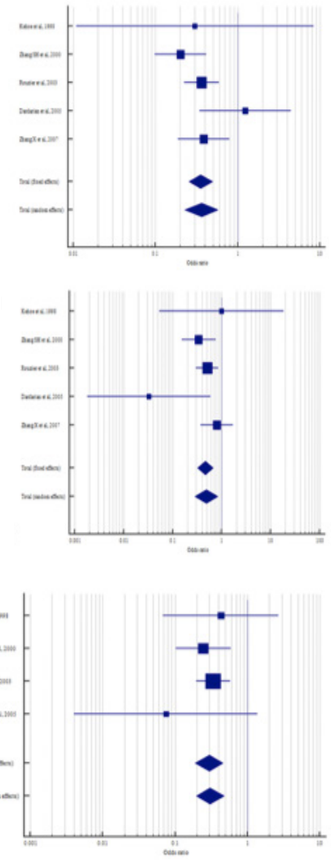
Introduction: Inguinofemoral lymphadenectomy (IFL) is included in the standard surgical management of early stage vulval cancer (VC) but is often accompanied by surgical complications. Efforts have been made to limit the post-operative morbidity by adopting more conservative IFL techniques without compromising the surgical outcomes. Saphenous vein (SV) preservation during IFL for VC appears to reduce the incidence of post-operative complications including lymphoedema. To ascertain the efficacy of SV preservation, we aimed to revisit the impact of SV preservation on short-term per groin complications by updating on a previous meta-analysis to further guide current clinical practice.

Methods: A systematic literature review was conducted to identify studies that reported post-operative complications following IFL with SV preservation and controls (SV ligation during IFL) in VC patients. We included articles in English language and avoided date restrictions. Direct comparison meta-analysis was performed between the use of SV preservation and SV ligation for the short-term outcomes of lymphoedema, cellulitis and wound dehiscence/ breakdown. Fixed- and random-effects models were fitted to calculate the odds ratios (OR) and 95% confidence intervals (CIs).



Results: Five studies were included in the final analysis. Direct comparison per groin meta-analysis between SV preservation and SV ligation significantly decreased the odds for developing lymphoedema [OR 0.363, 95% CI 0.228-0.578, p<0.001)], cellulitis [OR 0.481, 95% CI 0.28-0.825, p=0.008)] and wound dehiscence/breakdown [OR 0.296, 95% CI 0.191-0.458, p<0.001] (Figure). When SV sparing was clearly the sole intervention, lymphoedema was the only complication in which, the positive effect of SV sparing is exerted [OR 0.28, 95% CI 0.149-0.526, p<0.001)].

Conclusion: This per groin meta-analysis updates on the current evidence suggesting the SV sparing improves post-operative outcomes following IFL in VC patients. Where sentinel biopsy is not indicated, this risk reducing strategy should be considered in selected VC patients undergoing IFL until a multicentre RCT becomes available.

BGCS 0043

Obstetric outcomes in women with early bulky cervical cancer downstaged by neoadjuvant chemotherapy to allow for fertility sparing surgery; a meta-analysis

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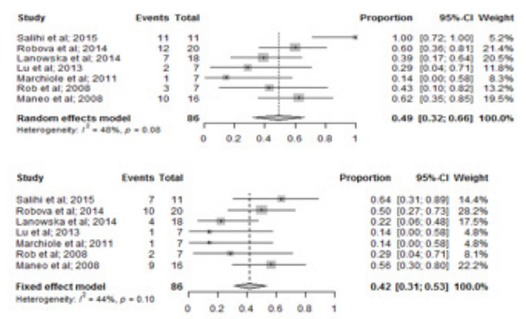
Introduction: It is difficult to critically outline the optimal treatment for women with early cervical cancer (eCC) wishing fertility preservation. Neoadjuvant chemotherapy (NAC) to downstage "bulky" eCC could potentially lead to fertility sparing surgery (FSS) in a wider patient population. The rationale is to provide oncological safety balanced with maximal fertility effort. We aimed to obtain the most accurate fertility outcomes for eCC women treated with NAC followed by FSS.

Methods: A systematic search of MEDLINE, EMBASE, Web of Science and Cochrane Database was performed. Studies that reported obstetric outcomes of eCC women treated with NAC followed by FSS were located. For the meta-analysis, we calculated the proportions (PR) of women who had the outcomes per total number of women who were considered for FSS.

Results: Seven studies enrolling 86 patients were included in the meta-analysis. Pooling of results from seven studies rendered a summary proportion of 0.49 [95%CI: 0.32-0.66] and 0.42 [95%CI: 0.32-0.53] for the outcomes of pregnancies and live births, respectively (Figure). The outcome of first and second trimester losses by pooling seven studies rendered a summary proportion of 0.16 [95%CI: 0.09-0.27]. For the outcome of premature deliveries, pooling of results from five studies rendered a summary proportion of 0.06 [95%CI: 0.02-0.16]. This reached 0.29 [95%CI: 0.15-0.48] in women who achieved live births.



Conclusion: This strategy achieves live births in four out of ten eCC women who desire fertility, whilst their risk for miscarriage is low. Three out of ten live births will be premature.

BGCS 0044

Malformation rates following treatment with single- and multi-agent chemotherapy in women with gestational trophoblastic neoplasia; a meta-analysis

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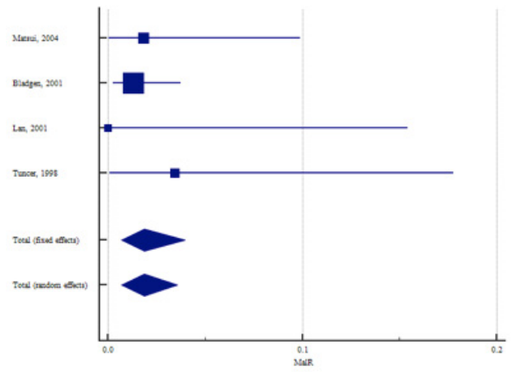
Introduction: Gestational trophoblastic neoplasia (GTN) represents a rare placental malignancy spectrum effectively treated with single (SEC) - or multi-agent (MEC) chemotherapy. Given that GTN usually affects women of childbearing age, post-chemotherapy pregnancy safety becomes an important consideration. Traditional thinking dictates chemotherapy can have potential teratogenic effects. We aimed to assess whether SEC or MEC increase the risk for foetal malformations.

Methods: A systematic search of MEDLINE, EMBASE, Web of Science, and Cochrane Database was performed. Studies that reported obstetric outcomes of GTN women treated with SEC or MEC were located. We performed a single-proportion meta-analysis for the outcome of malformation rate (MalR).

Results: Pooling of results from 24 studies enrolling 4685 pregnancies rendered a summary proportion of 1.76% (95% CI, 1.35-2.23) for the outcome of MalR with moderate heterogeneity across the studies (I2=26.11%, p=0.12). Pooling of results from four studies enrolling 424 pregnancies following treatment with SEC rendered a summary proportion of 1.69% (95% CI, 0.69-3.41) for the outcome of MalR with no heterogeneity across the studies (I2=0%, p=0.63). Pooling of results from six studies enrolling 336 pregnancies following treatment with MEC rendered a summary proportion of 2.73% (95% CI, 1.28-5.07) for the outcome of MalR with low heterogeneity across the studies (I2=7.65%, p=0.36). Direct comparison meta-analysis between SEC and MEC was not statistical significant [OR=2.97 (95% CI, 0.71-12.31), p=0.132, I2=23.06%, p=0.27). Pooling of results from four studies enrolling 137 pregnancies achieved within 12 months post-chemotherapy rendered a summary proportion of 1.87% (95% CI, 0.71-3.9) for the outcome of MalR without any heterogeneity across the studies (I2=0%, p=0.72) (Figure).

Conclusion: We provide the first combined evidence to support the safety of subsequent pregnancies amongst GTN



women treated with chemotherapy. Conception within 12 months post-chemotherapy does not appear to increase the progeny malR.

BGCS 0045

Biological profiling of ovarian cancer: the effects of warm and cold tissue ischaemia on DNA damage biomarker expression.

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Introduction: Successful precision medicine for therapeutic stratification depends on reliable biomarkers of tumour biology, which are entirely dependent upon the quality of the tumour tested. Hypoxia-inducible factor 1 alpha (HIF1α) is generated in response to hypoxia and has been associated with aggressive tumours and poor prognosis. This project aimed to determine the extent of intra- and post-operative sample collection upon tissue ischaemia and assess its impact on measurement of DNA damage repair (DDR) biomarkers.

Methods: Human xenografts were harvested from nude mice and snap frozen at 0, 30, 60 and 120 minutes. Tumour biopsies from ovarian cancer patients (RES/12/NE/0395) were sampled intra-operatively and formalin fixed (FFPE) or snap frozen at the same timepoints. HIF1α and DDR proteins (PARP1, RAD51, DNAPKcs, pDNAPKcs) were measured in frozen tissue homogenates by western blotting (WB) and by IHC in tissue microarrays (TMAs) of FFPE samples.

Results: Xenograft samples demonstrated a time-dependent increase in HIF1α with more than a 2-fold increase from baseline in both PARP1 and pDNAPKcs at 120 minutes but no significant change in RAD51 or DNAPKcs. These changes were independent of protein size. Despite standardisation of patient sample collection there was significant variability in baseline HIF1α as well as changes in expression with ischaemic time. Expression of DDR proteins showed highly variable time-related changes. PARP1 and pDNAPKcs expression were particularly variable, suggesting different patterns of DDR activation. Furthermore, phosphorylation signals appeared to be exquisitely sensitive to intra-operative sample handling.

Conclusion: Variable pre-analytical sampling handling as well as intra-operative warm ischaemia may result in substantial effects upon tissue hypoxia and DDR biomarker measurement. Pre-existing patient factors and heterogeneity within the tumour specimens collected may also contribute to the variability observed in this study. HIF1α and DDR protein quantification can only be considered reliable if samples are processed immediately at the time of excision. Studies are ongoing to standardise sample collection enabling reproducibility between research centres.

BGCS 0046

Evaluation of safety and feasibility of incorporating neoadjuvant bevacizumab and dose-dense paclitaxel into the primary multimodality treatment of advanced ovarian cancer; Results of the ICON8B trial interim safety analysis.

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Introduction: ICON8B is a randomised 3-arm phase III trial evaluating the safety and efficacy of bevacizumab (Bev) given with 3-weekly or weekly (1w) carboplatin/paclitaxel (carb/pac) in women with newly-diagnosed advanced ovarian cancer. Most patients had delayed primary surgery (DPS) after three of six chemotherapy cycles. We report the results of planned interim safety analysis undertaken after 150 DPS patients had completed chemotherapy.

Methods: Patients were randomised equally between: Arm B1, Carb AUC5 + Pac 175mg/m2 + Bev 7.5mg/kg; Arm B2, Carb AUC5 + Pac (1w) 80mg/m2; Arm B3, Carb AUC5 + Pac (1w) 80mg/m2 + Bev 7.5mg/kg. Bevacizumab was omitted at the pre-surgery cycle, and day 15 paclitaxel was omitted in arms B2, B3. Toxicity reporting included hypertension, GI perforation, haemorrhage, fistulae, thromboembolism and wound healing complications as notable events related to Bev.

Results: 150 patients were included, median age 64 years, 97% stage IIIC/IV, 93% high grade serous. Completion of 6 cycles protocol-defined chemotherapy was lowest among patients receiving weekly paclitaxel and Bev(40%,58%,26% in arms B1,B2,B3 respectively) but most patients received six cycles of carboplatin (85%,82%,77%). Median number of concurrently administered Bev cycles was 4 (5 planned). 87% arms B1/B3 patients started maintenance Bev. DPS was undertaken in 136 patients (91%). DPS wasn't performed in 14 (9%; clinical decision n=12, disease progression n=2). 56% patients experienced G3/4 toxicity (52%,54%,65%), mostly haematological. Notable events occurred more frequently in bevacizumab-containing arms (Table 1). There was no increase in other perioperative complications or length of hospital stay with preoperative Bev.

Conclusion: Most patients in ICON8B received six cycles of platinum, although did not receive all protocol-defined treatment. The rate of bevacizumab-associated adverse events was as expected and did not impact on safety of DPS. The data monitoring committee recommended trial continuation, but, as ICON8 showed no benefit with weekly paclitaxel, that arm B2 recruitment should stop.

	Notable event definition (CTCAE grade)	Arm B1 N=50		Arm B2 N=50		Arm B3 N=50		Total N=150	
Hypertension	G3+	5	10%	0	0%	1	2%	6	4%
Gastro-intestinal perforation	All grades	3	6%	0	0%	2	4%	5	3%
Haemorrhagic events	G3+	2	4%	1	2%	1	2%	4	3%
Fistulae	All grades	0	0%	0	0%	0	0%	0	0%
Thromboembolic events	G3+	5	10%	4	8%	6	12%	15	10%
Post-operative wound healing complication									
or									
Delayed wound healing	G1	1	2%	0	0%	4	8%	5	3%
Post-operative wound healing complication									
or									
Delayed wound healing	G2+	2	4%	1	2%	4	8%	7	5%

BGCS0048

Introducing the Advanced Ovarian Cancer Pathway (AOCP): a streamlined, individualised, one- stop service for women with disseminated intra-abdominal disease.

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Introduction: Prognosis for women with advanced stage ovarian cancer remains poor. Recommendations for surgery or neoadjuvant chemotherapy(NACT) made by Multidisciplinary meetings(MDT) often occur before a patient's fitness, histology and personal preferences have been assessed. In addition, prediction of operability by radiological imaging can be difficult. We present the results of a one-stop advanced ovarian cancer pathway(AOCP) to accurately select women for upfront surgery or NACT.

Methods: Women referred to the Northern Gynaecological Oncology Centre(NGOC), Gateshead, from March 2017-April 2018 with disseminated disease on CT scan report were triaged to AOCP clinic. They were seen by a Gynaecological Oncologist, followed immediately by an Anaesthetist with cardiopulmonary exercise(CPEX) testing. Dietetic referral and grip strength were measured. Detailed CT review was performed. In conjunction with CPEX outcome, a decision was made regarding operability. Those for neoadjuvant chemotherapy had image guided biopsies performed within 2days with histology discussed at MDT 6days later. Time to biopsy, to diagnosis and to first appointment with Medical Oncologist were measured and compared to a matched-control group.

Results: 42 patients were triaged to AOCP clinic. 8 were confirmed non-gynaecological malignancies on image-guided biopsy. Therefore, 34 patients were analysed. 24 women were selected for NACT: 7(poor fitness), 13(disease distribution), 4(both). At CPEX, 8(33%) were unable to achieve anaerobic threshold(AT). All patients had confirmed advanced stage high grade serous carcinoma tubo-ovarian origin. Time from first review to biopsy reduced from 10 to 3days, and time from first review to diagnosis reduced from 12 to 6days. Time from first review to meeting a Medical Oncologist reduced from 30 to 16days.

Conclusions: This pilot study demonstrates the huge potential of a one-stop AOCP to expedite histological diagnosis for referral for NACT and referral to non-ovarian MDTs; as well as demonstrating improved radiological and anaesthetic review to select patients for NACT versus upfront surgery.

BGCS0049

The rise and fall of bevacizumab in SE Wales

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Introduction: The current first line treatment for advanced ovarian, fallopian tube and primary peritoneal cancer includes debulking surgery and chemotherapy with carboplatin and paclitaxel. The ICON7 trial (Oza et al., 2015) showed a significant improvement in survival when administering half the licensed dose of bevacizumab (7.5 mg/kg) with standard chemotherapy in a sub-group of patients deemed to be at high risk of progressing. In 2016, the view of the Wales Interim Pathways Commissioning Group (IPCG) did not support the use of bevacizumab 7.5 mg/kg in combination with carboplatin and paclitaxel in this patient group.

Methods: A retrospective review of electronic case notes of all patients referred to the Velindre Cancer Centre who had received bevacizumab for ovarian, fallopian tube or primary peritoneal cancer. The use of bevacizumab was analysed by date, health board and whether patients were high-risk.

Results: Of 27 patients who received bevacizumab there was no grade 4 toxicity. 33.3% of patients developed hypertension (22.2% grade 3; 11.1% grade 2). 11.1% of patients developed febrile neutropenia. One patient developed a grade 3 perforation; one patient (3.7%) had a grade 2 thromboembolic event; two patients (7.4%) developed

grade 2 proteinuria. 40.7% of patients developed a grade 2 bladder infection. Use of bevacizumab peaked in 2014 and 2015, with 9 patients each year receiving treatment. Use of bevacizumab varied by health board, with a range of 1 to 14 patients receiving the drug. Of 19 patients with high-risk disease, the median survival was 34.7 months.

Conclusions: The median survival of 34.7 months in the cohort of unselected high-risk patients is consistent with a clinical benefit from adding bevacizumab to standard chemotherapy, with acceptable toxicity. Funding for routine use in high-risk patients is not available in Wales and since the 2016 IPCG decision the use of bevacizumab in this group of patients has fallen significantly.

BGCS0050

Surgical outcome, survival and morbidity associated with cytoreduction surgery for ovarian cancer.

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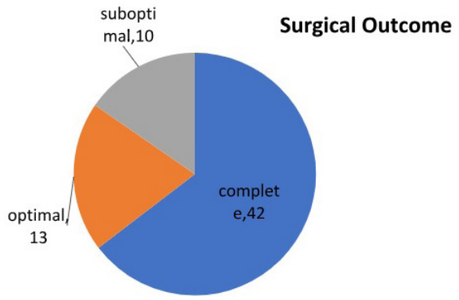
Introduction: Extensive surgery is often required to achieve complete cytoreduction (R0) and patients are at risk of peri-operative and post-operative morbidity. The purpose of this project was to ascertain surgical outcomes including survival, intra-operative and post-operative complication rates and associated long term morbidity of ovarian cancer patients.

Methods: A retrospective cohort study examined all patients who had cytoreduction surgery in Northern Ireland in 2016. Data collection proforma was completed using electronic and paper records. The data were then interrogated.

Results: 65 women were studied with mean age of 60 years, mean BMI of 28, 78% of them had 2 or more significant co-morbidities. 26% had stage 1 disease, 15% stage 2, 49% stage 3 and 9% stage 4. 42% of cases were HGSC ovary, 15% were endometrioid carcinoma and 12% were of mucinous origin. Complete cytoreduction rates were 100%, 70%, 36% and 50% for stage 1, 2, 3, and 4 disease respectively. Optimal cytoreduction rates for stage 2, 3 and 4 disease were 10%, 31% and 33% respectively. Overall suboptimal cytoreduction rate was 15% with primary surgery having a rate of 13% and delayed primary surgery a suboptimal cytoreduction rate of 20%. The most common intra-operative complication was estimated blood loss >1000ml followed by cystotomy. Post-operative complications of most prevalence included ileus and nausea / vomiting. There were 6 grade 3 complications (9%) and 1 grade 4 complication (1.5%). Median length of hospital stay was 7 days, mean length of stay was 10 days. The longest post-operative survivals were for complete cytoreduction in a primary (median 20 months) and delayed primary (median 18 months) settings.



Conclusions: Ovarian cancer patients are elderly, overweight and have significant co-morbidities. However, high complete cytoreduction rates can be achieved with an acceptable risk profile. These data suggest a survival benefit to patients of maximal surgical effort.

BGCS0051

Single centre retrospective clinical analysis of gynaecological malignancies of uncertain organ of origin

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Introduction: Squamous cell carcinoma of the cervix commonly presents with symptoms from the primary tumour such as bleeding, discharge or pain. We present a case series of four patients with metastatic squamous cell carcinoma of unknown primary site within the gynaecological tract, presumed to be an occult primary cervical tumour.

Methods: Retrospective review of four cases treated by the Gynaecological Oncology Service at UCLH.

Results: Presentation was of sciatic pain in three patients, and an incidental finding in one, with an initial finding of retroperitoneal pelvic sidewall mass in all patients. The mean age of diagnosis was 47.8 (range 31-63). Histology was reported as squamous cell carcinoma in three cases and poorly differentiated carcinoma with squamous features in one, with little concordance in immunohistochemical markers. Treatment approach differed considerably, mainly based on the extent of the disease. These included; primary surgery with adjuvant chemo-radiotherapy in two patients with complete response in one and the other still under treatment, neo-adjuvant chemotherapy followed by surgery and adjuvant radiotherapy with complete treatment response (one patient), and primary chemotherapy and pelvic radiotherapy with incomplete treatment response, with subsequent surgery to treat progression (one patient). Three patients are alive, one remaining under treatment at 8 months, the second with recurrence at 30 months, the third with disease progression from an incomplete initial treatment response, 15 months post diagnosis. The fourth patient had recurrence at 31 months and died 78 months post diagnosis.

Conclusions: Occult cervical cancer presenting as metastatic disease is a rare phenomenon. Histological/ immunohistochemical categorisation is challenging with little concordance between cases. Treatment approach differs considerably with high rates of early recurrence. Despite the unusual behaviour of these tumours, and the advanced presentation, aggressive treatment can result in significant survival and symptom control.

BGCS0052

Creation of an interactive learning resource for medical students on gynaecological cancer

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Introduction: Gynaecological cancer is an important part of undergraduate curricula. This student-led medical education and research project was designed to gauge learning needs and to develop and evaluate a bespoke educational package on the subject of gynaecological malignancies, to supplement learning for medical students at Cardiff University.

Methods: A questionnaire survey was carried out gauging potential interest from fellow medical students, as well as their learning needs and preferences. Primary research, guidelines and literature were consulted to direct the initial content of a short-course in gynaecological cancer. The short-course was developed by an iterative process and the contents were later revised and polished with input and guidance from consultants in gynae-oncology and clinical oncology, a general practitioner and a gynaecological cancer nurse specialist. Medical students were invited to complete the short-course and provide feedback. These results were used to guide future content.

Results: The initial survey of medical students at Cardiff University highlighted a very strong interest in the proposed short-course in gynaecological cancer. The majority demonstrated a preference for visual and interactive learning methods. The short-course was created as an interactive online-resource for peers, with original graphics and a supplementary ebook. The former is hosted on Xerte®, with the latter produced primarily using Microsoft Word®. Five modules were created; an Introduction, modules on Cervical, Uterine and Ovarian cancer, and a final module entitled Beyond Cancer. Student feedback showed overall satisfaction with the course was high, with an average rating of 9.14/10. The practicality and usefulness of the short-course were both well received, with 71.4- 85.7% of students in strong agreement.

Conclusions: This short-course in gynaecological cancer demonstrated great potential in enthusing and enriching the education of medical students, with encouragingly positive feedback. Future trials of similar short-courses would be helpful to aid medical education and provide further insight into student learning styles and preferences.

BGCS0053

Preoperative albumin levels in advanced epithelial ovarian cancer – a marker for successful cytoreductive surgery and survival

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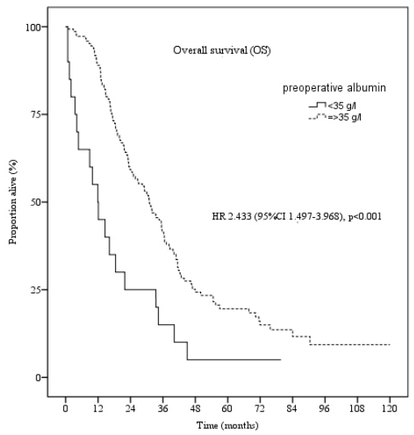
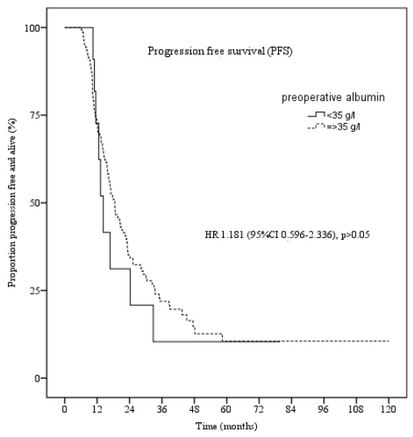
Introduction: This study constitutes the first report on the impact of hypoalbuminaemia in advanced epithelial ovarian cancer in Wales between 2007 and 2014.

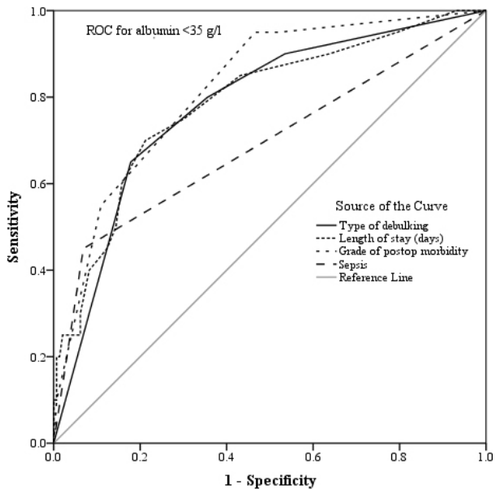
Methods: This single centre experience was reviewed retrospectively and patients with advanced ovarian, fallopian tube or primary peritoneal cancer (FIGO IIIC-IVB) were identified. Main outcome measures included OS, volume of residual disease and factors impacting perioperative morbidity and mortality.

Results: From October 2007 to December 2014, 166 women with advanced primary ovarian cancer were treated either by primary debulking surgery (PDS 62; 37.3%) or primary chemotherapy and interval debulking (PCT-IDS 104, 62.7%). Amongst our patients 23.5% underwent procedures of intermediate surgical complexity (4) involving small and large bowel resection, peritoneal stripping, diaphragmatic resection, resections of disease on spleen hilum and hepatoduodenal ligament, partial gastrectomy, splenectomy, cholecystectomy and removal of bulky retroperitoneal lymphnodes. Optimal cytoreduction to <10mm residual disease was achieved in 41.9% (n=26) amongst PDS patients and 74.8% (n=77) in PCT-IDS. Successful cytoreductive surgery, intra- and postoperative morbidity 5 as well as overall survival were greatly influenced by the level of preoperative albumin. For patients with a PS<2, statistically significant differences were found if they underwent interval debulking surgery (IDS: 2.9% vs PDS: 27.4%). Patients with albumin => 35g/l preoperatively had a shorter stay in hospital, were more commonly debulked to 10mm residual disease, and had less postoperative morbidity and mortality. These patients experienced less admissions to HDU / ITU / CCU and had lower rates of infections, sepsis, kidney failure, postoperative wound infections as well as less mortality within 28d of surgery (Fig. 2 - attached). Median overall survival (OS) and progression-free survival (PFS) were 29.2 months and 18.0 months respectively. Patients with normal pre-operative albumin levels (=>35 g/l) had a significantly improved median OS of 31.0 months (<35 g/l: 11.9 months, p<0.001). PFS, though better than in the hypoalbuminaemia cohort (18.6 months vs 14.3 months), did not reach statistical significance (Fig 1 - attached).

Conclusions: In summary, preoperative hypoalbuminaemia is an independent prognostic factor for overall survival in advanced epithelial ovarian cancer. Furthermore, it appears to be a predictive marker for surgical resectability and severe postoperative complications.







BGCS0054

Post-Operative Complications in a Gynaecological Cancer Centre in Sussex

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Introduction: There is limited literature on post-operative complications in Gynae-Oncological Surgery internationally, with the largest study in recent years being the UKGOSOC multicentre study. The aims of this ongoing audit on post-operative complications on Gynae-Oncology operations at the Royal Sussex County Hospital (RSCH) are to encourage transparency, and identify areas for improvement.

Methods: All Gynae-Oncology operations performed at the RSCH from 7 th March 2017 to 29 th September 2017 were included and recorded on an electronic encrypted Complications database by two junior doctors under the supervision of 3 Gynae-Oncologists. Complications were identified when patients were inpatient, or if they presented to the Gynaecology Assessment Unit (GAU). Complications were classified according to the Clavien-Dindo classification, and considered serious if Grade 3 or 4. The findings from this audit were then presented at a local departmental meeting.

Results: In this audit cycle, 245 operations were carried on female patients ranging from 18 to 96 years old. 93 laparotomies, 79 laparoscopic operations, 38 vulval operations, 27 hysteroscopies, and 9 cervical operations were performed. 34 complications (13.9% , 13 of which were serious (5.3%). Most common post-operative complication was wound infection (29.4% of all complications) Vulval operations had the highest complication rates. The intra-operative complications rate this cycle was 2.04%.

Conclusions: Our post-operative complications rate compares to previously published figures nationally and internationally. Patient co-morbidities can affect post-operative complication rates. In addition, the Clavien-Dindo classification does not take into account the patient's pre-operative health status. Complications from vulval operations are difficult to prevent due to the nature of the pathology and the location of the wound. Recommendations for the next audit include inclusion of patient co-morbidities on the electronic database for future analysis, and inspection of the GAU records book to pick up further complications.

BGCS0055

TUMOUR SPECIFIC RADICALITY IN AN APPARENT FIGO STAGE 1B2 CERVICAL CANCER, DEMONSTRATING TYPES C2 AND C1 RADICALITY AND THE ROLE OF SENTINEL LYMPH NODES

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Introduction: Women faced with a diagnosis of gynaecological cancer are usually given a stage-specific management plan. In the case of Stage 1B2 cervical cancer, the patient may be given a choice of chemoradiotherapy or radical surgery. We present the case and video of a 28-year old patient, Para 3, with a 5cm moderately differentiated cervical squamous cell carcinoma (SCC), and highlight the importance of tailored surgery, including choice of radicality and accuracy of sentinel lymph node (SLN) technique.

Methods: Cervical loop biopsy and examination under anaesthetic (EUA) suggested FIGO Stage 1B2 disease. MRI scan pelvis suggested early left parametrial and vaginal invasion. No suspicious lymphadenopathy. CT scan chest & abdomen showed no distant metastases. At multidisciplinary team meeting (MDT), neoadjuvant chemotherapy was not offered. Patient was counselled for chemoradiotherapy given radiological findings but refused. She wished for radical hysterectomy, bilateral salpingo-ophrectomy and bilateral pelvic node dissection with sentinel nodes. Intra-cervical Indocyanine Green (ICG) was administered and laparoscopic retrieval of bilateral iliac sentinel nodes was performed. These did not appear suspicious. Given the radiological and clinical findings, a decision for type C2 radicality on the left and C1 radicality on the right was made. Left lateral parametrium was submitted to histology separately.

Results: Final histology showed a completely excised tumour with no parametrial or vaginal invasion. However, there was a positive non-sentinel node in each hemipelvis, with extracapsular spread in the right node. 32 nodes were yielded in total. Ultra-staged sentinel nodes were negative. MDT recommendation was for adjuvant chemoradiotherapy.

Conclusions: Staging of cervical cancer is made clinically. Therefore, counselling is vital and surgeons should individualise radicality for those who choose surgery. It is possible that with little residual healthy cervical stroma, sentinel node techniques are unreliable with large cervical tumours.

BGCS0056

A NEW OPTION FOR VULVA CANCER PALLIATION: THE ROLE OF ELECTROCHEMOTHERAPY FOR TISSUE PRESERVATION

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Introduction: Electroporation involves delivery of electrical pulses to cutaneous lesions to transiently permeabilise cell membranes. This allows increased uptake of chemotherapeutic agents into these localised tumour cells(electrochemotherapy). Use of ECT has been well-reported in melanoma and non-melanoma skin cancers; local recurrences; and skin metastases from breast, head and neck cancers. However, in gynaecological malignancy little has been reported other than palliative use for vulva cancer patients. We present a literature review and video demonstration of ECT for use in a patient with recurrent vulva cancer, who declined surgery.

Methods: A 60year old patient had previously received chemoradiotherapy and presented with a midline perineal recurrence. Due to the proximity to the anus and her comorbidities she opted for ECT to preserve structure and function, rather than undergo excision with anovulvectomy. Comorbidities included obesity, heart failure, recent venous thromboembolism and abdominal psoriasis. She was counselled about options including palliative surgery, or the new technique of ECT, which she opted for. After general anaesthetic and positioning in lithotomy, intratumoural bleomycin was administered. Examination and assessment of suitability of electrodes was made. Adjustable needle electrodes were applied to the perineal lesion, directed away from the midline. Electroporation was provided by the Cliniporator (IGEA Clinical Biophysics, Italy).

Results: Duration of treatment was 5 minutes. The patient was discharged on oral analgesics on day 3. FACT V quality of life and Visual Analogue pain scores were administered preoperatively, on day 1 and 2 weeks and 4 weeks postoperatively. Photography of lesion showed response at 2 weeks with reduction in size of lesion.

Conclusions: ECT can be considered as a palliative option for women unsuitable for, or not willing to undergo, palliative surgery for recurrent vulva cancer. Response is seen within 4 weeks and response rates in the literature approach 70%.

BGCS0058

Impact of gynaecological cancer diagnosis in young women

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Introduction: Gynaecological cancers affect women of any age, however there is little in the published literature examining the impact on young women treated with chemotherapy and radiotherapy.

Methods: Retrospective review of electronic case records of women under the age of 30 who were referred to a non-surgical oncology centre, the Velindre Cancer Centre, and who were diagnosed with gynaecological malignancy from January 2000 to March 2018.

Results: In 112 women aged less than 30, over half (57.7%) had cervical cancer. In 57 women aged 25 or less, ovarian cancer was the malignancy seen most frequently, affecting 29 patients (50.9%): 12 (41.4%) germ cell; 10 (34.5%) epithelial; 4 (13.8%) sex-cord-stromal; 2 (6.9%) small cell, 1 (3.5%) not recorded. 45 patients (40.9%) died due to disease progression. The majority of deaths (71.1%) were due to cervical cancer; 24.5% ovarian; 2.2% vaginal and 2.2% uterus. Regarding fertility issues, only 6 patients were recorded as having had a successful pregnancy after treatment, in some cases using donor eggs. 52.7% of patients were recorded as having had a negative impact on fertility and 54 patients (49.1%) experienced premature menopause due to treatment. 71 patients (64.5%) experienced other symptoms such as vaginal dryness, tightness, bleeding or discharge. 30 patients (27.3%) reported dyspareunia, post-coital bleeding or decreased libido. 69 patients (55.5%) experienced severe psychological effects such as anxiety, depression or suicidal thoughts, requiring medical intervention with clinical psychologist, counselling or medications. 24 patients (21.8%) had trouble with body image. Other symptoms included gastrointestinal, urological, neurological, pain and fatigue. 61 patients (55.5%) were hospitalised at least once. 11 patients (10%) had thrombo-embolism.

Conclusions: Young women with gynaecological cancer attending a non-surgical oncology centre experience multiple, significant effects from decreased life expectancy, to fertility and psychological issues, premature menopause and other symptoms, requiring individualised care and a wide variety of specialist support services.

BGCS0059

Can endometrial thickness predict histology type of endometrial cancer?

Godfrey M, Nicholls R, Nikolopoulos M, Bhatte D, Sohrabi F, Adib T, Mukhopadhyay D, Wuntakal R.

Introduction: Endometrial cancer can exist at any endometrial thickness, and debate remains regarding a cost- effective cut off level of endometrial thickness at which biopsy is not required despite postmenopausal bleeding. Our question is whether different endometrial cancer histology types, namely endometrioid adenocarcinoma, serous and carcinosarcoma are likely to have less or greater endometrial thickness (ET) compared to each other.

Methods: Retrospective case note review of all endometrioid, serous and carcinosarcoma endometrial cancers diagnosed at Queens hospital, Romford from January 2011 to December 2016.

Results: A total of 361 endometrial cancers with the following histology's: endometrioid (n=290); serous (n-39); carcinosarcoma (n=32) were diagnosed during this period. Seventeen patients were excluded for having an unknown or unable to measure endometrial thickness. Twenty women, 5.6% of endometrioid and 9.4% carcinosarcoma presented with an endometrial thickness of 5mm or less, no serous carcinomas presented at this ET. Figure 1 shows the variation in ET with different histology. One quarter of endometrioid carcinomas had an ET 5.1-10mm and 23.4% from 10.1-15mm, therefore over half of all endometrioid cancers had an ET of 15mm or less. In comparison, carcinosarcoma and serous cancer can present at any thickness, with around a fifth of patients presenting with an endometrial mass of 4cm or more.

Conclusions: The majority of endometrioid adenocarcinoma present with an ET of 5-15 mm. Serous and carcinosarcomas can present with any ET. Twenty women had cancer with an ET of 5mm or less, therefore caution should be exercised when reassuring patients with postmenopausal bleeding based on thin ET alone.

BGCS0060

Changing demographics of surgical approach and BMI for uterine endometrioid adenocarcinoma over six years

Godfrey M, Nikolopoulos M, Nicholls R, Bhatte D, Sohrabi F, Adib T, Mukhopadhyay D, Wuntakal R.

Introduction: The incidence of endometrioid adenocarcinoma of the endometrium is rising with increasing prevalence of obesity. Laparoscopic surgery is the preferred route for stage 1 endometrial cancer, with better recovery time, decreased hospital stay and fewer complications related to wound healing. We report here findings from a large retrospective cohort relating to surgical approach and body mass index (BMI) of our patients, to establish any change in operating approach to stage 1 endometrial cancer and influence of BMI.

Methods: Retrospective case-note review of all endometrioid uterine cancers at Queens's hospital, Romford from January 2011 to December 2016.

Results: 291 women were diagnosed with uterine endometrioid adenocarcinoma: grade 1 = 212; grade 2 = 51; grade 3 = 28, Stage 1a = 184; 1b = 54; stage 2 = 20; stage 3 = 18; stage 4 = 9; unknown = 6. Of the 238 women with stage 1 disease, 132 had a total laparoscopic hysterectomy and BSO (TLH/BSO) and 97 had an open approach (TAH/BSO), seven women were treated with progesterone and two women had a combined vaginal/laparoscopic approach. Figure 1 shows the change in time with preferred surgical method, with steady decrease in number of women having TAH/BSO from 2014 onwards. BMI was similar in both groups with average BMI in the laparoscopic group of 34.7 and the open group of 34.0, with no significant change over this six-year period.

Conclusions: Since 2014 number of women undergoing open surgery has decreased for stage 1 endometrial cancer, with more women benefiting from the improved recovery that a laparoscopic approach offers. BMI has remained steady over this time-period; however average BMI remains in the obese category for both routes of surgery.

BGCS0061

Locally advanced cervical cancer presenting in labour

Godfrey M, Light M, Bhatte D, Adib T, Mukhopadhyay D, Wuntakal R.

Introduction: Locally advanced cervical cancer diagnosed during labour is rare. Here we present two women diagnosed with cervical cancer whilst in labour in 2017.

Methods: Retrospective case series from Queens hospital, Romford, UK

Results: Patient 1: A 26-year-old Caucasian woman in her fourth pregnancy. She had never had a smear test and was a smoker. She booked early during pregnancy with regular attendances. She presented at term with antepartum haemorrhage and a cervical mass. She had an emergency caesarean section for fetal distress (EBL 2.2L). A cervical biopsy at delivery confirmed grade 1 squamous cell carcinoma (SCC). PET CT 6 weeks post-delivery: FDG avid 3x3cm cervical primary, pelvic and para-aortic nodal disease extending to the renal hilum, of uncertain significance post caesarean. Patient 2: A 32-year-old British-Chinese woman in her second pregnancy. She had a LLETZ (2005) for CIN2. Her last cytology (2014): borderline nuclear change/HPV positive, with normal colposcopy. She booked early during pregnancy with regular attendances. She was induced at term for unstable lie. During labour, cervical mass was felt and thought to be a fibroid-polyp. She progressed slowly but had a normal delivery. Six weeks postpartum her vaginal bleeding continued, GP referred urgently for large cervical tumour. Biopsy confirmed a grade 2 SCC. MRI and PET CT revealed a FDG avid 5cm cervical primary involving parametrium, with positive obturator and external iliac node. Both women were FIGO stage 2B and received radical chemo-radiation therapy for 5.5 weeks, including concomitant weekly cisplatin chemotherapy, daily external beam radiotherapy, followed by intracavitary HDR brachytherapy and are in remission. Patient 1 required extended field treatment to the para-aortic region and has significant bowel and bladder toxicity.

Conclusions: Young women can have advanced cervical cancer with minimal or no symptoms. Suspicious cervix seen during pregnancy or labour needs urgent gynaecological oncology referral.

BGCS0062

Cost-effectiveness of population-based BRCA1, BRCA2, RAD51C, RAD51D, BRIP1, PALB2 mutation testing in unselected general population women

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Introduction: The cost-effectiveness of population-based panel testing for high and moderate penetrance ovarian cancer (OC)/breast cancer (BC) gene mutations is unknown. We evaluated cost- effectiveness of population-based BRCA1/BRCA2/RAD51C/RAD51D/BRIP1/PALB2 mutation testing compared to clinical-criteria/family-history (FH) testing in unselected general population women.

Methods: Lifetime costs and effects of Criteria/FH-based BRCA1/BRCA2 testing is compared with BRCA1/BRCA2/RAD51C/RAD51D/BRIP1/PALB2 testing in (a)those fulfilling clinical-criteria/strong FH of cancer (≥10% BRCA1/BRCA2 probability) and (b)all women ≥30years, using a decision-analytic model. Analyses are presented for UK & USA populations. Identified carriers can undergo risk-reducing salpingo-oophorectomy. BRCA1/BRCA2/PALB2 carriers can opt for MRI/mammography, chemoprevention or risk reducing mastectomy. One way and Probabilistic Sensitivity Analysis (PSA) evaluate model uncertainty. Outcomes include OC, BC and additional heart disease deaths. Quality adjusted life years (QALYs), OC incidence, BC incidence, and incremental-cost-effectiveness-ratio (ICER) were calculated. Data-Sources: Published literature, GCaPPS study, Australian-Breast-Cancer-Family-Registry, SEER, US-Census-Bureau, Nurses-Health-Study, BNF, CRUK, NICE, NHS reference-costs. Time-horizon: Life-time, Perspective:Payer

Results: Compared to Clinical-criteria/FH-based BRCA1/BRCA2 testing, Clinical-criteria/FH-based BRCA1/BRCA2/RAD51C/RAD51D/BRIP1/PALB2 testing is cost-effective: ICER=£7629.65/QALY or $ 49,282.19/QALY (0.04days life-expectancy gained). Population-based testing for BRCA1/BRCA2/RAD51C/RAD51D/BRIP1/PALB2 mutations is the most cost-effective strategy compared to current policy: ICER=£21,599.96/QALY or $54,769.78/QALY (9.34 or 7.57 days life expectancy gained). At £30,000/QALY and $100,000/QALY willingness-to-pay thresholds population-based BRCA1/BRCA2/RAD51C/RAD51D/BRIP1/PALB2 panel testing is the preferred strategy in 84% and 93% PSA simulations; and current criteria/FH-based panel testing is preferred in only 16% and 6% simulations respectively. Population-testing remains cost-effective if oophorectomy does not reduce BC-risk (£27,632.95/QALY or $72,221.37/QALY) or until testing costs reach £250/test or $772/test. Population-based BRCA1/BRCA2/RAD51C/RAD51D/BRIP1/PALB2 testing can prevent 1.86%/1.91% BC and 3.2%/4.88% OC in UK/USA women: 657/655 OC cases & 2420/2386 BC cases prevented/million.

Conclusions: Population-based BRCA1/BRCA2/RAD51C/RAD51D/BRIP1/PALB2 testing is more cost-effective and could prevent thousands more OC and BC than any Criteria/FH-based strategy. Criteria/FH- based BRCA1/BRCA2/RAD51C/RAD51D/BRIP1/PALB2 testing is more cost-effective than BRCA1/BRCA2-testing alone. Implementation studies evaluating population-based genetic-testing are needed.

BGCS0063

Cost effectiveness of population based BRCA1 founder mutation testing in Sephardi Jewish women

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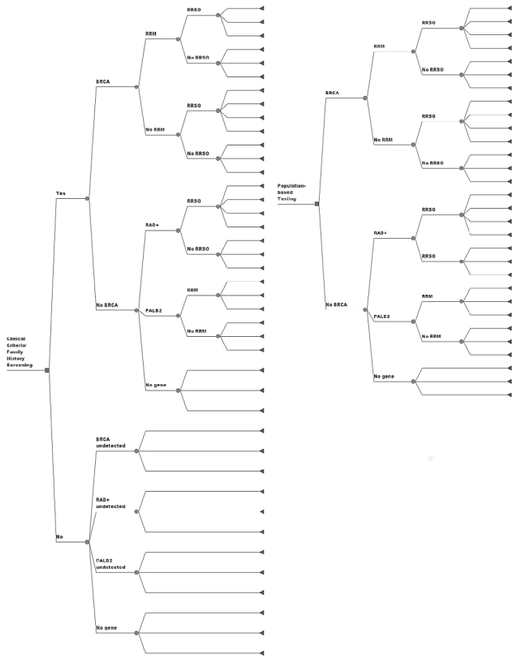
Introduction: Population-based BRCA1/BRCA2 founder-mutation testing has been demonstrated as cost- effective compared to family-history(FH) based testing in Ashkenazi Jewish(AJ) women. However, only one of the three AJ BRCA1/BRCA2 founder-mutations (185delAG(c.68_69delAG), 5382insC(c.5266dupC) and 6174delT(c.5946delT)) is found in the Sephardi Jewish(SJ) population (185delAG(c.68_69delAG)) and the overall prevalence of BRCA mutations in the SJ population is accordingly lower (0.7% compared to 2.5% in the AJ population). Cost-effectiveness analyses of BRCA testing have not previously been performed at these lower BRCA prevalence levels seen in SJ. Here we present a cost-effectiveness analysis for UK and US populations comparing population-testing with Clinical-criteria/FH-based testing in SJ women.

Methods: A Markov model was built comparing the lifetime costs-&-effects of population-based BRCA1- testing with testing using FH-based clinical criteria in SJ women ≥30years. BRCA1-carriers identified were offered MRI/mammograms and risk-reducing surgery. Costs are reported at 2015 prices. Outcomes include breast cancer(BC), ovarian cancer(OC) and excess deaths from heart disease. All costs-&-outcomes are discounted at 3.5%. The time horizon is life-time, and perspective is payer. The incremental-cost-effectiveness-ratio (ICER) per quality-adjusted life-year (QALY) was calculated. Parameter uncertainty was evaluated through one-way and probabilistic- sensitivity-analysis (PSA).

Results: Population-testing resulted in gain in life-expectancy of 12months (QALY=1.00). The baseline discounted ICER for UK population-based testing =£67.04/QALY and for US population=$308.42/QALY. Results were robust in the one-way sensitivity analysis. The PSA showed 100% of simulations were cost-effective at £20,000/QALY UK and the $100,000/QALY US WTP thresholds. Scenario analysis showed, population-testing remains cost-effective in UK



and US populations even if pre-menopausal oophorectomy does not reduce BC-risk or if hormone- replacement-therapy compliance is nil.

Conclusions: Population-based BRCA1- testing is highly cost-effective compared to clinical-criteria driven approach in SJ women. This supports changing the paradigm to population-based BRCA- testing in the Jewish population regardless of Ashkenazi/Sephardi ancestry.

BGCS0064

COMPARISON OF TRANSVAGINAL ULTRASOUND, CA125 AND HE4 IN DIFFERENTIAL DIAGNOSIS OF A POPULATION COHORT OF WOMEN WITH ADNEXAL MASSES: NESTED COHORT STUDY WITHIN THE UNITED KINGDOM COLLABORATIVE TRIAL OF OVARIAN CANCER SCREENING (UKCTOCS)

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Introduction: There is a scarcity of models evaluating the performance of ultrasound and biomarker- based models for differential diagnosis of ovarian cancer (OC) in primary care. Our study aims to evaluate such models in a population cohort of postmenopausal women with adnexal masses at recruitment to UKCTOCS.

Methods: Between 2001-2005, 98,308 women in UKCTOCS, 48,230 randomised to transvaginal ultrasound (TVS) screening (USS) and 50,078 to multimodal (MMS) screening (serum CA125 interpreted by Risk of Ovarian Cancer Algorithm (ROCA) with second line TVS) underwent the first (prevalence) screen. Women with adnexal lesions and/or elevated ROCA were clinically assessed and either referred for surgery or conservatively managed. All women who underwent clinical assessment with a banked serum sample taken within 6 months of the scan were included. The sample was assayed for HE4 and for those in the USS group, CA125 (CA125 was already available for MMS group samples). Sensitivity at a fixed specificity of 90% of multiple penalized logistic regression models incorporating log CA125, log HE4, age and ultrasound features of the adnexal mass were compared.

Results: Of the 1590 (158 MMS, 1432 USS) eligible women, 78 (48 primary invasive epithelial (iEOC), 24 borderline epithelial, 6 non-epithelial) were diagnosed with OC within a year of the last scan. Sensitivity for OC of the model incorporating age, ultrasound and CA125 (74.4%) was similar to that which also included HE4 (75.6%). Both models had high sensitivity for iEOC (89.6%) and Type II (>91%) cancers. Sensitivity of ROMA (using CA125 and HE4) albeit slightly lower (69.2%) for OC, was similarly high for iEOC (87.5%) and Type II (94%) cancers.

Conclusions: The data supports concurrent use of CA125 and ultrasound for differential diagnosis of an adnexal mass in postmenopausal women. While HE4 did not improve sensitivity, it could contribute to differential diagnosis in the absence of ultrasound.

BGCS0065

Outcomes following laparoscopic radical hysterectomy for cervical cancer: a ten year review at the Belfast City Hospital.

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Introduction: Over the last decade, minimal access surgery has been widely adopted in the management of women with early stage cervical cancer. The published benefits of laparoscopic surgery include reduced pain scores, reduced blood loss, reduced hospital stay and an earlier return to normal activities. However two recent presentations have suggested that women undergoing laparoscopic radical hysterectomy for stage 1a1 (with LVSI), 1a2 and 1b1 cervical cancer have worse disease-free survival (DFS) compared with traditional open radical hysterectomy. We aim to report our ten-year experience of laparoscopic radical hysterectomy in the Belfast City Hospital along with survival outcome.

Methods: We identified all women with stage 1a2 or stage 1b1 cervical cancer using the regional Cancer Patient Pathway System (CaPPS), a prospective database used for multidisciplinary team discussion, between January 2008 to January 2018. In keeping with the LACC trial inclusion criteria, only women with squamous, adenocarcinoma and adenosquamous histopathological subtypes were included. Follow up data was collected from Northern Ireland's comprehensive Electronic Care Record (ECR). All women were discussed at a regional MDT and underwent central histopathological review and MRI scan.

Results: A total of 133 women were identified who underwent a laparoscopic radical hysterectomy (including one converted to an open operation). During this time period two elective open radical hysterectomies were performed one due to obesity and one due to an enlarged uterus. The mean age was 41.1 year of age (median 40 years, range 26 to 64 years). The histopathological subtypes were 83 squamous, 50 adenocarcinomas, and 1 adenosquamous with LVSI present in 52 women (unknown in 2). The mean total pelvic node count was 20.9 (median 19, range 5-52) with positive nodes found in 14.3% of women. Clavien-Dindo level 3 complications occurred in 9% including ureteric injury in 3.75%. Complete follow up for at least 4.5 years was available for all of the 76 women during that time frame with Stage 1a2 to Ib1 cancers. Recurrence occurred in 3 women leading to one death. The DFS was 96% and overall survival (OS) of 98.6%.

Conclusions: In this single institutional study the DFS was 96% over 4.5 years broadly comparable to the DFS in the open radical hysterectomy group (96.5%) and superior to the laparoscopic group results (85%) in the recently presented LACC study. Data previously published in 2007 from our institution reported a DFS of 93.3% at 30 months for traditional open radical hysterectomy (Morgan et al 2007). In addition, a report by the Northern Ireland Cancer Registry suggests that survival has increased in women undergoing surgery for cervical cancer in a comparison of the years 1996 and 2010 . Strengths of our study included following up data on all the women with stage 1a2 and 1b1 cervical cancer and the fact that only two women underwent an open radical hysterectomy during this time period. Our data does not include any women with stage 1a1 (with LVSI) as we do not believe these women require radical surgery. The majority of operations were performed using the "buddy" system normally involving two consultant gynaecological oncologists experienced in laparoscopic surgery. Potential weaknesses in this study include its non-randomised nature and small numbers of women available for the duration of 4.5 years (though the data was available for all the 76 women). In conclusion, we believe laparoscopic radical hysterectomy remains an alternative to open surgery with the added benefits from the minimal access route without any decrease in survival or increase in morbidity in women carefully reviewed at a regional multidisciplinary team meeting.

BGCS0066

Cost analysis of traditional clinical follow up compared to patient initiated follow up (PIFU) for Stage 1 and Grade 1 or 2 endometrioid endometrial adenocarcinoma.

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Introduction: Cost effective, evidence- based practice should deliver the most effective healthcare within the resources available. Patient-initiated follow-up (PIFU) is no less effective than traditional clinical follow-up for women following low risk endometrial cancer (1). We introduced PIFU for low risk patients following treatment for endometrial cancer in 2010, following a 6-week post-operative holistic needs assessment (2), and sought to assess the impact of this policy.

Methods: A retrospective cohort study of all women diagnosed with FIGO Stage 1a, Grade 1/ 2 endometrial adenocarcinoma in Musgrove Park Hospital from January 2010 to December 2015 was performed Clinical records were interrogated and data extracted. Our tariff cost for a follow-up appointment is £82.38; cost calculations were performed upon this basis.

Results: For new cases, our patients would have had 13 appointments over 5 years, based on traditional follow-up. We calculated the costs of traditional follow-up versus our PIFU policy. By Jan 2018 we would have required 1644 clinic appointments for new patients under traditional follow-up. We have so far required 263 appointments on PIFU, saving the hospital £113,767. In this time period there were 8 recurrences. Only 3 patients had recurrences confined to the vaginal vault (all salvaged and still alive); 5 had distant recurrences (3 of whom have died).

Conclusions: Attending a hospital-based clinic for follow-up of a low risk malignancy may be challenging practically and/or psychologically, for limited proven benefit. PIFU demonstrated financial and operational benefits to the hospital, but this underestimates similar benefits for the patient (reduced transport and car-parking costs etc.). We demonstrated a significant cost-saving associated with PIFU and has been well-received by patients. This highlights the need to challenge traditional clinical practice to achieve highly effective and cost-effective outcomes for patients and the NHS.

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BGCS0067

Proliferative endometrium in Post menopausal bleeding : Feasibility and utility of studying long term outcomes

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Introduction: A minority of PMB women have proliferative endometrium on biopsy, however there is currently limited evidence on long term outcomes and how these women should be managed.

Methods: We collected data chronologically on 50 PMB women from January 2008 – June 2009 who had a diagnosis of proliferative endometrium on biopsy and used electronic records to follow them up for a minimum of 8 years. BMI ,endometrial thickness (ET) at time of diagnosis, any further referrals to gynaecology and progression of disease were recorded.

Results: Mean age was 56 years, mean BMI was 32 kg/m2. Most women had at least one significant co- morbidity. 33% of women had a further episode of PMB. Significant findings showed that ET >10mm increased the risk of lifetime hysterectomy from 4% to 50%. An ET >10mm also increased the risk of needing a repeat biopsy from 16% to 50%. BMI had a large impact of recurrence of symptoms (19% when BMI <30, and 36% when BMI>30) and further biopsy (6% when BMI <30, 33% when BMI >30) It is worth noting that out of the 50 women, only one progressed to develop endometrial adenocarcinoma.

Conclusions: Although the data numbers are small, it appears that having an ET >10mm or a BMI >30 is associated with further invasive procedures and more input from gynaecological services and a higher rate of requiring a hysterectomy. The small study size probably precluded true estimation and stratification of cancer risk. Future larger studies would answer this question.

BGCS0068

Audit of radical radiotherapy long-term toxicities & outcomes in cervical cancer patients treated with Image guided Intracavitary and Interstitial brachytherapy, Gloucestershire Oncology Centre

Dr Jyothsna Chennupati – Cheltenham General Hospital, UK Dr Audrey Cook - Cheltenham General Hospital, UK Graham Lockwood - Cheltenham General Hospital, UK Dr Emma Gilbert - Cheltenham General Hospital, UK Sinead Calvert - Cheltenham General Hospital, UK

Introduction: Locally advanced cervical cancers have been treated in Gloucestershire, using IMRT/ VMAT radiotherapy/ chemotherapy and MRI guided adaptive brachytherapy. Interstitial brachytherapy was introduced in October 2014. We

aim to analyse toxicities and outcomes since then to ensure that we are in line with international standards.

Methods: Data collected retrospectively on patients treated with HDR between October 2014 and May 2017. Data compared with results from EMBRACE I study

Results: 36 patients.

Age (27 -79yrs) ; Histology: squamous (83%), adeno (11%), adeno squamous (6%)

Staging: I (11%), IIB (44%), III A (2%), IIIB (30%), IV (11%)

Pelvic nodes (55%), PA nodes (3%)

Chemotherapy: concurrent cisplatin (78%), neo adjuvant carbotaxol weekly x 6 (11%)

EBRT:

- 50.4 Gy 28 fractions- 27 patients (75%)
- 45 Gy in 25 fractions - 9 patients (25%)

HDR:

- Interstitial Brachytherapy - 16 patients (44%)
- mean dose HR CTV D90 EQD2 = 86.33Gy

Median overall treatment time 52 days (EMBRACE I : 48 days)

Median follow up: 29 months

RT long - term toxicity using RTOG grade criteria: Compared with EMBRACE I study

RTOG Grade	Grade 1		Grade 2		Grade 3 & 4	
	Audit	EMBRACE	Audit	EMBRACE	Audit	EMBRACE
Bladder	16%	13%	11%	7%		
Bowel	27%	6%	5%	5%		
Bowel/ bladder					8%	5%
Bone					13% (Insufficiency fracture)	

Grade 3 / 4 toxicity

- 3 Patients
- All smoked
- All had 50.4Gy EBRT
- 1 treated with conformal technique rather than IMRT/VMAT.

Recurrence

Recurrent/Persistent disease: 36 % at 3 years (EMBRACE I 33%)

2 patients 1st site of relapse PA nodes

Conclusions: Recurrence rates and toxicity similar to EMBRACE trial. To reduce toxicity changed EBRT protocol to 45Gy and reduced nodal PTV margin with daily imaging and bony match (EMBRACE II protocol). PA nodes treated when 3 or more pelvic or common iliac nodes involved. We emphasise importance of not smoking.

BGCS0070

Service evaluation of patients who underwent joint colorectal/gynaecological oncological procedures for complex ovarian cancer de-bulking : 1-year outcome at South East Wales Gynaecological Oncology Centre

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Introduction: Most women who have ovarian cancer present with advanced disease with an overall 1-year survival rate for stage 3 disease of 71%. Potentially curative surgery requires reducing the diameter of all remaining tissue to less than 1cm. More recently, there has been a drive to reduce the residual macroscopic disease to 0cm. In order to achieve this, there is recommendation to jointly operate with other surgical disciplines. Studies have shown likely prolonged survival however an increased complication rate. In this study we aimed to look at the outcome of patients who underwent complex ovarian cancer de-bulking including survival and complications.

Methods: A retrospective cohort study looking at ovarian cancer patients who underwent ovarian cancer de-bulking surgery between 01/01/2017 – 31/12/2017 at University Hospital of Wales, Cardiff.

Results: Thirteen patients were identified with a median age of 68 (56-78). All patients within this cohort were alive at the time of evaluation (9 (69%) one year post surgery, 4 (31%) have also survived but are <1 year post surgery). 10 (77%) had interval de-bulking surgery. 11 (85%) had optimal de- bulking with 0cm residual disease (1 was 2-5cm, 1 was 5cm - patient requesting no colostomy). Six (46%) patients underwent a large bowel resection and stoma formation, of these 4 lost >500mls of blood and went to PACU post-operative. One had a small bowel resection and primary anastomosis. Two had a splenectomy and distal pancreatectomy. One had diaphragmatic stripping. Two had a supracolic omentectomy. The majority of patients had post-op complications – 7 (54%) had wound healing complications. The return to theatre rate was 31% (n=4). Two required a return to theatre for debridement and re-suturing of the abdominal wound. One had an anastomotic leak and required a return to theatre for formation of stoma.

Conclusions: Of the 13 patients that underwent surgery there was a 85% optimal de-bulking rate, with some limitations due to patient choice. One-year survival is 100% within this cohort.

BGCS0071

Outcomes of mucinous tumours of the ovary: a rare distinct clinical entity

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Introduction: Primary mucinous epithelial ovarian tumours present diagnostic challenges and exhibit a continuum of differentiation from benign through borderline to malignant. They have distinct molecular and immunohistochemical features but little randomised evidence exists to guide treatment. We sought to understand outcomes and pathologic characteristics.

Methods: Retrospective analysis of all cases of mucinous ovarian tumours between 2014-2018 in Bristol.

Results: 54 cases were analysed. 20 (37%) had borderline disease. All were right sided, stage 1 disease. 2 (10%) cases recurred in the pelvis within a year, managed with surgical excision. All were alive at completion analysis. 4 cases of borderline disease occurred in association with mature cystic teratoma. 30 (56%) had adenocarcinoma. Metastasis was excluded by CT, endoscopy and appendicectomy. 12 had adenocarcinoma arising in a background of borderline component. All had unilateral disease predominantly right-sided (77%). 11 (92%) had stage 1 disease. 2 (17%) had recurrence (1 pelvic, 1 distant). 1 died of the disease. Mean overall survival was 28.9 months. 18 had invasive disease without borderline component. Metastasis was excluded by CT, endoscopy and appendicectomy. All but 1 had unilateral disease predominantly right sided (62%). 17 (94%) had stage 1 disease. All underwent full surgical staging, 10 (53%) had adjuvant platinum-based chemotherapy. 4 (22%) had recurrence (2 distant, 2 pelvic). 3 (17%) died from the disease. Mean overall survival was 23.6 months.

Conclusions: Borderline disease is unilateral and carries an excellent prognosis. 5 cases of borderline disease arose from mature cystic teratoma highlighting possible monodermal teratomatous origin of mucinous tumours. A proportion of invasive adenocarcinoma arise in a borderline neoplasm. Once the tumour acquires invasion it behaves like frankly invasive disease. Invasive mucinous adenocarcinoma needs detailed clinical evaluation to exclude possibility of metastasis. Recurrence in invasive disease is not uncommon and with therapeutic options poorly defined, prognosis is poor.

BGCS0072

Multidisciplinary approach to Radical hysterectomy for stage 1b1 squamous cell cervical cancer in the patient with simultaneous pancreas and kidney transplant. Case report.

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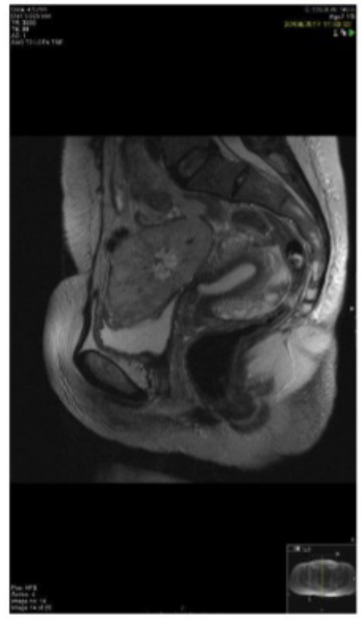
Introduction: Renal transplant recipients are at increased risk of developing the cervical cancer compared to the general population. Cervical cancer is approximately fivefold more common among these patients.

Results: 36 years old patient with 1B1 SCC of the cervix was treated with simultaneous pancreas kidney transplant 18 months prior to presentation. The patient was 5 years out of date with her cervical smears. After careful evaluation of the situation by MRI and PET CT and the multidisciplinary team involvement the decision was made to proceed with radical hysterectomy and bilateral salpingo-oophorectomy with pelvic lymphadenectomy. The anatomy was challenging. The pancreas was in the right parabolic gutter and had the Y graft anastomosis arising from the proximal right CIA with venous drainage directly into the IVC. The kidney was put on the patient right in a peritoneal pocket beneath the pancreas. There were single vessels arising from the EIA and EIV. The transplant ureter was anastomosed to the back of the bladder on the right side. Bilateral JJ stents were inserted into patient's native kidneys and 7Fr transplant stent was inserted into the transplanted kidney. The lymphadenectomy was straightforward on left side. The right side was challenging due to scaring on vessels from all the dissection done for implantation. Surgical Multidisciplinary team included Gynaecological Oncologist, Urologist, Vascular and Transplant Surgeon. The procedure was completed without compromise to the transplants or oncological principals. The Patient had ITU management postoperatively with renal team support. The Patient made good recovery. Final histology showed negative margins and clear lymph nodes.

Picture 1. Anatomical relation between the pelvic organs and renal transplant.



Conclusions: Treatment of the transplant patients with the cervical cancer is complex and requires extended multidisciplinary approach. Radical hysterectomy with lymphadenectomy may be technically difficult, and the graft in the pelvic position poses a number of operative difficulties and potential serious complications.

BGCS0073

Atypical presentation of recurrent cervical cancer: soft tissue metastases in the popliteal fossa and rectus abdominis muscle following radical robotic hysterectomy and adjuvant chemoradiotherapy for Stage 1b1 G2 squamous cell carcinoma of the cervix. A case report.

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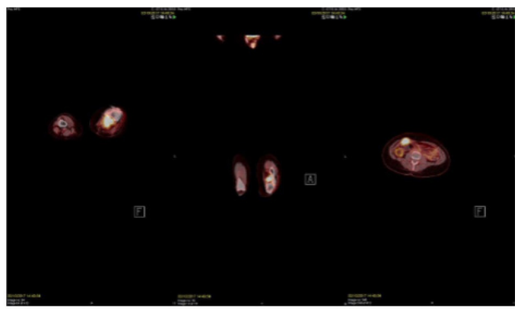
Introduction: Direct local extension and lymphatic embolization are the primary routes of cervical carcinoma spread. Distant metastases (lung, liver, bone and bowel) are usually associated with haematogenous dissemination. Soft tissue metastases arising from squamous cell carcinoma of the cervix are extremely rare.

Results: A 46-year-old female underwent unneedful robotic radical hysterectomy, bilateral salpingo-oophorectomy, bilateral pelvic lymphadenectomy for Stage 1b1 squamous cell carcinoma of the cervix. The patient was unable to have MRI due to a previously clipped Berry aneurysm. Preoperative CTCAP showed no metastases or lymphadenopathy. The final histology showed G2 SCC of the cervix with bilateral microscopic paracervical and one pelvic lymph node involvement 6 months after completion adjuvant chemoradiotherapy CTCAP showed no evidence of the recurrent disease. Only a month later the patient experienced

painful and swollen left knee, and right sided abdominal swelling, which was initially thought to be a hernia. The patient was seen by orthopaedic team. The presence of a large swelling within the medial head of gastrocnemius and MRI scan gave an initial impression of desmoid fibromatosis / aggressive fibromatosis of left knee popliteal fossa. The patient was referred to Tertiary Centre for soft tissue tumours, where the biopsy of the popliteal fossa lesion confirmed the presence of metastatic SCC carcinoma of the cervix. PETCT showed increased metabolic activity in the area of left knee and right-sided abdominal wall rectus sheath consistent with metastatic disease. After completion of 6 cycles of palliative chemotherapy PET-CT scan showed complete metabolic response of the lesion in rectus muscle. Left knee swelling has improved clinically. The patient is in the process of receiving the consolidation radiotherapy to her knee.

Picture 1. PETCT picture of left knee and abdominal wall deposits.



Conclusions: Cervical cancer metastases to soft tissue are very rare. High degree of suspicion and prompt resourcing to cross sectional imaging and biopsy for histological diagnosis is needed.

BGCS0074

BLOOD AND SERUM MARKERS IN WOMEN WITH RECURRENT GYNAECOLOGICAL CANCER. COULD STANDARD LABORATORY PARAMETERS BE USED TO DETECT RECURRENCE?

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Introduction: Close surveillance of women following gynaecologic cancer treatment is required to detect recurrences in a timely manner and therefore afford the best possible prognosis. Traditionally asymptomatic women undergo clinical examination and some tumour markers. The purpose of this study is to investigate whether standard laboratory parameters might enhance detection of recurrence.

Methods: Records of sequential recurrent cancers in 2015-2017 were taken from the hospital cancer data base. Women relapsing more than three months after completion of their treatment were identified. (N= 69) Exclusion criteria; incomplete response to primary treatment, maintenance anti-cancer treatments, systemic illness or on treatments that could affect haematological, biochemical or coagulation parameters. Those women eligible for inclusion (N=51) were categorised based on their site and histological type of gynaecological cancer. Controls were sequential patients without relapse of cancer attending the outpatient clinic for routine follow up. Statistical analysis was carried out using the non-parametric test (Mann- Whitney) and t-test with significant results identified as $p<0.05$.

Results: The following parameters were significantly associated with disease recurrence. A neutrophil lymphocyte ratio of ≥3, CRP levels of ≥5, Fibrinogen levels of ≥3.5, D-dimer levels of ≥500.

	N total	N with recurrence	Odds ratio (95% CI)	p
NL ratio ≥ 3	43	37	20 (6.68, 59.86)	<0.001
Fibrinogen level ≥ 3.5	51	39	45.33 (9.40, 218.53)	<0.001
D-Dimer level ≥ 500	51	40	15 (5.20, 43.31)	<0.001
C-reactive protein ≥ 5	25	24	102.86 (11.80, 896.73)	<0.001

Conclusions: One in five women with asymptomatic disease had recurrence detected on clinical examination. By comparison, all women with asymptomatic recurrence had at least one abnormal laboratory parameter. Markers of the inflammatory response: raised neutrophil lymphoctye ratio and CRP; and activation of coagulation: raised fibrinogen and dimer are significantly associated with disease recurrence. These investigations are relatively cheap, widely available and blood tests are generally acceptable to patients. We recommend attention to haematological, biochemical and coagulation profiles and CRP in the follow up of asymptomatic women after treatment of gynaecological cancer. Pending larger studies, further investigations are at the discretion of the attending clinician.

BGCS0075

Surgical Management of Placental Site Trophoblastic Tumours and Endometrial Trophoblastic Tumours: A 40-year retrospective study at a Gestational Trophoblastic Disease Centre

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Introduction: Placental site and Endometrial trophoblastic tumours (PSTT, ETT) are rare forms of gestational trophoblastic neoplasia (GTN), accounting for 0.2% of all GTD. Previous meta-analyses of PSTT/ETT outcomes have shown age >34 years, deep myometrial invasion and tumour size >1cm to be associated with poor outcomes. Guidelines from 2013 suggest primary surgical management for early stage disease diagnosed within 4 years. More advanced disease and those with later presentation benefit from more aggressive chemotherapy.

Methods: Retrospective review of all patients with surgical management of PSTT/ETT from 1975- 2014. Data analysed using Graphpad Prism software.

Results: 79 women underwent treatment for PSTT/ETT over 40 years, 85% were pure PSTTs. There were a wide variety of presentations with a range of 2-240 months from antecedent pregnancy and diagnosis. Mean age 34.3 years. 62% had antecedent livebirth pregnancy, 20% miscarriage/ termination, and 18% complete/partial mole. There was no statistical significance between stage of disease and hCG level at diagnosis type of surgical management or use of chemoradiotherapy. Nine patients had a relapse of disease with mean duration to relapse of 2.17 years; 6 of these subsequently died. Total mortality rate 8/79 (10%). We identified a statistically significant difference between stage of disease and resolution of hCG to normal levels after treatment (p=0.01).

Conclusions: PSTT and ETT are rare forms of GTN. Presenting symptoms are varied and can be delayed for several years from antecedent pregnancy. Length of time for hCG to resolve increases with stage of disease. This cohort appears to have a predominance of younger women than previous studies. There was a tendency to relapse after 2 years.

BGCS0076

Multidisciplinary Maximum Effort Cyto-reductive Surgery (MES) for Advanced Ovarian Cancer in Leicester: Outcomes

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Introduction: In the UK 7400 women are affected by ovarian cancer every year, only 36.2% survive for five years. The UK comes 45 th out of 59 in the global table. Some countries achieve nearly double this survival rate. The lack of adequate debulking has been highlighted as part of the problem. In Leicester, we have implemented a structured multidisciplinary surgical approach to offer MES to our patients with advanced ovarian cancer. The surgical team includes gynae- oncologists, hepatobiliary/colorectal surgeons, and anaesthetic team. This approach has helped us develop effective skills in extensive complex abdominal surgeries, and optimising the intraoperative decision making, hence improving outcomes in patients undergoing primary (PDS) or interval (IDS) debulking surgery.

Methods: A retrospective evaluation of prospectively collected data was performed to assess the surgical outcomes of all consecutive patients who underwent ultra-radical surgery for advanced ovarian cancer, from January 2016 to March 2018.

Results: 27 consecutive women had MES. Median age was 66(range 27-86). 13(48%) had PDS and 14(52%) had IDS. The majority of the patients were stage IIIC (67%) and most were high grade serous histology (85%). The median surgical duration was 295 minutes. Complete cytoreduction with no gross residual disease (GRD) was achieved in 82% of the patients, 11% had GRD <1cm and only 7% had suboptimal cytoreduction. Median blood loss was 800mls. Median length of hospital stay was 9 days. One year mortality rate was 11%(n=3), and one patient died in the first 28 days post-surgery. Only one patient had intra-operative complication of hypotension and tachycardia. The postoperative complications are presented in table(1) using the Clavien-Dindo classification.

Conclusions: Our data favours a multidisciplinary structured MES service for advanced ovarian cancer and this could be a more effective approach than a unidisciplinary approach. It minimises the morbidity, enables the development interdisciplinary surgical skills and improves the quality of surgery.

Post-operative complications according to The Clavien-Dindo classification	
Grade	**% (n)**
No Complications	22% (n=6)
Grade I	33% (n=9)
Grade II	41% (n=11)
Grade III	0
Grade IV	0
Grade V	4% (n=1)

BGCS0077

Rapid surgical learning curve and reduction in length of stay with introduction of robotic surgery in Gynaecology Cancer Centre

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Introduction: Robotic-assisted surgery facilitates application of minimally invasive techniques for complex/advanced oncological procedures.

Aims and objective:

- Improve surgical outcomes and patient experience for patients undergoing cancer surgery as measured against the NHS outcomes framework
- Reduce average length of hospital stay (LOS) in line with national best practice

Methods: A multi-disciplinary robotic programme was established in November 2017, lead by the Gynaecology Oncology (GO) department. Key performance indicators were agreed and targets set prior to the introduction of GO robotics. Performance has been prospectively tracked to ensure that the newly established robotic surgical service delivers against its clinical, operational and financial aims. Data on all robotic cases is collected prospectively into a dedicated database.

Results: Prior to clinical go live all surgical specialties, anaesthetic and theatre teams completed extensive training. From 28.11.17 to date our 2 robotic GO Consultants have completed 37 robotic procedures with no unplanned conversion. Mean BMI was 36 (Range 25-62). There were no major intra/postoperative complications. We demonstrate a rapid surgical learning curve (improved docking time, console time, increasing BMI and radical surgical procedures within a short duration). From 3rd case onwards our mean docking time is 6.5 min. Our Mean time for 28 hysterectomies

BSO cases and 5 Radical hysterectomies / trachelectomies, Pelvic lymph node dissections completed until now is 101 minutes and 290 minutes respectively. In 2016, of 106 women with endometrial cancer only 41% (n=43) were performed laparoscopically; mean LOS following TLH of 2.3 days. To date our LOS for endometrial cancer robotic hysterectomy is 1.4 days.

Conclusions: Our robotic programme demonstrates safe and rapid surgical learning curve, positive impact on patient outcomes and hospital capacity by reducing LOS. Further data is awaited including patient satisfaction and patient reported experience via validated questionnaires.

BGCS0078

The value of preoperative pelvic and groin CT scan in the management of vulva squamous cell carcinoma (VSCC)

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Introduction: There is no consensus as to whether preoperative CT scan is useful in assessing distant metastasis to the groins lymphatics in women with VSCC. Our study aims to determine the accuracy of preoperative CT scan in diagnosing distant metastasis to the inguinal and iliac lymphatics in women with primary VSCC.

Methods: A retrospective study of 94 consecutive cases of primary VSCC were included in the study. Patients who had preoperative CT scans were identified, and CT scan findings were compared with the histology of resected groin nodes.

Results: Preoperative CT scans identified 28% patients with a potential groin node metastasis, yet only 16% had actual groin node disease confirmed on histology. However, in 12% of patients, a preoperative CT scan failed to detect groin node metastasis. The sensitivity and specificity of a preoperative CT scan in detecting groin node metastasis were 57.15% and 77.78%, respectively; the positive and negative predictive values were 50% and 82.35%, respectively. In 0.7%, CT scans failed to provide a conclusive diagnosis as to whether a primary tumour had spread to the groins, although histological staining confirmed groin node metastasis in both cases. In cases where groin nodes were histologically negative, there were no positive iliac nodes detected on CT scan.

Conclusions: We found that a preoperative CT scan has limited value in diagnosing inguinal lymph node metastasis, as both the sensitivity and positivity of the test were poor. Our study does not support the need for preoperative CT scan in patients without clinical evidence of groin nodes metastasis as the first point of distant metastasis is almost always to the groin lymphatics. However, a post- operative CT scan may be useful in cases with confirmed groin lymphadenopathy to plan further treatment. Further studies using a larger cohort of patients is being undertaken to validate our findings.

BGCS0079

Spigelian Hernias- a case for routine closure of 5mm laparoscopic port sites?

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Introduction: A spigelian hernia is a rare type of abdominal wall hernia which occurs through a slit like defect in the anterior abdominal wall, adjacent to the semi-lunar line (1). Spigelian hernias typically present as abdominal masses or with postural pain (2), and are only linked to acute presentations secondary to trocar site herniation by case reports (3-6).

Case Details: A 73-year-old female was admitted for total laparoscopic hysterectomy and bilateral salpingooophrectomy. She had a past medical history of cholecystectomy, inguinal hernia and appendicectomy. Day 5 post operatively she became clinically unstable and a palpable mass was felt in the right lower quadrant. CT scan of the abdomen and pelvis (see figure 1) demonstrated an acute bowel obstruction secondary to a Spigelian hernia at a 5mm trocar site insertion.

Literature Review: Spigelian hernias at port site insertions are a poorly recognised complication of gynaecology surgery according to an article published in Gynaecology Surgery in 2017 (7). The article highlighted a possible link with right sided spigelian hernias and previous appendicectomy.(7). More generally speaking, 5mm hernias at trocar site insertion points are rare and infrequently reported, however literature reviews have identified extended manipulation of the port site as a risk factor for subsequent herniation (8). Other risk-factors identified include parous women over 60 years as they may have unknown defects in the fascia in the abdomen (9). 10mm and 12mm port sites are at a much higher risk of herniation and therefore literature reviews supports standard practice of routine closure (8-11).

Conclusions: This case and literature review determines the need to consider 5mm port site closure when risk-factors such as previous parity, prolonged surgical procedure, or previous operation at same site have occurred, which is against accepted practice at present where 5mm sites are generally not closed at the rectus sheath level.

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BGCS0080

Audit on hospital based clinical follow up for women with Borderline Ovarian Tumours (BOT) in Leicester

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Introduction: Borderline ovarian tumours (BOT) are a distinct group of neoplasms that demonstrate higher proliferative activity when compared with benign neoplasms, but which do not show stromal invasion. There has been no standardized method of follow up of these women. Suggested protocol has been 3 monthly for the first two years, 6 monthly for the next two years and annually thereafter. In the absence of a consensus, this audit was aimed to establish a tailored follow-up regime, based on the results.

Methods: We performed a retrospective audit of all BOTs from 1st January 2010 to 31st December 2017. 194 women were identified to be coded as BOT from histopathology records, and 133 patients had surgery for BOT. Out of the 133 patients, nine women who had epithelial ovarian cancer were excluded. Follow-up data for one woman treated in the private sector was unavailable. Microsoft Excel was used for data analysis.

Results: The median age was 52 years. 36 women had fertility sparing surgery, 87 women had primary staging, and 16 had completion surgery. The median follow up was 3 years (range of 0.25-6 years). One woman had recurrence of BOT after three years. There were no recurrences with carcinoma during this time. 26 women are currently under clinical follow-up, while 72 women have been discharged. There were no diagnoses of invasive implants in the study population. Overall survival was 97% (3 women died of other causes).

Conclusions: Our data suggests that for women with BOT undergoing primary staging surgery, in view of excellent prognosis and minimal incidence of recurrence within 5 years, a patient initiated follow up model may be beneficial, and could replace a hospital based clinical follow up. Key words BOT follow up, recurrence.

BGCS0081

Significant regional variation in clinical trial participation for ovarian cancer

Dr Norman Freshney, Health and Science Research Strategy Consultant On behalf of Target Ovarian Cancer

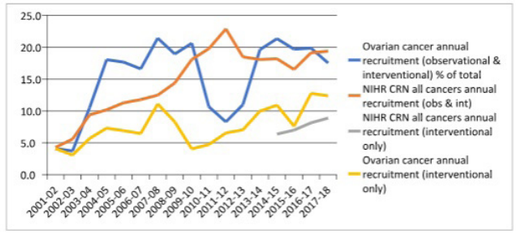
Introduction: Target Ovarian Cancer has been analysing participation in ovarian cancer clinical studies since 2013/14, when a 7.5-fold difference in recruitment between regions was observed. Understanding such variation is important for improving opportunities for women around the UK to participate in clinical studies. In 2016/17, a 6-fold variation between the top and bottom regional quartiles was identified (presented at BGCS 2017). The most recent analysis, using data from 2017/18, show that regional variations in ovarian cancer clinical study participation persist.

Methods: The NIHR Clinical Research Network (CRN) has provided data describing participation in observational and interventional studies in ovarian cancer from 2013/14 to 2017/18. These datasets have been analysed to measure participation in relation to regional population and the number of cases of ovarian cancer in each region. Annual and regional trends from 2013/14 to 2017/18 have also been analysed.

Results: In ovarian cancer, overall recruitment to interventional trials in the UK increased from 699 (2013/14) to 867 (2017/18) women. This equates to 12% of women with ovarian cancer joining an interventional trial in 2017/18 (figure 1). However, considerable variation between the regions exists, ranging from 6% of patients to 61% of patients recruited to clinical trials in 2016/17. Feedback from the regions has described the key challenges hindering recruitment to be due to staff shortages, insufficient financial support and trial design. Overall recruitment to observational trials* that are open to women with ovarian cancer has declined in recent years, from 847 (2015/16) to 498 (2016/17) to 361 (2017/18). *Excluding ICBP, SEARCH, EMBRACE and Metabonomics

Conclusions: There exists significant regional variation in clinical trial participation for women with ovarian cancer, which in previous years has led to a six-fold difference in recruitment between the quartiles of the best and worst performing regions. Clinical trials offer women the opportunity to access potential new treatments, whilst improving our understanding of disease and treatment options. However, the substantial regional variation indicates that many women in the UK still do not have the opportunity to join a clinical trial for ovarian cancer.

Figure 1 - Recruitment to clinical studies (UK) in ovarian cancer since 2001. Patient participation in observational and interventional studies is shown as a percentage of total patents (y-axis).



BGCS0082

Case report of successful robotic assisted laparoscopic cervical cerclage at 15 weeks gestation.

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Introduction: We report the case of a 34 year old female who presented at 14 weeks gestation. Six years prior to presentation she underwent a radical vaginal trachelectomy (with laparoscopic bilateral pelvic lymph node dissection) for stage 1B1 squamous cell carcinoma of the cervix. At the time of trachelectomy a cervical cerclage was inserted using

a vaginal approach. A subsequent excisional treatment for VAIN was required, at which point the cervical suture was transected.

Methods: The patient presented to the benign gynaecology service with pelvic pain and was found to be 14 weeks pregnant. Ultrasound confirmed a viable intrauterine pregnancy with no measureable cervical tissue. The placement and indications for cervical cerclage is much debated but there was a consensus view that this patient was at an increased risk of miscarriage due to the absence of cervical cerclage and the previous trachelectomy. In order to reduce the risk of miscarriage the decision was made to undertake a robotically assisted laparoscopic cervical cerclage at 15 weeks gestation. Mobilisation of the bladder was undertaken with identification of the ureters and uterine vessels to ensure placement of the cerclage medial to uterine arteries. The uterus was supported using swab slings to facilitate access. Anterior knot placement was chosen due to access and ability to exert sufficient traction. She was discharged home 24 hours following the procedure.

Results: Prelabour spontaneous rupture of membranes occurred at 34 weeks without dilatation of the lower uterus and a caesarean section was performed without complication. A literature review found no articles relating to robotically assisted laparoscopic insertion of cervical cerclage around a gravid uterus, suggesting that this is the first report of this procedure in a pregnant patient.

Conclusions: In this case robotically assisted rescue cerclage appeared to be safe and viable alternative to a vaginal or abdominal technique.

BGCS0083

The use of intraoperative frozen section analysis of pelvic masses in Gynaeoncology in Belfast Health and Social Care Trust

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Introduction: Frozen section (FS) analysis is a pathological laboratory procedure performed for rapid microscopic analysis of a specimen. Women with suspected early-stage ovarian cancer require surgical staging with tissue biopsies and retroperitoneal lymph nodes to inform further treatment. The use of intraoperative FS allows analysis of tumour type while the patient is on the table, tailoring the need for full staging procedure depending on the FS result. This avoids risks of surgical overtreatment and its complications if not required and the risk of a two stage procedure with the associated anaesthetic burden.

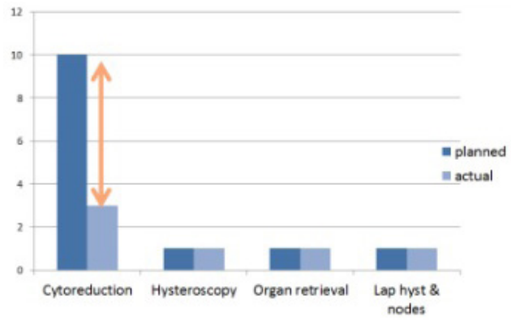
Methods: A retrospective cohort study was performed on all gynaecology cases that employed FS histopathology technique in Northern Ireland between 2015 and 2017. Data was collected from electronic and paper records and analysed to assess the uptake of its use, indications and outcomes.

Results: In total 14 women were studied, with mean age of 54, mean RMI of 558 and mean CA125 was 188U/ml. 35% of cases involved suspicious bilateral ovaries, 50% unilateral ovarian masses, 7% endometrium and 7% cervical lesions. 10/14 cases were planned for complete cytoreduction, however by using the results of FS only 3 cases went on to require this procedure.

Figure 1 – Graph to show operative procedure planned vs actual procedure performed given result of FS tumour typing. 7 cases did not require complete cytoreduction

Of the adnexal masses analysed by FS the maximal mean diameter was 10cm (range 4cm-15cm) and the mean weight of tissue sample was 469g. 42% were benign lesions, 42% malignant lesions and 7% borderline. There was a 100% concordance rate between FS and formal histopathological processing techniques.

Conclusions: Frozen section had a 100% accuracy rate at correctly identifying histological tumour type in BHSCT between 2015-2017. This conferred a benefit to the patients with a reduction in need for cytoreduction and its associated complications.



BGCS0084

Expression of DNA methyltranferases in ovarian serous tumours.

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Introduction: DNA methylation, mediated by five DNA methyltransferases (DNMT1, 2, 3A, 3B, 3L) regulates gene expression by causing gene silencing. We sought to explore the role of DNMTs in ovarian serous tumours in an effort to identify prognostic markers and potential therapeutic targets.

Methods: The expression of DNMT1, DNMT2, DNMT3A, DNMT3B and DNMT3L was examined in 74 serous tumours (2 cystadenomas, 12 borderline tumours, 15 low-grade carcinomas, 45 high-grade carcinomas) and 21 relapsed serous carcinomas by immunohistochemistry. Nuclear staining was evaluated for all markers. Cytoplasmic staining was additionally evaluated for DNMT2 and DNMT3A. Intensity of staining (1-3) was multiplied by the % of positive cells and an HSORE was reported for each case. Mann-Whitney and Wilcoxon signed-rank tests were used for statistical analysis.

Results: DNMT1, nuclear DNMT3A and DNMT3L expression was increased in high-grade carcinomas compared to low-grade ones ($p<0.001$, $p=0.004$ and $p=0.001$, respectively). Relapsed tumours also showed higher DNMT1, and DNMT3L positivity compared to their primaries ($p=0,006$). DNMT1 expression positively correlated with nuclear DNMT2, nuclear DNMT3A and DNMT3L expression ($p=0.03$, $p<0.001$ and $p=0.001$ respectively). Nuclear DNMT3A positivity was also associated with DNMT3L. Nuclear DNMT3A was inversely correlated with cytoplasmic DNMT3A expression ($p=0.006$). No difference was seen between borderline tumours and low-grade carcinomas. DNMT2 and DNMT3B expression didn’t show any clinicopathologic correlations.

Conclusions: Our results indicate that DNMT1, DNMT3a and DNMT3L are involved in the pathogenesis and progression of high-grade ovarian serous carcinomas and may be promising therapeutic targets, rationalizing further analysis of their functional role in ovarian carcinomas.

BGCS0085

The impact of introducing a robotic service on radical hysterectomy for stage 1b carcinoma of the cervix.

Thomas Ind, Jenneke Kasius, Desmond Barton, John Butler, Marielle Nobbenhuis.

Introduction: To assess the impact of a robotic programme for stage 1b cervical cancer on the laparotomy rate, service, and complications.

Methods: An audit of prospectively collected data over eight years.

Results: Ninety patients* were identified. Thirty seven before the first robotic procedure and 53 after. In total, 33 were open, 25 laparoscopic, and 32 robotic. The laparotomy rate reduced from 75% to 0%. There were no differences in age, BMI, comorbidities, stage and grade. Length of stay reduced from a median of 6 days to 3 days ($P<0.0001$). Robotic surgery was significantly less than laparoscopic and open (median = 2, 3 & 7 days). Robotic surgery was on average 34 minutes longer than open and 103 minutes shorter than laparoscopic ($p < 0.0001$ & $p = 0.0101$). The complication rate before robotics was 68% compared to 45% ($p= 0.0493$). The most common complication was the need for a blood transfusion that reduced from 43% to 11%. The blood transfusion rate was 51% for open, 20% for laparoscopic, and 0% for robotic. This was accompanied by reductions in estimated blood loss and falls in haemoglobin. Overall, 24% of women had urinary tract infections, 27% urinary retention, and 8.9% lymphoedema. The lymph node count was significantly higher in the robotic arm compare to the open.

Conclusions: Robotic radical hysterectomy for carcinoma of the cervix reduces hospital stay and complications. It is of shorter duration than laparoscopic surgery and yields more lymph nodes than laparotomy.

BGCS0086

Evaluation of 5 year outcomes of Laparotomy versus Laparoscopic approach for Radical Hysterectomies for Cervical cancer at the South East Wales Gynaecological Cancer Centre

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Introduction: A retrospective evaluation of outcomes of the Radical Hysterectomies for Cervical cancer comparing laparotomy versus laparoscopic approach, in response to a recent presentation at the IVW Conference in Prague and the LACC trial discussed in the article: ‘Unexpected Outcome in Hysterectomy Study’ which has suggested higher risk of recurrence and overall mortality with the laparoscopic approach.

Objectives:

1. To compare the overall recurrence and mortality rates of cervical cancer for laparotomy versus laparoscopy approach.
2. To determine the incidence of intra-operative and post-operative complications and need for adjuvant treatments.

Methods: Data was collected retrospectively between 12/01/2012 to 15/05/2017 and was analysed on 15/05/2018 to allow at least 1 year outcome. Cases were identified from the Gynae-Oncology database. Data was gathered from the Cardiff & Vale Clinical Portal, theatre notes and clinic letters and analysed using Excel 2007.

Results: There were 30 laparotomies and 78 laparoscopic radical hysterectomies for cervical cancer. The median follow up for laparotomy versus laparoscopic approach was 12 months and 6 months respectively with a range of 3 weeks to 12 months for both subgroups. In the laparotomy subgroup there was a 13.3% major complication rate (ureteric injury; 1, bleeding >500mls; 2, return to theatre; 1), 33% of patients required adjuvant treatment (10 patients). Recurrence rate was 7.1% (2 patients) and survival was 90% (27 patients). In the laparoscopy subgroup there was a 6.4% major complication rate (ureteric injury; 3, pelvic collection; 1, conversion to a laparotomy; 1, return to theatre; 1), 12.5 % of patients requiring adjuvant treatment (10 patients). Recurrence rate was 5.5% (4 patients) and survival was 97.1% (99 patients) including all stages of disease.

Conclusions: Given recent evidence, our data does not suggest higher recurrence and lower survival with the laparoscopic approach. Morbidity is higher with laparotomy approach. Further analysis (including final histological stage) will be undertaken to assess significance of our findings.

BGCS0087

Distant recurrences are common following pelvic exenteration for malignancy of non- cervical origin

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Introduction: Historically pelvic exenteration (PE) has been advocated for treatment of locally advanced or recurrent cervical cancer. Although there is extensive data on surgical and oncological outcomes following this radical surgery, pattern of recurrence is seldom reported. Moreover, there is paucity of data on pelvic exenteration for malignancies of non-cervical origin. In this study, we report on frequency and sites of recurrence following PE for malignancy of non-cervical origin.

Methods: In this retrospective study, the twenty two patients who had pelvic exenteration for malignancy of non-cervical origin at our tertiary gynaecological cancer centre between 2007 and 2017 were included. Patient characteristics, patterns of recurrence, surgical outcomes and oncological outcomes were extracted from the electronic records.

Results: Four (16.6%) patients had PE for primary gynaecological cancer and eighteen (82%) at recurrence. Eight (33%) had recurrent endometrial cancer, six (25%) recurrent vulval cancer, seven (32%) vaginal cancer and one (4%) ovarian cancer. All patients had a preoperative whole body F-FDG PET CT scan. Median hospital stay was 20 days (range 7-146 days). Major postoperative complication rate (Clavien-Dindo classification > III) was 41.7%. There were no peri-operative deaths. Late complications (>30 days postoperative) occurred in 11 patients (50%). Ten (45.5%) had distant recurrence and one (4.5%) had local pelvic recurrence after a median follow-up of 40 months (range 2-151 months). Sites of distant recurrence include: Brain, lung, liver, small bowel serosa, sacral skin and inguinal node. Most common distant site of metastasis was lung (50%). Median duration of follow up was 19 months (IQR 10-65 months). Median progression free survival was 12.5 months (IQR 6-41 months).

Conclusions: In our practice, indication for PE has been extended to malignancy of non-cervical origin. Following PE for malignancy of non-cervical origin, distant sites of recurrence are common and therefore, close whole-body imaging surveillance is advocated.

BGCS0088

Outcomes of bowel resections during surgical cytoreduction of advanced stage ovarian cancer: Should we be working towards reducing stoma rates?

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Introduction: Up to 23% of patients require bowel resection in order to achieve complete surgical cytoreduction for advanced stage. Approximately 20% have a significant postoperative complication following bowel resection. Although this may be justified in view of an improved prognosis, if complete cytoreduction is achieved, having a stoma has a significant impact on quality of life. In this study, we report outcomes of patients requiring enterostomy with an intention to deferred reversal after completion of adjuvant chemotherapy.

Methods: In this retrospective study, patients who required bowel resection at cytoreduction surgery for primary ovarian cancer at our tertiary gynaecological oncology centre between 2007 and 2016 were included. Patient characteristics, tumour stage, complete cytoreduction rate, complication rate according to Clavien-Dindo classification, time interval to recurrence or death were analysed.

Results: 72 (75%) out of 95 patients were primary ovarian cancer. 43 (59.7%) patients had primary debulking surgery, 23 (32%) had interval debulking surgery following 3 cycles of chemotherapy and 6 (8%) had delayed debulking surgery. Overall complete cytoreduction rate was 82%. 22 (30%) had colorectal anastomosis, with 5 requiring defunctioning ileostomy. 2 (9%) patients without defunctioning ileostomy had anastomotic leak. 41 (56%) had colostomy and 9 (12%) had end ileostomy. 16 (22%) patients had grade 3 or 4 complications according to Clavien-Dindo classification and 1 (1.3%) postoperative death was reported. Median follow up since debulking surgery was 36 months (IQR 21-62 months), 44 (61%) patients reported to have recurrence. Median progression free survival was 18 months (IQR 8-46 months). 32 (44%) patients were deemed not suitable for reversal of stoma due to recurrence.

Conclusions: In our study, 44% of patients with enterostomy at debulking surgery had recurrence within 12 months of completing treatment. When performing bowel resection, risk of complications associated with anastomosis should be weighed against the potential negative impact on quality of life due to enterostomy

BGCS0089

Immunohistochemical determination of p53 in advanced stage high-grade serous ovarian cancer: Is there a prognostic value for disease free survival and overall survival?

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Introduction: High-grade serous ovarian cancer (HGSOC) is associated with high degree of TP53 gene mutation. TP53 gain-of-function and loss-of-function mutations are associated with overexpression or complete absence of immunohistochemical p53 expression, respectively. Literature suggests null-type p53 expression is associated with a worse prognosis. We aim to study prognosis of patients with advanced stage HGSOC in relation to p53 expression.

Methods: 257 patients with advanced HGSOC (FIGO III/ IV) treated at our tertiary gynaecological cancer centre between 1st January 2012 and 31st December 2016 were included. Immunohistochemistry of p53 (DO-7) and WT1 (6F-H2) was conducted using the mouse antibodies (Ventana Medical, Roche®). p53 immunohistochemistry was evaluated in a ternary response: wild-type, over- or null-type expression. Progression free survival (PFS) and overall survival (OS) were estimated using the Kaplan-Meier method.

Results: 107 patients (41.6%) were diagnosed with stage III. 224 patients (87.1%) underwent primary debulking surgery, whilst 33 (12.8%) underwent interval debulking with complete resection rates of 54 % and 75.7%, respectively. WT1 was overexpressed in 89.4 % of tumours. Wild-type p53 expression was noted in 1 case (0.38 %) which was excluded. Overexpression of p53 in the tumour was detected in 183 patients (71.2%) and in 73 patients (28.4%), a null-type p53 expression. There were no differences in patients', tumour', or treatment characteristics based on p53 expression status. Median PFS and OS of the entire cohort was 21 and 45 months. There was no significant difference in the PFS (p= 0.40) and OS (p=0.954) for patients with overexpression of p53 as compared to null-type p53.

Conclusions: Immunohistochemical determination of p53 in advanced HGSOC confirms a high prevalence of p53 aberrations. However, different p53 expression pattern do not influence prognosis in HGSOC. If different p53 expression pattern are of predictive value in specific targeting of p53 mutant tumours warrants further investigation.

BGCS0090

Primary debulking surgery for stage IV ovarian cancer: A sequential study over 17 years from a tertiary gynaecological oncology centre.

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Introduction: Complete cytoreduction (CC) at primary debulking surgery (PDS) for advanced stage ovarian cancer is a surrogate marker of disease free survival (DFS) and overall survival (OS). In this study, we report outcomes of PDS for stage IV ovarian cancer comparing sequential time intervals over a period of 17 years

Methods: Four hundred and thirty seven consecutive patients who underwent PDS for stage IV ovarian cancer at our tertiary gynaecological oncology centre were included. Data was analysed from our prospectively maintained cancer registry. Study period was divided into subgroups A (2000-2003), B (2004-2007), C (2008-2011) and D (2012-2017). Surgical complexity score (SCS), postoperative morbidity and mortality as per Clavien-Dindo classification (CDC), CC rates, DFS and OS was compared in the four subgroups A-D.

Results: The number of patients having PDS for stage IV ovarian cancer increased from 41 in group A to 150 in Group D. Overall 56.1% patients had CC during the study period. CC rates improved from 31.7 % in group A to 61% in C and 58.7% in D. There was a temporal increase in median SCS from 9 in group A to 12 in group D. This was not associated with significant increase in morbidity and mortality with Grade 3-5 CDC ranging from 26-37%. Median OS improved from 16 months in Group A to 36 months in Group C.

Conclusions: Improving complete cytoreducion rate at primary debulking surgery for stage IV ovarian cancer is associated with significant increase in overall survival. Aggressive change in surgical paradigm is necessary in improving outcomes for this advanced stage disease

BGCS0091

Solitary recurrence of squamous cell carcinoma of the cervix in the omentum –Management of an unusual presentation

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Introduction: Whilst it is common for cancer of cervix to recur locally in the pelvis, small proportion present with distant nodal metastatic disease. We report the management of an unusual recurrence of squamous cell carcinoma of the cervix in the omentum.

Methods: For this case report, we conducted a thorough literature review.

Results: A 54-year-old woman presented with heavy vaginal bleeding. Investigations revealed a barrel shaped lesion arising from the cervix. Examination under anaesthesia with a biopsy confirmed FIGO stage IIIB grade 2 squamous cell carcinoma of the cervix. She completed external beam radiotherapy with concurrent cisplatin chemotherapy, followed by 3 fractions of high dose rate brachytherapy. She remained disease free until ten month later, when routine follow-up CT scan detected a 3 cm nodule deep to the left rectus muscle. F-FDG PET/CT confirmed a solitary recurrence in the greater omentum. A laparotomy and infracolic omentectomy with the removal of the nodule, revealed metastatic grade 2 squamous cell carcinoma of the cervix. The multidisciplinary team recommended adjuvant chemotherapy but the patient declined any adjuvant treatment and remains under surveillance.

Conclusions: Extra-pelvic distant recurrence of squamous cell carcinoma of the cervix in the omentum is uncommon, with only one other case reported in literature. We report an unusual site of recurrence and management. We recommend the use of routine surveillance imaging in an asymptomatic patient.

BGCS0092

Primary vaginal mucinous adenocarcinoma of gastrointestinal type arising in the background of recurrent mullerian vaginal cyst.

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Introduction: Primary vaginal cancer is a rare gynaecological malignancy with an incidence of <1% in UK. There is paucity of knowledge regarding management and prognosis of the gastroinstestinal subtype. Previously reported cases are associated with vaginal adenoma or endometriosis. We report a multidisclipinary diagnosis and management of a tumour in association with recurrent mullerian vaginal cyst.

Methods: We have conducted a thorough literature search for this case report

Results: A 34-year-old patient presented to the gynaecology clinic with history of prolapse and stress incontinence. On vaginal examination, a polyp-like periurethral structure was noted. Magnetic resonance imaging (MRI) suggested benign appearing vaginal cyst. This was surgically excised and histopathology confirmed benign mucinous mullerian cyst. Five years later, a small nodule was identified at the previous surgical site. This was surgically excised and histopathology confirmed no malignancy but remnants of mullerian type glands. She remained asymptomatic until eleven years from initial presentation when she was investigated for post-coital bleeding. Vaginal examination revealed a mass in the anterior vaginal wall at the previous surgical site. Diagnosis of primary vaginal cancer was suspected and biopsy was performed under anaesthesia. Histopathology confirmed well differentiated mucinous adenocarcinoma. Immunohistochemistry shows the tumour to be positive for CDX2, CK7, and patchy positive for PAX 8 and negative for CK20, ER and p16. She underwent gastroscopy and colonoscopy to rule out primary gastrointestinal malignancy. Her imaging and histopathology was discussed by multidisciplinary team and anterior pelvic exenteration was performed followed by adjuvant radiotherapy. She remains under surveillance.

Conclusions: Primary vaginal mucinous adenocarcinoma of gastrointestinal type is a rare malignancy and may arise in association with mullerian vaginal cysts. Paucity of evidence makes treatment strategy challenging. We advocate dual aggressive approach with initial radical surgery followed by adjuvant radiotherapy.

BGCS0093

Rare Ovarian Tumours in Gynaecological Oncology

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Introduction: Three cases of rare ovarian tumours encountered by the gynaeoncology team are detailed.

Results: A fifty-five year old lady presented with new left sided pelvic pain. MRI scan suggested a possible right adnexal mass of uncertain origin. A laparotomy was performed which revealed a large 4 x 3cm mass in the right obturator fossa with no nodal enlargement. Histologically, the mass appeared to be a spindle cell neoplasm displaying a focal severe cytological atypia. A diagnosis of Ancient Schwannoma was made. These are rare tumours which usually occur in the upper extremities, very few abdominal cases have been reported. They display degenerative changes, calcification, hyalinisation and nuclear atypia and appear to hold a good prognosis. Brenners tumours constitute up to 2.5% of ovarian tumours. Most are benign with a gross fibroma like appearance. A 46 year old woman underwent a full staging laparotomy for a suspicious left ovarian mass. A 30cm left ovarian cyst was found with no enlarged lymph nodes. Histologically this was a proliferative Brenner tumour of the left ovary. She recovered well, but a baseline Ca125 of 39 prompted an MRI scan which revealed a 3cm liver cyst. This was resected and found to be a transitional cell carcinoma. We propose several hypotheses: a transformation of the original Brenners tumour, pre- existing missed malignant transitional cells in the original tumour or a cancer originating from the urothelial epithelium. A 68 year old woman had an ultrasound scan which revealed a 19mm nodule, suspicious of malignancy on MRI. She underwent a laparoscopic bilateral salpingo-oopherctomy which revealed a suspicious looking right tube and ovary. Histology showed this to be a benign microcystic stromal tumour of the ovary. This is a distinctive subtype of ovarian tumours and are usually solid-cystic. Microscopically, microcysts, solid nests and hyaline degenerated fibrous stroma are seen.

BGCS0094

Pathological ultrastaging of sentinel lymph nodes in cervical cancer.

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Introduction: To evaluate the incidence and management significance of low volume metastasis detected in sentinel lymph nodes by histological ultrastaging in patients with surgically operable cervical cancer.

Methods: Retrospective review of 176 patients with cervical cancer who underwent surgery with sentinel node detection at the West Kent Oncology Centre from 2005 to 2018. Sentinel nodes benign on an initial H and E stained section underwent ultrastaging with serial sections and cytokeratin immunohistochemistry. The first ultrastaging method was for paired H and E and MNF116 stained sections at 330-400 micron intervals and from 2013 onwards was changed to paired H and E and AE1/AE3 stained sections at 500 micron intervals.

Results: Sixty percent of tumours were squamous carcinoma, 33% adenocarcinoma, 6% adenosquamous carcinoma and 1% other carcinomas. The FIGO stage was IB1 in 79%, IA2 in 12%, IA1 in 6%, IB2 in 2% and IIA1 in 1% of cases. Twelve sentinel lymph nodes from 12 patients (6.8%) were positive for metastasis in the initial H and E and were not ultrastaged. 211 sentinel nodes from 91 patients which were benign on initial H and E were ultrastaged and 7 nodes from 7 patients (3.3% of nodes and 7.7% of patients) were found to be positive. In 4 of these 7 cases (57%) there were close or involved margins which would have warranted adjuvant chemoradiation. In 3 of the cases (43%) the metastasis detected on ultrastaging influenced the decision to give adjuvant chemoradiation.

Conclusions: Pathological ultrastaging identified occult metastasis in sentinel nodes of 7.7% of patients initially thought to be negative on routine histology and influenced the adjuvant management in 43% of this group.

BGCS0096

Impact of the UK India Education Research Initiative (UKIERI) in setting up Gynaecogical Oncology Research in Eastern India

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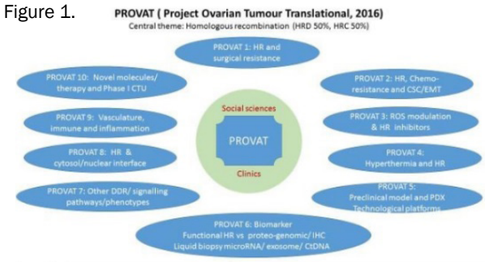
Introduction: The experience of established Gynaecological Oncology Centres in the UK can have a massive impact in dissemination of knowledge and setting up of services/ research globally.

Methods: We describe our model of developing a training and research programme in Gynaecological Oncology at Tata Medical Center, Kolkata, a tertiary referral centre in Eastern India through an exchange programme focussing on the following research areas: 1. Quality improvement in ovarian cancer cytoreductive surgery 2. Human resources development 3. Social sciences- economics and quality of life 4. Education and training- medical/basic science/ data management and trials 5. Translational Research Funding was obtained through the British Council- DST India collaborative research grant UKIERI and UICC technical fellowships.

Results: 1. A research team comprised of 25 members including specialist nurses, medical social workers, data managers, clinical trial co-ordinators, basic science and clinical researchers was developed through a joint mentoring scheme 2. Kolkata gynaecological Oncology Trials and Translational Research Group- KolGo Trg was established to participate in International clinical trials 3. Translational research programme in Ovarian cancer (PROVAT) was established focussing in the theme on homologous recombination status in epithelial ovarian cancer (Figure 1).

Conclusions: UKIERI has provided a platform for long standing collaborative research and development in gynaecological oncology in low resource settings in India.

Figure 1.



BGCS0097

Delayed interval debulking surgery in advanced ovarian cancer patients; prevalence and a simple root cause analysis of a small case series.

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Introduction: Adherence to cancer guidelines is attractive as a quality process measure. According to the British Gynaecological Cancer Society (BGCS) guidelines, neoadjuvant chemotherapy (NACT) with interval debulking surgery (IDS) after three cycles of platinum-based chemotherapy is non-inferior to primary debulking surgery (PDS) and adjuvant platinum- based chemotherapy. The role of delayed IDS following six chemotherapy cycles has not been thoroughly evaluated. We aimed to identify the prevalence pertaining to the total cohort of serous advanced (stage 3c-4) ovarian cancer (sAOC) patients. We also performed a root cause analysis to identify reasons for the deviation from the BGCS guidelines as a quality measure of our treatment of sAOC.

Methods: The Trust Patient Pathways Manager (PPM) was queried for sAOC between 2007 and 2016 and cases with delayed IDS were identified. All the cases were discussed at the Central Gynaecological Multidisciplinary Team (MDT) Meeting. Treatment type, reasons for surgical treatment after six chemotherapy cycles and clinicopathologic factors were collected. The patients were followed up until March 2018. Descriptive statistics and survival curves were produced.

Results: 675 sAOC patients received surgical treatment. Seven out of 675 patients (1%) underwent delayed IDS. The mean age was 69 ± 7 years. Differences between pre-treatment and pre- surgery CA 125 values were statistically significant (p:0.03). In all but one cases, EBL was <500 ml. There were neither Clavien-Dindo 3-5 complications nor hospital readmissions. The reasons for delayed IDS were identified in all cases (Table). In three of seven patients, persistent disease warranted delayed surgery to facilitate additional chemotherapy response and/or symptomatic relief. The median survival time for this group was 61 months (9-96 months), largely attributable to one patient (Table).

Conclusions: Only 1% of sAOC patients received delayed IDS, which appears reassuringly low. Review of the reasons for non-adherence to guidelines revealed appropriate clinical reasons being made in a MDT setting.

Patient	Reason IDS after cycle 3 not performed	Residual disease	Overall survival (mths)
P1	Patient declined	RD	96+
P2	Attempted IDS, abandoned due to extensive disease	RD	40
P3	MDT decision:unsure of benefit from surgery given excellent response after C3	R1	13
P4	Poor PS (walking with a z-frame, good clinical response)	R1	12
P5	Persistent anaemia despite iron infusions and EPO (Jehovah's witness)	R1	8+
P6	MDT decision:unsure of benefit from surgery given excellent response after C3	RD	17+
P7	Poor PS (nutrition,PE, pressure ulcer)	R1	9
			Note: + = alive

BGCS0099

Assessing outcomes of the "test of cure" smear results following colposcopy treatments performed at the West Middlesex Hospital Colposcopy unit.

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Introduction: Cervical cancer accounts for 2% of all new cancer cases in females, with around 3,200 new cases in the UK annually. The NHS Cervical Screening Programme (NHSCSP) has been successful in reducing the incidence of and mortality from cervical cancer. At West Middlesex Hospital, the six month 'test of cure' smear, following

treatment, are now performed by the patients General Practioner (GP). We looked to see if these follow up smear tests are being performed and whether this provides a safe alternative compared to having the smear test performed back in the colposcopy clinic.

Methods: A total of 81 patients with abnormal smear results between (2014-2016) were identified, 6 were excluded (incomplete information). Data was collected retrospectively using electronic patient records. Data including whether treatment was complete, test of cure smear and the outcome of the follow up smear were obtained.

Results: Outcomes are currently being analysed

Conclusions: Outcomes are currently being analysed and conclusions need to be drawn

BGCS0100

The effects of neo-adjuvant chemotherapy on tumour associated myeloid cells in high- grade serous ovarian cancer metastases

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Introduction: Many tumours have abundant macrophage populations. Tumour-associated macrophages (TAMs) frequently have tumour promoting roles and high levels are associated with poor clinical outcome. Recent work from our laboratory has studied the effects of neo-adjuvant chemotherapy (NACT) on tumour-infiltrating T-cell responses in high-grade serous ovarian cancer (HGSOC) patients and shown potential enhancement of the host anti-tumour immune response following NACT. However, we do not know the effect of chemotherapy on TAMs in these patients. We hypothesise that targeting the recruitment, polarisation and effector function of TAMs may improve HGSOC response to chemotherapy as well as having independent anti-cancer activity.

Methods: We are using mouse models of HGSOC and samples from patients pre and post treatment to study the effects of chemotherapy on TAMs in the tumour microenvironment.

Results: The overall aim of this project is to produce preclinical data to support clinical testing of macrophage targeting agents in combination with chemotherapy in HGSOC. We find that TAM density decreases in tumour cell islands after chemotherapy. In both mouse models and human samples we find that TAM phenotype is changed by chemotherapy – some, but not all, markers of tumour promoting macrophages decrease.

Conclusions: These preclinical data support macrophage targeting in combination with chemotherapy in HGSOC.

BGCS0101

Management of malignant vulval melanoma in South-West England – a review of cases

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Introduction: Mucosal malignant melanomas are rare, with an incidence 0.1/100,000 and studies are limited. SWAGGER (South West Academic Gynaecological Oncology Group for Education and Research) collected retrospective data across five cancer centres to evaluate pathology reporting, staging, management and outcomes in South West England.

Methods: Retrospective analysis of all patients newly diagnosed with vulvo-vaginal malignant melanoma since 2001 at five cancer centres in the South West. Imaging, pathology, results, surgical interventions, recurrences, follow-up and overall survival rates were recorded.

Results: Fifty-four patients with vulvo-vaginal melanoma were identified, with a median age of 74 years. Over the course of follow-up there were 39 (72.2%) deaths (30 melanoma-related) and 29 (54%) recurrences: local (7); pelvis (10); distant (10); no details (2). Disease-specific median survival in this series was 29 months (95% CI 15.4 – 42.6 months). 28/54 (52%) patients had pre-operative imaging. 34/54 (63%) patients had 3-monthly follow-up within the initial 3 years post-diagnosis, and at least 31/54 (57%) patients had regular surveillance CT CAP to detect asymptomatic recurrences.

Conclusions: This retrospective multi-centre study highlights the high recurrence rate and poor prognosis of vulvo-vaginal melanoma. Adherence with RCPath reporting and AJCC staging will improve future data collection and analysis. Consensus on management is unclear, but primary excision was standard. Scar re-excision was performed with a similar approach to vulval Squamous Cell Carcinoma management, if margins were close or involved. Full inguinal lymphadenectomy was generally reserved for patients with abnormal lymph nodes on imaging or clinically involved. Seven patients had sentinel lymph node (SLN) sampling. However, two patients with negative SLNs had distant recurrences within 16 months. There is current variation in management .We aim to refine a South West Care Pathway that incorporates baseline and follow-up imaging, surgical interventions and clear follow-up strategy. The imminent publication of the Mucosal Melanoma Consensus Group Guideline will aid ongoing management.

Table: Staging and Management of vulval melanoma

Tumour staging and management	Number	Percentage %
TNM staging		
(Sub grouped if ulceration status known)		
1	4	7
1a		
1b	2	4
2	7	13
2a	1	2
2b	3	6
3	15	28
3a	2	4
3b	7	13
4	17	32
4a		
4b	13	24
Biopsy only (palliative)	5	9
No details	6	11
Primary treatment		
WLE/vulvectomy (and re-excision)	43 (14)	80 (26)
Full inguinal lymphadenectomy	2	47
Sentinel lymph node biopsy	7	13
Palliative radiotherapy	2	4
Palliative chemotherapy	1	2
Adjuvant treatment		
Radiotherapy	2	4
Chemotherapy	1	2

BGCS0102

Pathological ultrastaging of sentinel lymph nodes in cervical cancer.

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Introduction: To evaluate the incidence and management significance of low volume metastasis detected in sentinel lymph nodes by histological ultrastaging in patients with surgically operable cervical cancer.

Methods: Retrospective review of 176 patients with cervical cancer who underwent surgery with sentinel node detection at the West Kent Oncology Centre from 2005 to 2018. Sentinel nodes benign on an initial H and E stained section underwent ultrastaging with serial sections and cytokeratin immunohistochemistry. The first ultrastaging method was for paired H and E and MNF116 stained sections at 330-400 micron intervals and from 2013 onwards was changed to paired H and E and AE1/AE3 stained sections at 500 micron intervals.

Results: Sixty percent of tumours were squamous carcinoma, 33% adenocarcinoma, 6% adenosquamous carcinoma and 1% other carcinomas. The FIGO stage was IB1 in 79%, IA2 in 12%, IA1 in 6%, IB2 in 2% and IIA1 in 1% of cases. Twelve sentinel lymph nodes from 12 patients (6.8%) were positive for metastasis in the initial H and E and were not ultrastaged. 211 sentinel nodes from 91 patients which were benign on initial H and E were ultrastaged and 7 nodes from 7 patients (3.3% of nodes and 7.7% of patients) were found to be positive. In 4 of these 7 cases (57%) there were close or involved margins which would have warranted adjuvant chemoradiation. In 3 of the cases (43%) the metastasis detected on ultrastaging influenced the decision to give adjuvant chemoradiation.

Conclusions: Pathological ultrastaging identified occult metastasis in sentinel nodes of 7.7% of patients initially thought to be negative on routine histology and influenced the adjuvant management in 43% of this group.

BGCS0103

Comparative Efficacy and Safety of Niraparib and Olaparib in Relapsed Ovarian Cancer: The Hammersmith Experience

Mark P Lythgoe[1] Nawa Amin[1] Mariam Nassar[1] Anna Brown[1] Laura Tookman[1] Jonathan Krell[1,2] Iain McNeish[1,2]

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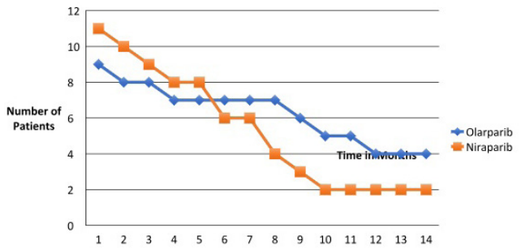
Introduction: Maintenance therapy with poly(ADP-ribose) polymerase inhibitors (PARPi) extends progression free survival (PFS) in platinum-sensitive (BRCA1/2 mutant and non-BRCA mutant) relapsed ovarian cancer. In the UK, two PARPi are licensed for maintenance therapy; olaparib (BRCA-mutant receiving >3 chemotherapy lines) and niraparib (BRCA mutant and non-BRCA mutant via early- access program). No direct comparison studies of PARPi exist.

Methods: We performed a retrospective analysis to identify patients receiving niraparib or olaparib (excluding clinical trials) at Hammersmith Hospital. Records were analysed for duration, cessation reason, toxicities and germline BRCA status.

Results: Twenty patients were identified; eleven received niraparib and nine olaparib. 100% (n=9/9) receiving olaparib and 54% (n=6/11) receiving niraparib had germline mutation in BRCA1/2. Median PFS (Chart 1) was 12 and 7 months in the olaparib and niraparib groups respectively. Median PFS in the niraparib group was 7 and 5 months in the BRCA mutant and BRCA non-mutant groups respectively. 44% (n=4/9) of olaparib patients and 18% (n=2/11) niraparib patients had a response >12 months. 10/11 (91%) niraparib patients required dose reduction (DR) due to grade 3/4 toxicity, compared to only 1/9 (11%) olaparib patients (p=0.0075). Reasons for niraparib DR included haematological toxicity (n=7), mucositis (n=1), headache (n=1) and diarrhoea (n=1). 27% (n=3) had concomitant grade 3/4 toxicities and 9% (n=1) required toxicity-induced treatment cessation. Only 9% (n=1) tolerated the initial dose (300mg). 54% (n=6/11) required dose adjustment to the lowest maintenance (100mg) dose due to haematological toxicity. 72% (n=8/11) who required DR due to toxicity weighed <77Kg. The olaparib DR was due to haematological toxicity and no olaparib patient required treatment cessation.

Conclusions: Olaparib was associated with a longer median PFS (including BRCA mutant sub-group) and superior tolerability. Niraparib was associated with higher incidence of grade 3/4 toxicities necessitating dose reductions but rarely cessation. A head to head comparison may fully delineate this effect.

Chart 1: Time to Progression



BGCS0104

Management of Atypical Endometrial Hyperplasia at a Cancer Centre

Tomas Barani[1], Hassan Elashkar[1], Rahul Nath[1], Jane Borley[1], Ahmad Sayasneh[1,2], Gautam Mehra[1,2] Guy's & St Thomas' NHS Foundation Trust (South East London Cancer Centre)[1] King's College London[2]

Introduction: Atypical endometrial hyperplasia (AEH) is a precursor for endometrial cancer (EC). AEH has a high recurrence rate despite medical treatment, and its management is challenging. We present our series of AEH managed over the last 10 years.

Methods: We retrospectively collected data on all patients diagnosed with AEH at Guy's & St Thomas' Hospital. Histology was reviewed by our Multidisciplinary Team. Data were collected from hospital records on histology, medical management and its duration and rate of hysterectomy.

Results: 72 patients were diagnosed with AEH. The mean age was 57 years (range 36-84). Commonest risk factors were obesity and nulliparity. The majority of patients had abnormal uterine bleeding. 82% of women received surgical treatment, 14% medical and 4% declined any treatment and only wished for surveillance. 48% women had CT/MRI to

screen for cancer. EC was diagnosed in 46% women following the hysterectomy (of which 96% were FIGO stage-I). There was one case of the ovarian granulosa cell tumour and four non-secreting ovarian tumours (two malignant; one borderline; one benign). In the medical management group, 45% had levonorgestrel-releasing intrauterine device (LNG- IUS), 22% oral progestogens and 33% LNG-IUS with oral progestogens. Mean duration of treatment was 8 months. Endometrial biopsies were carried out every 3 months. The complete response rate of medical treatment was 55 %. Out of patients declining treatment, one developed EC requiring surgery and radiotherapy. The rest had spontaneous resolution of AEH. 4% women at follow up developed breast cancer.

Conclusions: AEH has a high rate of occult endometrial cancer. Most of these are fortunately low-grade and early-stage. CT/MRI have limited value in detecting EC. We recommend strict monitoring with frequent endometrial biopsies during non-surgical management with early recourse to completion hysterectomy in case of failure of medical treatment.

BGCS0105

Surgical Complexity Score in Gynaecological Oncology and Surgical Outcome

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Introduction: UKGOSOC study published a surgical complexity score (SCS) to help predict complications in gynaecological oncology surgeries. We aim to assess the role of SCS in predicting morbidity and mortality in gynaecological oncology surgery.

Methods: Prospective cohort study of major surgical cases between 01/02/2017 and 01/02/2018. Histology was confirmed and reported according to WHO classification. Intraoperative complications were reported and postoperative morbidity classified by Clavien and Dindo's (CD) score. The UKGOSOC SCS (Table 1) was used. Two tailed t-test was used to compare means; p<0.05 was considered statistically significant.

Results: 286 surgeries performed during the study period. SCS in 53 cases was <3, in 54 cases 3-4, in 53 cases 5-6, in 81 cases 7-8 and in 45 cases >8. Intraoperative complications occurred in 9/286 (3%) procedures (2 small bowel injuries, 1 bladder injury, 1 bile leak, 2 vascular injuries, 1 uterine perforation and 2 intraoperative bleeds >2500mls). There was a statistically significant difference in SCS between intraoperative complication cases compared to no intraoperative complications (95%CI: 0.76-4.81; p= 0.007). Postoperative morbidity for CD2 was 40/286 (14%); for CD3a 7/286 (3%) and for CD3b 5/286 (2%). We reported one mortality following a CD4b complication in a patient with surgery shortly after ITU admission for stroke. This patients' SCS was only 1, however, she had multiple comorbidities including pulmonary emboli, tetraplegia and hypertension. The mean SCS when a CD3 occurred was 7.36 compared to 5.56 when no complications occurred. This difference was not statistically significant (95% CI: -0.05-3.65; p=0.06). Similarly, when CD2 occurred SCS mean was 5.9 with a difference of 0.33 compared to the non-complication group, with no statistical significance (95% CI: -0.27-0.93; p=0.3).

Conclusions: We observe an association between SCS and intraoperative complications. This, however, is insufficient to accurately predict postoperative morbidity. Other factors such as comorbidity should be considered.

Procedure	Po'nts
Laparoscopic approach	1
Total hysterectomy +/- Bilateral Salpingo-oophorectomy	1
Bilateral Salpingo-oophorectomy	1
Radical hysterectomy +/- Bilateral Salpingo-oophorectomy	4
Radical trachelectomy	3
Simple trachelectomy	1
Cervical stumpectomy	2
Ureterolysis (mobllisation of ureter from tumour / adhesions)	1
Re-implantation of ureter	2
Omental Biopsy / Staging Infracolic Omentectomy	1
Supracolic + Infracolic Omentectomy	2
Adhesiolysis (any code for adhesiolysis)	1
Pelvic Lymphadenectomy	2
Para aortic Lymphadenectomy	2
Peritoneum resection / stripping	1
Large bowel resection with primary anastomosis	3
Large bowel resection with stoma	2
Small bowel resection with anastomosis	2
Small bowel resection with end small bowel stoma	1
Appendicectomy	1
Diaphragm stripping / resection	2
Splenectomy	2
Liver resection (s)	2
Wide local exclsion of vulva	1
Simple vulvectomy	1
Radical vulvectomy	2
Sentinel node biopsy	1
Inguinofemoral Lymphadenectomy	2
Posterior Exenteration	5
Anterior exenteration +/- urinary conduit	7
Total exenteration	7
Surg'cal Complexity Score	
Complexity Score Group	**Po'nts**
1	<3
2	3-4
3	5-6
4	7-8
5	>8

BGCS0106

Unusual Gynaecological Presentations of Metastatic Breast Cancer: A Cases Of Metastatic Breast Cancer to the Bartholin's Gland and Literature review.

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Introduction: Breast Cancer is the most common cancer in women accounting for 23% of all female cancers. The majority present with localised disease, however, metastases are seen in Bone, Brain, Lung and Liver. Invasive lobular carcinoma (ILC) can have unusual metastatic sites including peritoneum, pelvic organs and hollow viscera. Very rare occurrences of Bartholin's gland metastases of Breast Cancer have been reported. We present a case of metastatic breast cancer to the Bartholin's Gland highlighting the need for gynaecologists to maintain this rare diagnosis within their differential. Case: 73 year old, 9 month history of right sided 5x3cm non-tender, mobile Bartholin's mass with associated vaginal puckering. Personal history of Breast Cancer 15 years previously - treated with Mastectomy and adjuvant chemoradiotherapy. Underwent Wide Local Excision by cold knife dissection. Histology revealed Invasive Ductal Carcinoma Grade 2 similar to patients previous mastectomy specimen. Immunohistochemical staining showed strong nuclear GATA3, diffuse moderate oestrogen receptor, diffuse strong progesterone receptor and negative HER2. She was referred to medical oncology and commenced on palliative chemotherapy.

Methods: We carried out a Pubmed search using the terms ''Breast Cancer AND Vulva'', ''Breast Cancer AND Genital Metastases'' and ''Breast Cancer AND Cervix''.

Results: In English Medical Journals, we identified 25 cases of Breast Metastases to the Vulva including 2 in the Bartholin's gland 3,6 and 15 cases of Metastasis to the Cervix between 1946 and 2018. There was 1 previous case of Invasive Ductal Carcinoma metastasis to the Bartholin's Gland.

Conclusions: Although rare occurrences, this clinical case highlight the importance of maintaining a clinical suspicion of new gynaecological lesions in women with a history of breast cancer, even in cases with a long interval from primary diagnosis. Carcinoma of the Bartholin's gland is rare and the majority are primary cancers, however uncommonly, metastatic disease to the Bartholin's gland can occur.

BGCS0107

Audit of Endometrial Hyperplasia (management and follow up) - NHS Fife

Dr Sudha Singh, Dr Dulcie Fleming, Dr Lauren McRoberts NHS Fife

Introduction: The aim of this Audit was to compare our practice of management and follow up of Endometrial Hyperplasia against the joint RCOG/BSGE guidance published in February 2016

Methods: All Endometrial samples collected at clinics and theatres were retrospectively looked at for a 2 month period between October and November 2016. The management and follow up was reviewed by looking up records on the Clinical Portal (online) system.

Results: A summary of the results, including sufficient details to support the conclusions 36 cases (34 without atypia, 2 with atypical Hyperplasia) were identified. The cases without atypia were found to have had adequate follow up. The 2 cases with atypical Hyperplasia were elderly unfit patients, hence managed with Mirena IUS and follow up.

BGCS0108

Changes in approach to hysterectomy for cervical cancer in England between April 2011 and 2018 – An analysis of Hospital Episode Statistics (HES) data.

Thomas Ind[1], George Morgan[3], Tom Burke[3], Abigail Lishman[3], Alan Gillespie[4]

[1]Royal Marsden Hospital NHS Trust. [2]St George's University of London. [3]HCD Economics, University of Chester. [4]Sheffield Teaching Hospitals NHS Trust

Introduction: To assess the route of surgery and complication rates for hysterectomy for cervical cancer in England between the years 2011 and 2018.

Methods: The English Hospital Episode Statistics (HES) database was searched between the years 2011/2012 and 2017/2018 for the diagnosis of cervical cancer and hysterectomy. Laparoscopic & robotic procedures were identified by searching for 'Y' codes. The proportion of women having a hysterectomy by each route was presented for each year and complications compared for each surgical route.

Results: A total of 3,104 hysterectomies for cervical cancer were recorded in England on the HES database between the years 2011/12 and 2017/18. The proportion of women who had an open approach to their hysterectomy fell from 68% (173/255) in 2011/12 to 25% (122/496) in 2016/17. The figure in 2017/18 was 28% (82/295). Standard laparoscopic techniques doubled from 25% (63/255) in 2011/12 to 57% (282/496) in 2016/17. The figure in 2017/2018 was 53% (157/295). Robotic laparoscopic techniques increased four and a half fold from 4% (9/255) in 2011/12 to 18% (52/295) in 2017/2018. There were significant less cardiac and pulmonary complications in the minimal access approaches compared to open hysterectomies (RR = 0.48, 95%CI 0.30 to 0.72 and RR = 0.41, 95%CI 0.22 to 0.70 respectively). There were no significant differences in wound, infective, renal or neurological complications. Although there were no demonstrable differences between all minimal access approaches and open hysterectomy for gastro-intestinal complications. Robotic surgery had significantly less gastro-intestinal complications than open surgery (RR = 0.53, 95%CI 0.29 to 0.94).

Conclusions: There has been a trend towards a laparoscopic approach to hysterectomy for cervical cancer over the last seven years. The slight dip in the last year might be because the last two months occurred after data from the LACC study was first presented. Although this data does not give a survival analysis, the data demonstrates less complications in the laparoscopic and robotic groups compared to open surgery.

BGCS0109

Swyer Syndrome

Mr Kunal Rathod, Senior Clinical Fellow, Guy's and St Thomas' Hospital, London. (Primary Author) Ms Debra Penny, Senior Clinical Fellow, Guy's and St Thomas' Hospital, London. (Presenting Author) Dr Mahua Bhaduri, ST 3, Guy's and St Thomas' Hospital, London. Mr Tom Holland, Consultant Gynaecologist, Guy's and St Thomas' Hospital, London.

Introduction: Disorders of sex development (DSD) are congenital conditions characterized by atypical chromosomal, gonadal, or anatomical sex development 1 . Complete gonadal dysgenesis is characterized by a female phenotype, nonambiguous genitalia, the presence of Müllerian derivatives, gonadal dysgenesis, and a normal karyotype 2 . One type of gonadal dysgenesis is Swyer syndrome, which is a rare cause of DSD. The SRY gene is deleted in approximately 10-15% of patients with Swyer syndrome and mutated in an additional 10-15% of Swyer syndrome patients 1,2

Methods: A 17 years old patient presented to endocrinology clinic with primary amenorrhea and delayed puberty from her general practitioner. She had poor secondary sexual characteristic features. Her blood investigation showed hyper gonadotrophic hypogonadism. MRI scan showed pre-pubescent Uterus and cervix with bilateral streak gonads. Karyotype showed XY and PCR confirmed absence of SRY gene and diagnosis of Swyer syndrome. She underwent laparoscopy and bilateral salpingo oophorectomy. Histo pathology showed dysgerminoma along with gonadoblastoma

in right ovary. It was staged 1a ovarian cancer and no further treatment was required.

Conclusions: All Women with primary amenorrhea should be subjected to thorough investigations including ruling out Swyer syndrome and other chromosomal abnormalities associated with higher rates of incidence of gonadal tumours. The accurate and early diagnosis of this syndrome can reduce the incidence of gonadal tumours, improve patient survival and reduce emotional trauma.

BGCS0110

The management of low RMI ovarian cysts in postmenopausal women – laparotomy vs laparoscopy

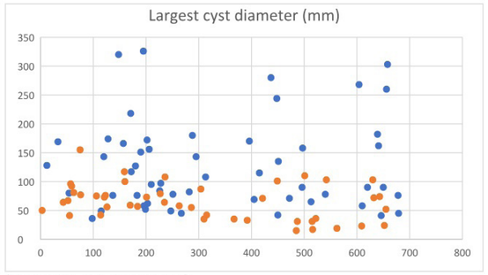
L. Hole, A. Kermack, R. Hadwin, S. Johnson University Hospital Southampton NHS Trust

Introduction: Histological assessment is the gold standard for diagnosis of ovarian pathology. However, timing, technique and extent of surgery can be varied according to the risk of malignancy. There are many ways of assessing this risk, with RMI I being the method recommended by the RCOG and BGCS. However, with a cut-off of 200 this will still allow some malignancies to come into the 'low-risk' category. Laparoscopic bilateral salpingo-oopherectomy is the recommended procedure for women with a symptomatic low risk adnexal mass but the evidence for the safety of a laparoscopic approach in the management of ovarian cancers remains uncertain.

Methods: Data was collected for 103 women aged over 50 with an RMI I <200 and available histology.

Results: 21 malignancies were identified on histological examination: 13 ovarian; 5 uterine; 3 non- gynaecological (1 ovarian metastasis, 2 caecal tumours involving the adnexal structures). 82 had benign pathology. 2 had biopsy only. We had operative details for 99 (80 benign and 19 malignant), of which 45 were commenced laparoscopically and 54 were open procedures. 48% (39/80) of benign cases had laparoscopic surgery whilst only 26% (5/19) of malignancies were removed with a minimal access approach. Four cases were started laparoscopically but converted to open. Maximum cyst diameter was larger in the open group (range 36-326mm, mean 128mm) compared to the laparoscopic group (range 15-155mm, mean 65mm) and those undergoing open surgery were more likely to have had previous abdominal surgery (23/54 vs 10/45).

Conclusions: None of the cases with malignancy had their outcome compromised by having a minimal access approach, although one required a second 'completion' surgery. Predicting the risk of malignancy for adnexal masses is a complex and dynamic process involving clinical as well as radiological and biochemical assessments. Consideration should be given to a laparoscopic approach where this is considered safe and achievable.



(blue – open, red – laparoscopic)

BGCS0111

The management of low RMI ovarian cysts in postmenopausal women – predicting malignancy

L. Hole, A. Kermack, R. Hadwin, S. Johnson University Hospital Southampton NHS Trust

Introduction: Histological assessment is the gold standard for diagnosis of ovarian pathology. However, timing, technique and extent of surgery can be varied according to the risk of malignancy. There are many ways of assessing this risk, with RMI I being the method recommended by the RCOG and BGCS. However, with a cut-off of 200 this will still allow some malignancies to come into the 'low-risk' category. Laparoscopic bilateral salpingo-oopherectomy is the recommended procedure for women with a symptomatic, low risk adnexal mass but the evidence for the safety of a laparoscopic approach in the management of ovarian cancers remains uncertain.

Methods: 103 women, aged over 50 and with an RMI<200 were included . All were scanned by a sonographer trained in IOTA classification to allow multiple RMIs to be calculated either retrospectively or prospectively (RMI I, LR2, ADNEX, simple rules).

Results: 21 malignancies were found on histological examination: 13 ovarian; 5 uterine; 3 non- gynaecological (1 ovarian metastasis, 2 caecal tumours involving the adnexal structures). 82 had benign pathology. Of the cases with primary ovarian malignancy only two had a raised CA125, with RMI I scores ranging from 62-195. The ADNEX risk of malignancy score detected all but one case of primary ovarian malignancy with scores of 22-93 (cut-off of 25 in our unit).

Conclusions: The ADNEX risk of malignancy index performed well in our group. Reducing the cut-off to 20 would have detected all cases of primary ovarian malignancy but increased the number of false positive results from 23 to 25. Predicting the risk of malignancy for adnexal masses is a complex and dynamic process involving clinical as well as radiological and biochemical assessments. This can be enhanced by ultrasound assessment by specialist sonographers trained in the IOTA classification.

BGCS0112

Occult Carcinoma and Serous Tubal Intraepithelial Carcinoma (STIC) in High Risk Population

Debra Penney[1], Vishakha Tripathy[2], Anju Kulkarni[2], Ahmad Sayasneh[1,3], Gautam Mehra[1,3]

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Introduction: Women with BRCA gene mutation and/or strong family history of ovarian/tubal cancer (OC) are at an increased life-time risk of OC. Some women will undergo risk-reducing bilateral salpingoophorectomy (RRBSO) and get diagnosed with occult OC or STIC. The optimum follow up for STIC lesions following RRBSO is contentious even though STIC lesions are considered precursor lesions of serous OC. Some centres discharge women without any follow up while others follow up for varying duration and measure Ca-125 with or without imaging of pelvis. Our regional BRCA clinic receives large number of referrals in the UK and offer counselling on risk reduction strategies. We present our series of RRBSO reporting the rates of occult OC and STIC and share our experience on follow-up for STIC.

Methods: Data was collected on high-risk women (BRCA gene mutation and/or strong family history of OC) undergoing RRBSO over a period of thirteen years at Guy's & St Thomas' Hospital. The details on BRCA nutation were obtained from the genetic database maintained prospectively. All women diagnosed with STIC or occult OC had their histology discussed in the Gynaecological Oncology MDT.

Results: 105 patients had RRBSO. Nine (8.6%) women had occult malignancy or STIC lesions. Two patients had high grade serous carcinoma (HGSC) of the ovary and three had tubal HGSC. Four (3.8%) women had STIC lesions. All patients with carcinoma underwent completion surgery and follow up. Women with STIC had a follow-up ranging from 6-24months (6 monthly Ca-125 and imaging) and there were no abnormal results.

Conclusions: Occult OC is rare in this high-risk group women but requires completion staging surgery following RRBSO. It appears safe for women with STIC to be discharged after a short-term follow up following RRBSO.

BGCS0113

Changes in approach to hysterectomy for endometrial cancer in England between April 2011 and 2018 – An analysis of Hospital Episode Statistics (HES) data.

Thomas Ind[1], George Morgan[3], Tom Burke[3], Abigail Lishman[3], Alan Gillespie[4]

[1]Royal Marsden Hospital NHS Trust. [2]St George's University of London. [3]HCD Economics, University of Chester. [4]Sheffield Teaching Hospitals NHS Trust

Introduction: To assess the route of surgery and complication rates for hysterectomy for endometrial cancer in England between the years 2011 and 2018.

Methods: The English Hospital Episode Statistics (HES) database was searched between the years 2011/2012 and 2017/2018 for the diagnosis of endometrial cancer and hysterectomy. Laparoscopic & robotic procedures were identified by searching for 'Y' codes. The proportion of women having a hysterectomy by each route was presented for each year and complications compared for each surgical route.

Results: A total of 21,109 hysterectomies for endometrial cancer were recorded in England on the HES database between the years 2011/12 and 2017/18. The proportion of women who had an open approach to their hysterectomy fell from 60% (1,026/1,697) in 2011/12 to 27% (614/2,264) in 2017/18. Standard laparoscopic techniques increased from 37% (630/1,679) in 2011/12 to 59% (1,345/2,264) in 2017/2018. Robotic laparoscopic techniques increased from 1% (11/1,697) in 2011/12 to 12% (277/2,264) in 2017/2018. Complications between the different group will be presented. The proportion of black women who had an open procedure over the seven years was 62% compared to 42% for white women.

Conclusions: There has been a trend towards a laparoscopic approach to hysterectomy for endometrial cancer over the last seven years. There has been a significant increase in a robotic approach to endometrial cancer surgery. Black women are more likely to have an open operation and this may in part be due to fibroids.

BGCS0115

Surgical Outcome of Presumed Malignancies in Gynaecology

M. Quaranta[1], T. Eichenberger-Gautschi[1], R. Nath[1], J. Borley[1], G. Mehra[1,2], A.Sayasneh[1,2]

[1]Department of Gynaecological Oncology Guy's and St Thomas' NHS Foundation Trust [2]King's College London

Introduction: Aim of this study was to assess the implications of treating benign pathology which were presumed as malignant in a Gynaecological Oncology tertiary centre.

Methods: Prospective cohort study analysing all elective surgically treated cases between 01/02/2017 and 01/02/2018 at Guy's and St Thomas' NHS Foundation Trust. Cases were confirmed at multidisciplinary histopathology examination and reported according to WHO classification of gynaecological tumours. Intraoperative complications were reported and discussed prospectively, postoperative morbidity was assessed by Clavien Dindo(CD) classification score.

Results: A total of 568 elective surgeries were performed by Gynaecological Oncology surgeons, of which 358 were classified as majors (62.8%). The remaining 210 minor procedures were excluded from analysis. 71 major surgeries were of benign histology (19.8%); 27 women with presumed benign preoperative diagnosis and 44 women were treated on the assumption of malignancy. In the latter group, the most common benign gynae tumours misdiagnosed as malignant were from ovarian (39/44) (88.6%) followed by uterine (3/44) and vulval (2/44) origin. 29/39 women with presumed ovarian malignancy underwent full staging (hysterectomy, omentectomy, pelvic and paraaortic lymph nodes sampling), and the most represented histological diagnosis was cystadenoma/adenofibroma followed by ovarian fibromas. There was no mortality reported in the 44 operations with benign final histology and false positive preoperative diagnosis. There was 2/44 (4.5%) intraoperative complications (small bowel injury closed primarily and transverse colon injury with partial resection and end to end anastomosis. There were 4/44 (9%) postoperative CD2 complications (2 cases of sepsis, 2 cases of ileus).

Conclusions: Benign gynaecological pathologies which are falsely presumed as malignant are mainly ovarian. These women are at risk of overtreatment and its related morbidity. Other diagnostics, such as intraoperative frozen section may offer part of the solution.

BGCS0116

An audit of rapid-access gynaecology referrals in North West Kent, UK

Dr Alistair Ward, Obstetrics and Gynaecology ST2, Maidstone and Tunbridge Wells NHS Trust, Mr Praneil Patel, Obstetrics and Gynaecology ST6, Maidstone and Tunbridge Wells NHS Trust, Miss Phillipa Moth, Obstetrics and Gynaecology Consultant, Maidstone and Tunbridge Wells NHS Trust, Mr Steven Montalto, Gynaecological Oncology Surgeon, Maidstone and Tunbridge Wells NHS Trust,

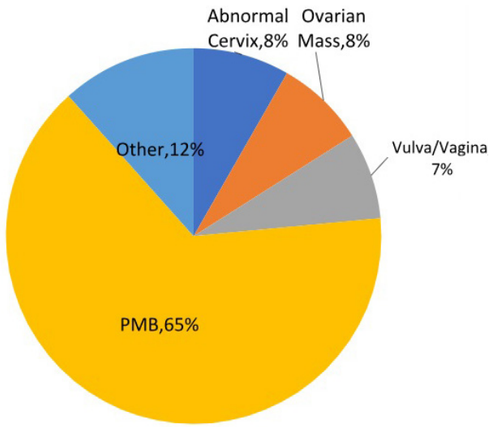
Introduction: The NHS Cancer Plan in 2000 stated that all patients presenting to their General Practitioner (GP) with suspected cancer should be seen by a hospital specialist within two weeks of referral 1 . Our aim was to assess the number of patients seen within two weeks from referral; identify the reason for referral and the proportion of benign, borderline and malignant gynaecological disease.

Methods: This was a retrospective audit of two week wait (2WW) referrals to Maidstone and Tunbridge Wells NHS Trust Gynaecology department linked to the North West Kent Oncology Centre from January 1st to March 31st 2017.

Clinical details were collected from clinic letters (Viper E-Notes), imaging software (PACS) and histology results (Telepath).

Results: From the 364 patients that were analysed, 98% were seen within the two week wait target and 2% breached due to trust limiting factors. - 65% of patients (235) were referred with post-menopausal bleeding - 8% (30) were referred with an abnormal appearing cervix - 8% (28) with a suspected ovarian mass - 7% (27) with a suspicious vulval/vaginal lesion - 12% (42) were referred for other reasons. Eighty nine percent of all referrals were benign, 4% were borderline and 7% were malignant. The most frequent reason for referral was for post-menopausal bleeding, of which the majority, 91%, were found to be benign, 3% were borderline and 6% were malignant.

Conclusions: The Trust is meeting the 2WW target in 98% of patients. This was similar to the average of all NHS Trusts in England over the same time period, where 96% of patients were seen within 2 weeks. The number of referrals of each type are also similar to other published audits in the literature 2.



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BGCS0117

Ureteric obstruction: clinical profile of a common complication in women with cervical cancer

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[1]Department of Gynaecology, St James's Hospital, Dublin, Ireland [2]Department of Interventional Radiology, St James's Hospital, Dublin, Ireland [3]Department of Obstetrics and Gynaecology, Trinity College, Dublin, Ireland

Introduction: Ureteric obstruction commonly occurs in women with cervical cancer. It may be diagnosed at presentation or at any subsequent point in the disease pathway. The purpose of this retrospective study was to determine the incidence and review the presentation, management and impact of hydronephrosis on women with cervical cancer.

Methods: Women with a new diagnosis of cervical cancer from 1 January 2012—31 December 2016 were identified from the oncology database. The patient record was examined in detail to determine the incidence of hydronephrosis, its management and sequelae.

Results: Three-hundred and ten women were diagnosed with cervical cancer during the study period and 75 (24%) had hydronephrosis diagnosed during their disease course. Hydronephrosis diagnosis coincided with cancer diagnosis in 45 (60%) and was diagnosed at a later timepoint in 30 (40%); 22 (29%) were stage I—II at cancer diagnosis. The impact on renal function is shown in table 1. Primary management of hydronephrosis was by interventional radiology (n=51), retrograde stenting (n=19), urinary conduit (n=2) and symptomatic control only (n=3). Forty- two women had an ongoing ureteric stent requirement; 34 had ultrasound-guided retrograde stent change, 1 cystoscopy and 7 died before interval stent change. Morbid events to hydronephrosis arose in 37 women; recurring infection (n=12), chronic kidney disease (n=8), pain (n=6), secondary hypertension (n=3), arterio-ureteric fistula (n=1) and major interventions—urinary conduit (n=4), nephrectomy (n=3) and renal artery embolisation (n=1). Adjusted for cancer stage, the mortality risk for women who developed hydronephrosis at any timepoint was 2.3 times higher than for those who did not.

Conclusions: Hydronephrosis is stage-defining for advanced cervical cancer, but frequently arises after initial cancer diagnosis in earlier stage disease. The impact on renal function is as substantial in the latter group. We recommend routine renal biochemistry for women during clinical follow-up. The impact on morbidity and survival is significant.

Table 1. Mean values for tests of renal function in women with cervical cancer who developed hydronephrosis at different points of the disease pathway 2012—2016 (n=75)

Parameter	Point 1[†] (n=45)		Points 2—4[‡] (n=30)		*P*
	Mean	CI[§]	Mean	CI	
Creatinine at cancer diagnosis, µmol/L	205.6	±97.9	67.6	±4.8	0.003
eGFR* at cancer diagnosis	50.3	±8.3	82.6	±4.1	<0.001
Highest creatinine, µmol/L	302.8	±107.8	252.4	±123.7	0.267
Lowest eGFR	32.0	±6.8	37.8	±8.4	0.139

*Estimated glomerular filtration rate, mL/min/1.73m²
†Point 1 Hydronephrosis at diagnosis of cervical cancer
‡Point 2—hydronephrosis between diagnosis and treatment, Point 3—hydronephrosis during treatment, Point 4 –hydronephrosis later in the disease pathway
§95% confidence interval

BGCS 0118

Planning our future better – The benefits of image guidance in gynecology oncology.

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Introduction: The use of image guidance systems (IGS) in minimal access surgery is increasing, improving surgical safety and accuracy. This study explores the potential benefit of image guidance in surgical planning and its impact on the surgeon's behavior in the preoperative phase of the clinical pathway.

Methods: 20 gynaecology-oncology surgeons were randomised to review 5 previous cases (3 ovarian, 2 endometrial cancer) with either 1) tomographic images and radiology report (TR) and subsequent additional IGS (TR +IGS) or 2) IGS alone. After two weeks the alternative modality was viewed. Predictions regarding surgical complexity score (SCS), theatre planning and complications were collected and compared to actual outcomes. Decision-making workload was collected using NASA-TLX.

Results: For the three ovarian cases, surgeons predicted higher SCS using IGS than TR (p=<0.0001, 0.0438, 0.0004). In the least complex case, TR-SCS was closer to past SCS than IGS-SCS (SCS-TR 5 vs 5, IGS 9 vs 5). In the two more complex cases, IGS was more accurate than TR-SCS (SCS-TR 7 vs 9, 8 vs 12, IGS 9 vs 9, 12 vs 12). TR+IGS increased SCS compared to TR in all three cases (p=<0.0001). No significant difference was found between the TR+IGS and IGS-SCS. Prediction of complications was significantly higher in the IGS groups and surgeons' confidence in ability to remove all disease was significantly lower. In endometrial cases, predicted SCS was similar between TR and IGS. Surgeon's workload was lower when making decisions using IGS than TR (p=<0.0001) and using TR+IGS than TR (p=<0.0001).

Conclusions: Predicted SCS were closer to actual SCS using IGS than TR, especially for more complex cases. IGS increases surgical engagement and understanding as shown by predictions on complications and disease resection. IGS could play an important role in the preoperative phase by augmenting surgeon's operative performance and engagement whilst reducing workload.

BGCS 0119

Ovarian cancer symptoms, routes to diagnosis and survival – population cohort study in the 'no screen' arm of the UK Collaborative Trial of Ovarian Cancer Screening (UKCTOCS)

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Introduction: Significant efforts have been undertaken to increase symptom awareness especially of 'pelvic/abdominal pain, increased abdominal size/bloating and difficulty eating/feeling full' (GOFF Index) in an attempt to diagnose ovarian cancer earlier and improve outcomes. We report on symptoms, routes and interval to diagnosis and survival in a population-based cohort of postmenopausal women diagnosed with invasive epithelial ovarian, tubal or peritoneal cancer (iEOC/FT/PPC) in the 'no screen' (control) arm of UKCTOCS.

Methods: Of 101,299 women in the control arm, 574 were confirmed on outcome review to have iEOC/FT/PPC between randomisation (2001-2005) and 31st December 2014. Data was extracted from medical notes and electronic records. A multivariable model was fitted for individual symptoms, time interval from symptom onset to diagnosis, route to diagnosis, speciality, Type age at diagnosis, year of diagnosis (period effect), stage, primary treatment, and residual disease.

Results: Women presenting with Goff Index (HR1.68, 95% CI1.32-2.13, p<0.0001) symptoms or those in the NICE guidelines (HR1.48, 95% CI1.16-1.89, p=0.001) had significantly worse survival than those who did not. Each additional presenting symptom decreased survival (HR1.20, 95% CI1.12–1.28, p<0.0001). In the multivariable analysis abdominal pain, loss of appetite/feeling full, advanced stage, increasing residual disease and inadequate primary treatment were significantly associated with increased mortality.

Conclusions: Recognition of ovarian cancer symptoms is important in promoting prompt referral to gynaecological services. However, symptoms awareness should not be promoted as a method of achieving stage shift or improved survival in symptomatic ovarian cancer patients.

BGCS 0120

Pelvic Rectosigmoid Peritonectomy and Bowel Surgery Outcome in Gynaecological Oncology Surgery

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Introduction: Stripping of pelvic (rectosigmoid) peritoneum (with immediate reconstruction where indicated) is a surgical technique used to remove peritoneal cancer deposits with preservation of the large bowel. The aim of this study is to assess postoperative bowel related complications at the time of gynaecological oncology surgery.

Methods: Prospective cohort study between 01/02/2017 and 01/02/2018. We analysed all surgical cases treated in our tertiary centre. Post-operative complications were reported and scored according to the Clavien Dindo's (CD) classification score.

Results: 358 major procedures were performed by the gynaecological oncology team at Guy's Pelvic Cancer Centre; 75/358 cases (21%) involved bowel surgery. Uneventful rectal/sigmoid peritonectomy and excision of serosal disease was performed with preservation of rectosigmoid in 29/75(39%). No post-operative perforation or ileus was reported during the study period. One case required drainage of pelvic lymphorrhea caused by concurrent lymphadenectomy. Appendectomy was performed for 35 (47% of bowel surgeries) women with two postoperative ileus cases reported; both were managed conservatively. We performed 4 (6%) small bowel resections with side to side anastomosis, one of which was complicated by postoperative ileoperineal fistula (rectosigmoid resection with Hartman's colostomy and small bowel resection). Rectosigmoid resection with EEA and defunctioning ileostomy/colostomy was performed in 6 (2%) cases and rectosigmoid resection with end colostomy was performed in 6 cases (2%). Ileocaecal resection was performed in 2 cases (0.5%) and transverse colon resection with end to end anastomosis was performed in one case. Within the large bowel resection group we reported 2 case of postop ileus (CD2) and 2 wound infections (CD2 and CD3b). No bowel perforation, ischemia or anastomotic leak were observed.

Conclusions: Rectosigmoid peritonectomy is a safe technique allowing resection of malignant ovarian or endometrial peritoneal deposits while allowing preservation of the rectosigmoid.

BGCS 0121

Audit of Total Laparoscopic Hysterectomy (TLH) for Early Endometrial Cancer

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Introduction: Endometrial cancer is the most common gynaecological cancer accounting for 300,000 new diagnoses every year worldwide. [1] In developed countries, lifetime risk is between 2.5% and 3% and incidence is rising. [1] There were 7800 cases diagnosed in 2009 in United Kingdom that had risen to 8984 cases in 2015.[2] Standard treatment is surgery to remove the uterus, fallopian tubes and ovaries.

TLH provides treatment option with smaller incisions and scars, shorter hospital stay and shorter recovery period. The Specialist Advisers listed adverse events reported in the literature as; conversion to open surgery, damage to abdominal or pelvic structures, respiratory difficulties, port-site herniation, port-site metastasis, reported dehiscence of the vaginal vault after laparoscopic suturing as an anecdotal adverse event [1]

Aim of this audit was to evaluate the local practice against figures quoted by NICE in Interventional procedures guidance [IPG356] for Laparoscopic hysterectomy for endometrial cancer.

Methods: A retrospective review of all cases of Total Laparoscopic Hysterectomy performed for early endometrial cancer in Calderdale Royal Hospital during December 2014 and September 2017. Patient demographics, Conversion rate, Intra and Post-operative complications, length of hospital stay were recorded and analysed. We also looked into the mean operating time and whether patient received extended thromboprophylaxis of 4 weeks as per NICE recommendation. [3] Data was collected from Bluespier (theatre system), Consultant's booking diary, Pasweb and EPR (patient's electronic record system).

Results: Total 66 cases were identified. 47/66 (71%) were above the age of 60. 34/66 (52%) had BMI above 35. 28/66 (42%) had previous abdominal surgery including sterilisation, caesarean section, appendicectomy, cholecystectomy and splenectomy. 12/66 were converted into Laparotomy but out of 12 cases 11 had only diagnostic laparoscopy and were not deemed suitable for Laparoscopic approach due to extensive adhesions, big fibroids or obliteration of Pouch of Douglas. 1/66 case had conversion due to bleeding from vaginal angle. These 12 cases were excluded when analysing the data for laparoscopic procedure.

1/54 (1.9%) had superficial injury to bowel serosa; required laparoscopic suturing of serosa and procedure was completed through laparoscopy. 2/54 (3.8%) developed respiratory complications including period of desaturation intra/ post-operatively and pulmonary oedema and subsequent chest infection. 2/54 (3.8%) had post-operative port site infection. 45/54 (83.3%) went home by Day 2 of surgery and 54/54 (100%) received 28 days of thromboprophylaxis. Mean operating time was found to be 128 minutes.

Conclusions: Laparoscopy is a safe treatment approach for early endometrial cancers. In our audit most of the cases were managed laparoscopically. Conversion rate was very low. Intra and Postoperative complications rate was less than quoted by NICE; 1.9% Vs 10% and 6.2% Vs 14% respectively. There was no vascular, bladder or ureteric injury. Most of the patient went home by day 2 of the surgery. Mean operating time reported by LACE Trial [4] was 107 minutes, not specifying the indication of hysterectomy. Our data showed mean operating time of 128 minutes. 100% of the cases received extended thromboprophylaxis as recommended by NICE.

We recommended continuing expertise along with training junior doctors. We suggested TLH proforma or TLH database to facilitate a rolling audit in future.

References:

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2. Cancer registration statistics, England: first release, 2016
3. Nice Guidance 89 Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism, published March 2018
4. LACE Trial: The cost-effectiveness of total laparoscopic hysterectomy compared to total abdominal hysterectomy for the treatment of early stage endometrial cancer Nicholas Graves, Monika Janda, Katharina Merollini, Val Gebski, Andreas Obermair, for the LACE trial committee

BGCS 0122

The Feasibility of Uterine Cavity Assessment after Endometrial Ablation in women Presenting with Postmenopausal Bleeding

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Introduction: Endometrial ablation (EA) is the first line surgical treatment for menorrhagia. Accessing the uterine cavity to investigate postmenopausal bleeding (PMB) can be challenging following EA due to intrauterine adhesions. This study evaluates the feasibility of endometrial assessment in these women.

Methods: This cross-sectional study was conducted on women referred to the PMB clinic at SWBH NHS Trust between 1 January 2011 and 31 December 2015. Success in outpatient endometrial sampling, accessing uterine cavity and visualisation of endometrium were compared between those underwent EA vs those who did not.

Results: Of 2010 women, 1016 were excluded because of endometrial thickness of ≤4 mm on transvaginal ultrasound i.e. further assessment deemed unnecessary. The number of women included was 994: 16 (1.6%) with previous EA v 978 (98.4%) no EA. In the EA group; 9 underwent Thermachoice, 6 Microwave and 1 Novasure. When compared to the none-EA group, women with EA were significantly younger (54 v 61 years, p=0.02) and closer to the menopause (3.7 v 11 years, p=0.005). However; there was no statistical difference between EA vs no EA pertaining to parity (100% v 88.3%, p=0.15), HRT use (0% v 7.6%, p=0.63), Caesarean section rate (25% v 22%, p=0.23) or body mass index (33 v 31, p=0.42).

The success rate of performing Pipelle sampling was significantly lower in EA group (11/16, 69% v 869/978, 89%; p= 0.03). There was no difference in the rate of successful outpatient hysteroscopy (2/2, 100% v 49/50, 98%; p=1) or GA hysteroscopy (7/7, 100% v 261/267, 98%; p=1). However; 7 out of 9 (77.8%) women were deemed unsuitable for outpatient and booked straight for hysteroscopy under GA.

Conclusions: The destruction of endometrial lining reduces the feasibility of Pipelle endometrial sampling and mandates performing hysteroscopy under GA. A well-conducted multi-centre study with robust design is recommended to get further evidence.

BGCS 0123

A Study Evaluating the depth to which Helica (Helium Thermal Ablation) Can Penetrate Vaginal Epithelium: Could it be used to treat vaginal intra-epithelial neoplasia?

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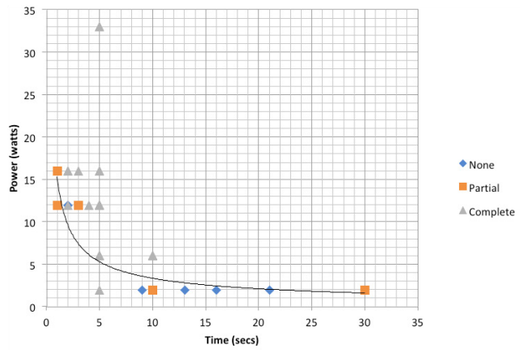
Introduction: This study aims to determine the minimum power and duration of ablation to consistently achieve full-thickness destruction of the vaginal epithelium, with a view to using Helica in the management of VAIN. The benefit of this would be treatment for VAIN in an out-patient setting as Helica causes more localised tissue destruction compared with diathermy and therefore can be tolerated under local anaesthesia.

Methods: Samples of vaginal mucosa were obtained from patients undergoing colporrhaphy for vaginal prolapse. Each specimen underwent a timed ablation at a specific power until the tissue appeared macroscopically to be fully ablated. The tissue was examined microscopically to determine the depth to which cellular destruction had occurred

Results: A total of 44 sections of vaginal mucosa were obtained from 7 patients.

The shortest duration of ablation resulting in full-thickness ablation was 2 seconds at a power of 12 Watts. The lowest power resulting in full-thickness ablation was 2 Watts applied for 5 seconds. However, neither of these combinations consistently resulted in full-thickness ablation.

Conclusions: A power of 6 Watts applied for 6 seconds consistently achieves full-thickness ablation. Further research is required to ensure that Helica ablation at this power and duration can be tolerated as an out-patient procedure.



BGCS 0124

Should all women undergoing neoadjuvant chemotherapy for epithelial ovarian cancer receive routine thromboprophylaxis?

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Introduction: Cancer patients undergoing chemotherapy have a six-fold increased risk of developing a venous-thromboembolism (VTE), and mortality is twice that of other cancer patients. Patients with ovarian cancer have among the highest incidence of VTE, but are not routinely offered thromboprophylaxis in the UK.

The aim of this study was to determine the incidence of VTE in high grade ovarian cancer patients undergoing neo-adjuvant chemotherapy (NACT), and to establish whether a high-risk subgroup would benefit from VTE prophylaxis during NACT.

Methods: A retrospective cohort study based in a London tertiary cancer. 278 patents with FIGO stage III & IV primary ovarian, fallopian tube and primary peritoneal cancer who received NACT between January 1st 2000 and December 31st 2015 were identified from the ovarian cancer database. Additional information was collected from review of electronic and paper medical notes. VTE was recorded if deep vein thrombosis (DVT) or pulmonary embolism (PE) was confirmed on imaging.

Results: Of the 278 patients, 58 (20.9%) developed VTE between initial presentation and the immediate post-operative period. 39 of these (14%) developed VTE between starting NACT and the immediate post operative period, which may have been preventable. PE occurred in 45 patients (77.6% of VTE) with or without co-existing DVT, and DVT alone occurred in 13 patients (22.4% of VTE), with sites including major vessels in the lower limb, pelvis and abdomen. Age, BMI, smoking status and co-morbidities were not significantly associated with increased VTE risk.

Conclusions: A significant proportion of ambulant ovarian cancer patients develop VTE during chemotherapy, and it was not possible to identify any predisposing risk factors. All patients are therefore at high risk, and may benefit from thromboprophylaxis. We are developing a pilot study using a direct oral anticoagulant in our centre to assess the impact of this.

BGCS 0125

Laparoscopic assessment improves case selection prior to pelvic exenteration for recurrent cervical and endometrial cancer compared to imaging studies alone.

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Introduction: To evaluate laparoscopic assessment in the case selection of patients for pelvic exenteration for recurrent cervical and endometrial cancer.

Methods: Retrospective database review from a single institution over a twelve year period, assessing 58

consecutive laparoscopic assessments for patients being evaluated for possible exenterative surgery for recurrent cervical and endometrial cancer. All patients had no evidence of extra-pelvic disease on imaging prior to the laparoscopy

Results: Of the patients undergoing successful laparoscopic assessment, previously unappreciated peritoneal, nodal or extra-pelvic metastases were detected in 23.21% of, despite prior cross sectional imaging. Of 36 patients who underwent an exenterative procedure two patients (5.56%) were found intraoperatively to have unresectable pelvic disease, which was not detected by any pre-operative evaluation or during the initial exploratory laparotomy.

Conclusions: Despite modern cross sectional imaging investigation, laparoscopic assessment improves case selection for exenterative surgery for recurrent cervical and endometrial cancer.

BGCS 0126

Management of suspicious ovarian masses: the value of expert multidisciplinary opinion

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Introduction: In our cancer centre, patients with suspected early stage ovarian malignancy undergo a full staging laparotomy with total abdominal hysterectomy, bilateral salpingo-oophorectomy, infracolic omentectomy, peritoneal washings with pelvic and para-aortic lymphadenectomy. However, lymphadenectomy can be associated with additional morbidity and we wanted to assess whether this can be omitted for cases where radiological opinion suggests borderline tumour at most.

Methods: Women who underwent staging laparotomy for suspected borderline or early stage malignant ovarian tumour were identified from the electronic Patient Pathway Manager System between January and December 2016. Age at diagnosis, RMI score, MDT review of pre-operative imaging, histopathological data and post-operative disease stage data were collected. 5 subgroups were identified depending on pre-operative radiological suspicion. Expert radiological opinion and RMI were then correlated with histopathological results.

Results: 90 patients were identified. The median age at surgery was 62 years old. The histopathological result showed malignancy, borderline tumour and benign condition in 44%, 31% and 25% respectively. The RMI was calculated in 78% of the cases, with sensitivity and specificity of 65% and 60%, and we acknowledge that the incomplete data set might have had an impact on these results. The overall correlation between imaging and histopathology was 75% and reached 82% in the borderline/malignant group. No malignancy was identified in the borderline and benign/borderline groups, with a sensitivity of expert opinion of 100% in this data set.

Conclusions: The subjective opinion of an expert radiologist seems to be the most effective and reliable pre-operative method of differentiating between benign and borderline tumours from malignant tumours of the ovary. After multidisciplinary discussion and in agreement with BGCS guidance, lymphadenectomy will be omitted in our department for those cases where radiological opinion suggests borderline tumour at most. We plan to re-audit our practice in 6 months.

BGCS 0127

Comparing symptoms, routes to diagnosis and intervals to treatment for ovarian cancer – the International Cancer Benchmarking Partnership Module 4 (ICBPM4)

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Introduction: It has been suggested that differences in time intervals and routes to diagnosis may underlie international differences in ovarian cancer (OC) survival and stage at diagnosis that have been reported in many studies, including the International Cancer Benchmarking Partnership (ICBP). We report from ICBP Module 4 on the first international comparison of routes to diagnosis and time intervals from symptom onset to start of treatment in OC patients.

Methods: Surveys were sent to newly-diagnosed OC patients aged >40 from ten jurisdictions across five countries (Canada, UK, Norway, Denmark, Australia) identified via cancer registries. Questionnaire data from patients, their primary care physicians (PCPs) and specialists, supplemented by information from treatment records or clinical databases, werecollated. Routes to diagnosis and differences in time intervals using quantile regression with Denmark (largest number of patients) as the reference were calculated.

Results: The analysis involved 1,110 patients (range: 51-271 per jurisdiction) diagnosed between May 2013 and November 2015. Overall 40% were Stage I/II with no significant difference between jurisdictions. There was no difference across jurisdictions in the proportion of patients presenting with Goff (overall 53%; p=0.179) or NICE (overall 62%; p=0.946) symptoms. Patients reported fatigue more often than PCP (29% versus 3%; p=<0.001).

The main route to diagnosis, involving presentation to primary care, was similar (63%- 86%; p=0.068) across jurisdictions. However, based on PCP data, the proportion of patients referred urgently varied significantly (29-79%; p<0.001). Diagnostic intervals were generally shorter and treatment intervals longer in most jurisdictions compared to Denmark (Table 1 below)

Conclusions: Despite similar symptom profiles, Module 4 demonstrates important differences between jurisdictions in diagnostic and treatment intervals and use of urgent referrals in women with OC which warrant further exploration. These two intervals are influenced by system factors and in particular cross-sectional imaging and surgical capacity. The findings should be considered in the context of number and proportion of patients who participated in individual jurisdictions.

Table 1. Differences in intervals (days) for the 50th, 75th and 90th percentiles (age to its mean value and comorbidity to its mode) between Denmark (actual number of days included) as the reference and the other eight jurisdictions.

		Denmark	England	Victoria	Scotland	Ontario	Wales	N Ireland	Manitoba	Norway
Patient Interval	Number	246	223	117	95	91	82	81	48	39
	Median (95% CI)	12	13 (-9,35)	13 (-5,32)	6 (-13,25)	21 (-1,42)	**19** (6,32)	**19** (3,35)	8 (-16,33)	2 (-13,16)
	75th centile (95% CI)	47	**14** (1,28)	**18** (4,33)	8 (-3,18)	**24** (9,38)	**21** (3,39)	33 (-6,71)	**57** (51,63)	-6 (-18,5)
	90th centile (95% CI)	125	**38** (23,52)	**72** (26,118)	**72** (59,90)	-8 (-22,5)	**54** (23,85)	**95** (75,114)	**179** (149,209)	**-68** (-75,-61)
Primary Care interval	Number	164	161	66	64	29	55	58	32	7
	Median (95% CI)	1	5 (-2,12)	**5** (3,6)	**12** (8,16)	11 (-2,24)	**5** (3,8)	**6** (4,8)	**16** (9,22)	**9** (1,18)
	75th centile (95% CI)	12	**11** (6,15)	8 (-2,17)	**19** (9,29)	**35** (24,46)	**23** (15,32)	**11** (3,19)	**50** (44,56)	**18** (11,24)
	90th centile (95% CI)	62	7 (-3,17)	**12** (1,22)	4 (-2,9)	**94** (85,103)	**53** (37,70)	**23** (17,29)	**200** (165,235)	2 (-7,11)
Diagnostic interval	Number	244	219	116	94	86	84	77	48	38
	Median (95% CI)	56	-4 (-21,13)	**-30** (-47,-13)	**-26** (-45,-8)	-10 (-27,6)	-1 (-16,14)	11 (-12,33)	-3 (-28,21)	**-22** (-44,-1)
	75th centile (95% CI)	115	**-27** (-36,-18)	**-64** (-78,-49)	**-53** (-64,-41)	13 (-26,1)	**-21** (-36,-6)	**16** (5,28)	**16** (3,29)	**-24** (-36,-12)
	90th centile (95% CI)	195	**-52** (-63,-40)	**-73** (-84,-62)	**-68** (-79,-57)	**-26** (-37,-15)	-11 (-23,1)	-8 (-21,4)	**39** (27,51)	**60** (42,77)
Treatment interval	Number	269	226	125	100	98	88	84	55	49
	Median (95% CI)	0	**11** (3,18)	0 (0,1)	**38** (27,50)	6 (0,11)	1 (-1,3)	0 (0,1)	2 (-7,11)	**16** (10,23)
	75th centile (95% CI)	1	**30** (10,49)	5 (0,11)	**63** (44,81)	**32** (8,55)	**30** (1,60)	**28** (22,33)	**28** (22,35)	**42** (36,48)
	90th centile (95% CI)	25	**24** (15,33)	-3 (-10,3)	**73** (62,84)	**35** (26,44)	**60** (50,70)	**16** (8,24)	**18** (11,25)	**34** (28,39)
Total interval	Number	225	210	107	77	88	81	76	44	35
	Median (95% CI)	66	**38** (28,48)	-10 (-20,0)	**52** (16,89)	**38** (22,54)	**55** (44,66)	**59** (45,72)	**22** (11,33)	6 (-9,20)
	75th centile (95% CI)	133	31 (-146,208)	4 (-234,242)	**42** (12,72)	27 (-475,529)	88 (-66,243)	107 (-54,269)	**52** (39,65)	-4 (-122,113)
	90th centile (95% CI)	246	48 (-46,142)	1 (-14,16)	65 (-137,267)	36 (-17,90)	78 (-74,230)	107 (-65,280)	85 (-61,231)	**51** (40,62)

Intervals relative to Denmark	Significant	Not significant
Reduced		
Increased		

BGCS 0129

Thirty day post operative readmission rates in benign and gynae-oncology firms.

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Introduction: Predictive modelling programs such as the ACS NSQIP risk calculator can identify patients at risk of readmission and be used to employ effective and personalised prevention strategies. The monitoring of surgical outcome through the assessment of readmission rates needs to be standardised and a formal reporting system is the solution.

Methods: Retrospective analysis of patients readmitted to the gynaecology ward at St Thomas' Hospital over a three month period July - September 2017. The inclusion criteria was cases under benign gynaecology or gynae-oncology who had undergone primary surgery. The ACS NSQIP risk calculator was used to determine the patient specific risk of complications which includes readmission.

Results: A total of 13 readmissions were identified over three months with a median age of 50. 7 cases were benign gynaecology and 6 were gynae-oncology. There was no significant difference between the groups (P=0.02) on the type of incision. 2 were laparoscopic, 5 midline laparotomies, 2 pfannasteil incisions and 4 vaginal surgeries.

The modal reason for readmission was post operative sepsis. There was a significant difference in the performance status (P=0.05) when comparing the benign and gynae-oncology groups. In gynae oncology patients, the actual risk (calculated with ACS NSQIP) of serious complications (p=0.1) and readmission (p=0.08) was higher than the average risk for same operation groups. Inversely in benign patients, actual risk of serious complications (p=0.2) and readmission (p=0.1) was lower than the average risk for same operation groups. The lack of statistical significance is likely due to the small number of cases.

Conclusions: Validated predictive models such as the ACS NSQIP can have a significant impact on understanding the actual risk of readmission rather than crude numbers which are often used to mark the quality of surgical care. Further studies are needed to look at the correlation between readmission and the patient's health trajectory.

BGCS 0130

Neoadjuvant Chemotherapy versus Primary Cytoreductive Surgery for Stage IIIC/IV Endometrial cancer: Single institution retrospective analyses of survival and surgical outcomes

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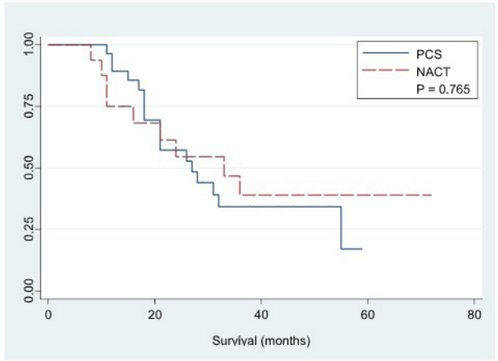
Introduction: The aim of this study was to compare the survival and surgical outcomes of women with stage IIIC/IV Endometrial cancer who received Neoadjuvant Chemotherapy followed by delayed primary surgery with that of women who underwent Primary cytoreductive surgery followed by chemotherapy

Methods: In this retrospective review, 44 patients in the period from 2010 to 2016 were identified from the Guy's and St Thomas' NHS Trust cancer services database suitable for categorisation into either arm of the study. 16 women received Neoadjuvant Chemotherapy and their survival outcomes were compared with 28 women who had Primary surgery. Overall survival and progression-free survival were described using Kaplan Meier survival curves. Intraoperative surgical outcomes and postoperative complications were evaluated in the 2 groups.

Results: Women in both groups were of comparable age, ethnicity and performance status. There was no significant difference in the incidence of both intraoperative complications and postoperative morbidity. Rates of optimal cytoreduction were also similar (NACT 69 % vs PCS 61%). There was no difference in median progression free survival - 12 months versus 15 months - NACT vs PCS, (p value 0.59). Overall median survival was noted be 33 months in the NACT group versus 27 months in the PCS cohort (p value 0.77).

Conclusions: No significant difference was noted in surgical outcomes between the 2 treatment groups. The usage of NACT in women who were initially deemed inoperable showed survival outcomes that are comparable with that achieved in women undergoing Upfront surgery followed by chemotherapy for Advanced Endometrial cancer.

Kaplan Meier Curve – Overall Survival



BGCS 0131

Innovative initiatives to promote cervical screening

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Introduction: Tayside colposcopy unit (TCU) has engaged with intense social marketing and screening initiatives to promote cervical screening uptake within Tayside. This was subsequent to learning outcomes from cervical cancer audits that consistently showed majority of cervical cancer patients were smear defaulters. Community based pop-up clinics have been a huge success and as the next phase, TCU are looking at targeted screening of high-risk women.

Aims: 1) To look for risk factors such as smoking, HIV, Hep B and Hep C infection, drug abuse in women with cervical cancer. 2) To assess cervical screening history in women attending the Termination of pregnancy (TOP) service.

Methods: Cancer database was used to identify women with cervical cancer (n=342) over a 10-year period. First set of data (drug abuse/smoking history and HIV/Hep status) were derived from GP records on clinical portal while the second set of data were derived from questionnaire-based survey of 50 women attending the TOP service.

Results: Among 342 cancer patients, none of the women tested were found to be HIV or Hep B positive while 1% (n=4) tested positive for Hep C. 46.7% (n=160) women were known to be current/ ex- smokers and 7% (n=23) known to have addiction to either drugs/alcohol.

Among women attending the TOP service, 34/50 women were eligible for cervical screening and of these, 55% (19/34) were either overdue for smears or persistent defaulters.

Conclusions: This service improvement project (SIP) has identified two areas where targeted screening will enable engagement of high-risk women. TCU in conjunction with Public health are planning integration of cervical smears as part of package offered to women with Hep C and or drug addiction in a community centre. Also, TCU are looking at the feasibility of opportunistic smears within the TOP service.

BGCS 0133

Outcomes in advanced ovarian cancer when treatment is started with neoadjuvant chemotherapy - Experience from a single institution

Anil Tailor[1,2], Kavitha Madhuri[1,2], Patricia Ellis[1,2], Jayanta Chatterjee[1,2], Sharadah Essapen[2,3], Agnieszka Michael[2,3], Alexandra Stewart[2,3], Adrian Franklin[2,3] & Simon Butler-Manuel[1,2]

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Introduction: Following the publication of level I evidence for equivalence of primary(PDS) versus interval surgery(IDS) for the management of advanced ovarian cancer within the last decade, many centres, including ours, have seen a trend towards increasing use of neoadjuvant chemotherapy(NACT). In this study we present the data from a single institution collected since 2005 and examine the survival outcomes in patients treated with NACT.

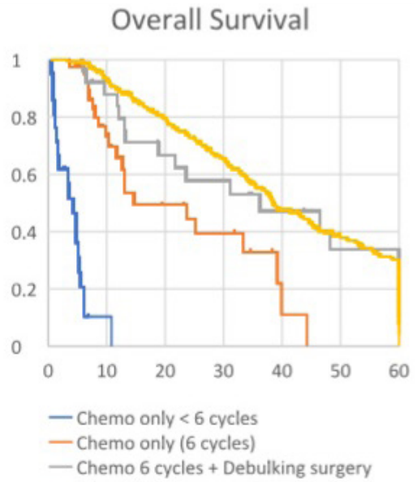
Methods: Royal Surrey County Hospital in Guildford, Surrey is a cancer centre serving a catchment of approximately 1.5 million. It has maintained a dedicated gynae-oncology database since 2005. Primarily designed to function as an administrative electronic patient records system with a parallel function of collecting clinical data regarding outcomes. All MDT meetings since 2005 have been conducted through this database and clinical information about patient diagnoses, stage, grade and current patient status have been recorded prospectively during MDTs. Additional information about patient deaths has been updated on a regular basis by matching the records against the hospital administrative system which is updated from NHS spine.

Results: As of 1st May 2018, the database has 7493 patient records. Of these 4606 have been discussed through MDTs. 5163 patients have a diagnosis allocated of which 3441 have a diagnosis of invasive cancers. 1211 of these are either ovarian or peritoneal or tubal cancers. 1134 of these were diagnosed after 1st January 2005. 755/1134 were stage 3c or 4 of whom 457 have died.(Table 1)

Table 1

Treatment Modality	Count
No active treatment - Symptomatic palliation	25 (3.3%)
Neoadj chemo only < 6 cycles	21 (2.8%)
Neoadj chemo only >= 6 cycles	44 (5.9%)
Neoadj chemo + Completion surgery after 6 cycles	27 (3.6%)
Neoadj chemo + IDS	389 (52.1%)

Figure 1



Conclusions: These data appear to suggest that those who complete 6 cycles of NACT may benefit from delayed debulking surgery. (Figure 1) Further work ongoing to determine whether those who did not have surgery after the 6 cycles were those with poor performance status or surgical fitness and whether that was the major factor in avoiding surgery in these women. If not then the practice of avoiding surgery will be deprecated.

BGCS0134

Increasing surgical debulking effort in advanced ovarian cancer does not necessarily translate into better overall survival

Anil Tailor[1,2], Kavitha Madhuri[1,2], Patricia Ellis[1,2], Jayanta Chatterjee[1,2], Sharadah Essapen[2,3], Agnieszka Michael[2,3], Alexandra Stewart[2,3], Adrian Franklin[2,3] & Simon Butler-Manuel[1,2]

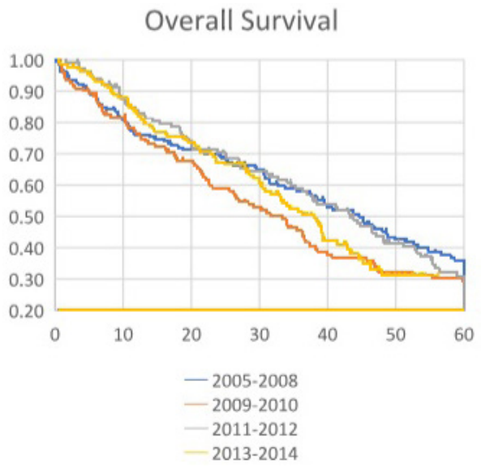
[1]Department of Gynaecological Oncology, Royal Surrey County Hospital NHS Foundation Trust, Guildford, Surrey [2]Guildford GynaeOncology Research Group, Department of Clinical & Experimental Medicine, Faculty of Health & Medical Sciences, University of Surrey [3]Department of Oncology, St Lukes Cancer Centre, Royal Surrey County Hospital NHS Foundation Trust, Guildford, Surrey

Introduction: Surgical debulking and carbo-taxol chemotherapy remain the mainstay of management of advanced ovarian cancer (EOC). Goals of surgical debulking have evolved over the recent decades with increasing emphasis on zero macroscopic residual whereas previously a residual of < 1cm was considered “optimal”. Data from a single cancer network collected since 2005 is presented examining the impact of increasing surgical aggression over time.

Methods: Royal Surrey County Hospital in Guildford, Surrey is a cancer centre serving a catchment of approximately 1.5 million. It has maintained a dedicated gynae-oncology database since 2005. Primarily designed to function as an administrative electronic patient records system with a parallel function of collecting clinical data regarding outcomes. All MDT meetings since 2005 have been conducted through this database and clinical information about patient diagnoses, stage, grade and current patient status have been recorded prospectively during MDTs. Additional information about patient deaths has been updated on a regular basis by matching the records against the hospital administrative system which is updated from NHS Spine.

Results: As of 1 st May 2018, the database has 7493 patient records. Of these 4606 have been discussed through MDTs. 5163 patients have a diagnosis allocated of which 3441 have a diagnosis of invasive cancers. 1211 of these are either ovarian or peritoneal or tubal cancers. 1134 of these were diagnosed after 1 st January 2005. 755/1134 were stage 3c or 4 of whom 457 have died. At least 665 out of 755 have had a major operation. 403/665 have had surgical times recorded in the database. (Table 1)

Conclusions: Our experience from a single institution is that despite a trend in increasing surgical times, there has not been a trend in improving overall survival in patients with advanced ovarian malignancy. The 5 year survival remains dismally low at approximately 30 to 35%.



BGCS0135

Single institution experience with primary upfront surgery and neoadjuvant chemotherapy for management of advanced ovarian cancer.

Anil Tailor[1,2], Kavitha Madhuri[1,2], Patricia Ellis[1,2], Jayanta Chatterjee[1,2], Sharadah Essapen[2,3], Agnieszka Michael[2,3], Alexandra Stewart[2,3], Adrian Franklin[2,3] & Simon Butler-Manuel[1,2]

[1]Department of Gynaecological Oncology, Royal Surrey County Hospital NHS Foundation Trust, Guildford, Surrey [2]Guildford GynaeOncology Research Group, Department of Clinical & Experimental Medicine, Faculty of Health & Medical Sciences, University of Surrey [3]Department of Oncology, St Lukes Cancer Centre, Royal Surrey County Hospital NHS Foundation Trust, Guildford, Surrey

Introduction: Surgical debulking and carbo-taxol chemotherapy remain the mainstay of management of advanced ovarian cance(EOC). Goals of surgical debulking have evolved over the recent decades with increasing emphasis on zero macroscopic residual. Results from recent RCTs suggest survival equivalence and non- inferiority of order of treatment (chemotherapy followed by surgery or vice- versa) We present data from a single cancer network collected since 2005 and examine the trends in survival outcomes.

Methods: Royal Surrey County Hospital in Guildford, Surrey is a cancer centre serving a catchment of approximately 1.5 million. It has maintained a dedicated gynae-oncology database since 2005. Primarily designed to function as an administrative electronic patient records system with a parallel function of collecting clinical data regarding outcomes. All MDT meetings since 2005 have been conducted through this database and clinical information about patient diagnoses, stage, grade and current patient status have been recorded prospectively during MDTs. Additional information about patient deaths has been updated on a regular basis by matching the records against the hospital administrative system which is updated from NHS spine.

Results: As of 1 st May 2018, the database contains 1211 patient records of either ovarian or peritoneal or tubal cancers.1134/1211were diagnosed after 1 st January 2005. 755/1134 were stage 3c or 4 & 457/755 have died. Data collected on treatment modality and was analysed. (Table 1)

Conclusions: Our experience suggests that those who were treated with primary surgery(PDS) had a better survival then those who had neoadjuvant chemotherapy (NACT). (Figure 1) However, we would urge extreme caution in interpreting this as a clear advantage in favour of PDS. We are aware of a strong bias operating within our MDT decision making process which actively channels patients with poor performance scores or higher tumour burden at presentation towards NACT. These patients inherently have worse disease at the outset and their overall poor outcome may be a reflection of this.

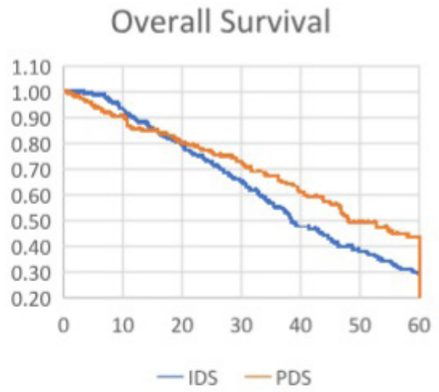


Table 1

Treatment Modality	Count
No active treatment - Symptomatic palliation	25 (3.3%)
Neoadj chemo only < 6 cycles	21 (2.8%)
Neoadj chemo only >= 6 cycles	44 (5.9%)
Neoadj chemo + Completion surgery after 6 cycles	27 (3.6%)
Neoadj chemo + IDS	389 (52.1%)
Primary surgery + Adj chemo	233 (31.2%)
Primary surgery only	4 (0.4%)
Unknown	4 (0.4%)

BGCS0137

Trends in early stage endometrioid endometrial cancer management in the UK

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Introduction: Staging and adjuvant treatment continues to be a topic of debate in endometrial cancer (EC). In the multicentre UKCTOCS population cohort we explored trends in staging and adjuvant treatment in early stage (I&II) endometrioid EC between 2002-2014.

Methods: UKCTOCS participants are followed up via flagging with national cancer/death registries and postal questionnaires. Hospital notes of women with a possible EC diagnosis were retrieved. Diagnosis, morphology, stage, grade and treatment were extracted and confirmed by central review. In stage I&II endometrioid EC, trends over time in staging and in adjuvant treatment were undertaken. We also compared past EC management against current BGCS guidelines.

Results: Of 202,638 postmenopausal women recruited across 13 UK regions, 1272 were confirmed to have been diagnosed with EC between 2002-2014. Of them, 1026 had Stage I/II endometrioid EC and surgical resection. Complete notes were available in 1006 (98%; 1006/1026). There was a significant (p<0.001) increase in minimally invasive surgery rates (MIS) from 8.2%(2003-2004) to 58.6%(2013-2014). Pelvic lymphadenectomy rates decreased significantly (p<0.001) from 22.4%(2003-2004) to 9.2%(2013-2014). These rates varied across different parts of England, Wales and Northern Ireland (Figure 1). There was consensus in the management of low (no adjuvant treatment 89.5 %) and high (94.1% adjuvant therapy) risk stage I endometrioid EC (Table1) but not intermediate and high-intermediate risk groups with patients more commonly being under treated. Overtime, there was a significant change (p<0.001) favouring vaginal brachytherapy alone as adjuvant treatment.

Conclusions: There was increase in use of MIS and vaginal brachytherapy and decrease in pelvic lymphadenectomy in Stage I & II endometrioid EC across UK between 2002-14. However, even in 2014, over 40% of surgery was not-minimally-invasive and use varied across regions. Management of intermediate and high-intermediate risk Stage I EC reflected the controversies surrounding adjuvant radiotherapy and the failure to demonstrate survival benefit in prospective trials.

Figure I: Regional differences in staging of Stage I&II endometrioid EC in England, Wales and Northern Ireland (2002-2014)

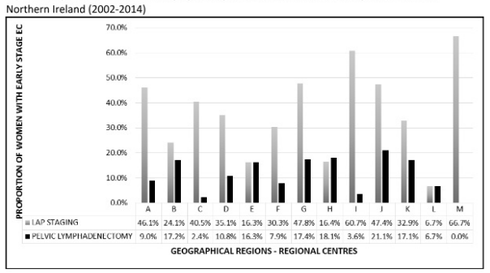

Table 1: EC management during 2002-14 compared to current BGCS guidelines for Stage I patients with data on lymphovascular invasion (LVSI)

Risk category	Classification criteria	Treatment recommendation 2017 BGCS guidelines		Total	Those received recommended treatment n (%)	Comment
Low risk	FIGO grade 1, Stage Ia, Ib, no LVSI FIGO grade 2, Stage Ia, no LVSI	No adjuvant treatment		408	365 (89.5%)	43 (10.5%) overtreated with VB or EBRT or chemo or combination
Intermediate risk	FIGO grade 3, Stage Ia, no LVSI FIGO grade 2, Stage Ib, no LVSI	Vaginal brachytherapy (VB)		53	18 (34%)	23 (43.4 %) undertreated -no adjuvant; 12 (22.6 %) over-treated with EBRT, chemo or combination
High-intermediate risk	FIGO grade 3, Stage 1a, regardless of LVSI	Nodal status unknown	Consider EBRT* versus vaginal brachytherapy (VB) if nodal status unknown.	69	44 (63.8 %) EBRT or brachytherapy or both	5 (7.3 %) were overtreated with chemo. 20 (29 %) were undertreated - no adjuvant
	FIGO grade 1, grade 2, LVSI unequivocally positive, regardless of depth of invasion	Nodal status negative	Consider adjuvant brachytherapy (VB) versus no adjuvant therapy if node negative	16	11 (68.75%)	5 (31.25 %) over-treated with EBRT or chemo or combination
High risk	FIGO grade 3, Stage Ib	Consider EBRT* versus vaginal brachytherapy (VB). Consider adjuvant chemotherapy.		34	32 (94.1 %)	2 (5.8 %) undertreated- no adjuvant treatment -

BGCS0139

Survival outcomes following robotic surgery for stage 1b1 cancer of the cervix

Anil Tailor[1,2], Kavitha Madhuri[1,2], Patricia Ellis[1,2], Jayanta Chatterjee[1,2] & Simon Butler- Manuel[1,2]

[1]Department of Gynaecological Oncology, Royal Surrey County Hospital NHS Foundation Trust, Guildford, Surrey [2]Guildford GynaeOncology Research Group, Department of Clinical & Experimental Medicine, Faculty of Health & Medical Sciences, University of Surrey

Introduction: Recent concerns have been raised about the possible inferiority of survival outcomes for women with early stage cervix cancers managed with minimal access surgery. As yet, the evidence for these concerns has not undergone formal peer-review and publication but has been widely debated following the presentation of the data at the SGO conference in 2018. In this study we have reviewed our centres experience with all cases of stage 1b1 cervix cancers managed with robotic radical surgery.

Methods: The Royal Surrey County Hospital in Guildford, Surrey is a cancer centre serving a catchment of approximately 1.5 million. We started our robotics programme in December 2009 and to date have performed the highest number of robotic gynaecological procedures in the UK totalling over 1050. We have kept an extensive database of all patients managed in our centre and this has been maintained prospectively. This data includes clinical information about all patient diagnoses, stage, grade and current patient status for cancer patients. Additional information about patient deaths has been updated on a regular basis by matching the records against the hospital administrative system which is updated from NHS spine.

Results: As of 1 st May 2018, the database has 7493 patients entered within it and 3441 have a diagnosis of invasive cancers. 475 of these are cervix cancers. 206 of these were stage 1b1 of whom 24 have died. 98 have undergone either a robotic radical hysterectomy (n=85) or robotic radical trachelectomy (n=13). (Table 1). 16/ 98 patients have required dual modality treatment, ie radical surgery and radical chemoradiotherapy. The 5 year survival is 91.3%.

Conclusions: On superimposing our survival curve on those for the open and minimal access groups that were presented, there was no obvious inferiority in survival for those managed with robotic radical surgery. (Figure 1) We acknowledge the study limitation that longer follow-up is necessary for better data maturity. It should be noted that in the SGO study the vast majority of patients treated in the minimal access arm had conventional laparoscopic surgery. It should also be noted that the other study included stage 1a1 and 1a2 patients which would have biased their survival outcomes more favourably.

Figure 1

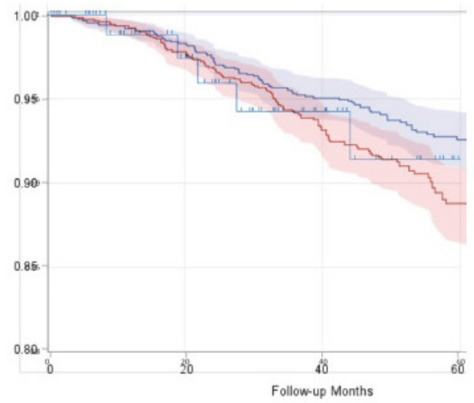

Table 1

Treatment modalities	Count
Robotic RHND Dual Op	33
Robotic RHND Single Op + ChemoRad	7
Robotic RHND Dual Op + ChemoRad	7
Robotic RHND Dual Op + Adj Chemo	1
Robotic Trach + PLND, Single Op	5
Robotic Trach + PLND, Dual Op	5
Robotic Trach + PLND, Dual Op + Rad ChemoRad	1
Neo Chemo + Robotic RHND + ChemoRad	1

BGCS0140

Surgical outcomes of cytoreductive surgery in metastatic and recurrent ovarian cancer

Carmen Gan, Nottingham University Hospital Pei Wen Chiang, Nottingham University Hospital Amelia Banks, Nottingham University Hospital Ketankumar Gajjar, Nottingham University Hospital Mel Davies, Nottingham University Hospital Karin Williamson, Nottingham University Hospital David Nunns, Nottingham University Hospital Khalid Mohiddin, Nottingham University Hospital Balamurali Bharathan, Nottingham University Hospital Glen Irving, Nottingham University Hospital Alex Navarro, Nottingham University Hospital Dhanny Gomez, Nottingham University Hospital Jafaru Abu, Nottingham University Hospital

Introduction: Ovarian cancer is a disease that is commonly diagnosed at an advanced stage. Treatment modalities involve surgery and chemotherapy. Short of an effective screening programme for prophylactic surgery, current surgical treatment aims to achieve optimal cytoreduction of disease. The aim of this study is to review surgical outcomes and complications in advanced ovarian cancer patients undergoing extensive debulking surgery at a major UK Teaching Hospital.

Methods: Prospective data collection for patients undergoing elective cytoreductive surgery for advanced stage ovarian cancer, performed at Nottingham University Hospitals (UK) were conducted. Patients who had primary and interval debulking (stages 3/4 disease) as well as those undergoing surgery for recurrent ovarian cancers between July 2014 and February 2018 were included in our study. Chi-square test was used for evaluating categorical variables and Mann-Whitney (non- parametric) tests for continuous variables (SPSS-22).

Results: Thirty-nineconsecutive patients were listed forextensive debulking surgery during this period with the aim of achieving complete cytoreduction. Median age of these patients was 56.7(SD 11.0). There were 3 patients who were found to have non-resectable disease at laparotomy. Primary surgery was performed in 10/39(25.6%), interval debulking in 22/39(56.4%), recurrent disease 4/39(10.3%). Bowel resections were performed in 17/39(43.6%), stoma formation 15/39(38.5%), splenectomy 8/39(20.5%), excision at portahepatis 6/39(15.4%) and coeliac axis 3/39(7.7%). Complete cytoreduction was achieved in 36/39 patients(92.3%). Mean length of stay=18.6 days(SD 14.9).

Conclusions: Careful patient selection will result in greater number of patients with R0 resection. This should translate into improved disease-free interval and better survival

BGCS0142

MORBIDITY OF BOWEL RESECTION AFTER INTERVAL DEBULKING SURGERY (IDS) FOR STAGE IIIC-IV OVARIAN CANCER, COMPARISON WITH A HISTORICAL COHORT WHO UNDERWENT PRIMARY DEBULKING SURGERY

Matteo Morotti MD, PhD, Jvan Casarin, MD, Ahmet Baysal, MD; Riccardo Garruto- Campanile, MD; Marcello Desgro, MD; Raffaella Giannice, MD; Gaetano Valenti, MD; Yakup Kilic, MD; Hooman Soleymani Majd, MD; Roberto Tozzi, MD

Introduction: Large and small bowel resections represent the most common extra-gynecologic procedure during surgery for ovarian cancer (OC). Not surprisingly, gastrointestinal complications are the most common adverse events, accounting for 9-26% of the overall morbidity in primary and post neoadjuvant chemotherapy (NACT) surgery. In this study, we aimed to investigate if the use of NACT reduces the rate of bowel resection in patients with stage III-IV OC compared to upfront surgery. We then focused on the impact of NACT on the sub-group of patients who underwent Visceral Peritoneal Debulking (VPD).

Methods: From the Oxford OC database, we retrieved all patients who underwent surgery between January 2009 and July 2016. Primary endpoint was the rate of bowel resection in patients undergoing upfront surgery vs. post-NACT. Sub group analysis on patients undergone Visceral Peritoneal Debulking (VPD) divided in upfront VPD (U-VPD) and interval VPD (I-VPD). Endpoints for this subgroup were the rate of: bowel resection, overall and bowel specific complications and bowel diversion.

Results: Three hundred and seventy-one patients underwent surgery: 126 U-VPD group and 245 in I-VPD group. Overall rate of bowel resection was 41.3% vs. 26.5%, respectively (p=0.004). VPD was performed in 272 patients out of 371 (75.2%). Fifty-two patients in U-VPD group and 65 patients in I-VPD group underwent bowel surgery. Rate of bowel resection was 47.3% vs. 38.5% (p=0.172). Overall morbidity rate was 37.5% and 28.6%, p=0.625. Bowel specific complications affected 16.3% vs. 11.1% of the patients (p=0.577). I-VPD group had higher rate of bowel diversion compared with U-VPD (46.0% vs. 26.5%, p=0.048).

Conclusions: NACT was associated to an overall reduced rate of bowel resection. However, sub-group analysis showed no reduction in terms of bowel resection rate, overall and bowel specific complications in patients requiring VPD. Patients in the I-VPD group had a significantly higher rate of bowel diversion.

BGCS0143

Why we must review our practice: Results of a national survey regarding surgical practice for FIGO Stage 1A1 to 1B1 cervical cancer

N Ratnavelu[1], A Fisher[1], A Kucukmetin[1]

[1]Northern Gynaecological Oncology Centre, Gateshead, UK

Introduction: NCCN guidelines advocate minimally-invasive or open radical hysterectomy for Stage 1A2 to 2A disease. LACC trial results were presented in March 2018, demonstrating a 4-fold increase in cumulative recurrence rate in minimally-invasive compared to open surgery. Clinicians were recommended to inform patients of these results. We aimed to establish current practices in the UK and demand for discussion/reflection.

Methods: A 5-question survey was distributed to the members of the BGCS in May 2018. This included 95 Consultant Gynaecological Oncologists. Members were asked 1) their current surgical practice for 1A1 with LVSI to 1B1 cervical cancer; 2) if they had heard of the LACC trial; 3) if they had since changed practice; 4) what hypotheses they had for poor oncological outcomes in the minimal access surgery(MIS) group; and 5) whether they would participate in a national retrospective audit.

Results: 45/95 Consultant members responded, from 28 centres in UK. For 1A1 with LVSI and 1A2 surgical practice ranged from LLETZ alone, simple trachelectomy to radical hysterectomy with node dissection. For 1B1 disease practice ranged from offering LLETZ for small volume tumours to radical surgery. 3 Consultants offered robotic surgery, 18 offered laparoscopic, 15 did not state route. 43/45(96%) members had heard of the LACC trial. 8/43(19.%) Consultants had modified/changed their practice since the presentation of LACC results, offering women informed choice or changing practice to open surgery. Hypotheses for poor performance in MIS group were: a)poor surgical performance/radicality; b)patient selection bias; c)insufficient tumour data presented ; d)surgical techniques(manipulation/pneumoperitoneum/tumour seeding); and e)lack central pathology review. 38/45(85%) Consultants would consider participating in a national collaboration.

Conclusions: A fifth of Consultants who responded have changed their surgical practice despite unpublished data. There is demand for national debate and collaboration to identify surgical trends and predictors of poor oncological outcomes in cervical cancer.

BGCS0144

MULTIPLE BOWEL RESECTION VERSUS SINGLE BOWEL RESECTION DURING SURGERY FOR PATIENTS WITH STAGE IIIC-IV OVARIAN CANCER

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Introduction: Due to peritoneal spread, concomitant tumour involvement of multiple bowel segments is common in patients with stage IIIC-IV ovarian cancer (OC) with the need of performing multiple bowel resection (MBR) to pursue a complete resection. The rate of MBR ranges between 5.9% and 30.1%, with only one study reporting a 47.1% morbidity rate after these procedures. In this study we aimed to assess the impact of MBR on post-operative outcomes in stage IIIC-IV OC patients.

Methods: From the Oxford OC database we retrieved all consecutive patients who underwent sigmoid-rectal resection between January 2009 and November 2017. Patients were divided in two groups: single bowel resection (SBR, sigmoid rectum resection) and multiple bowel resection (MBR, sigmoid rectum resection + any other segment of large or small bowel). The following outcomes were compared between the two groups: 30-day overall and bowel specific surgical-related complication rate, bowel diversion rate and time to start/restart adjuvant chemotherapy.

Results: Thirty-five patients were allocated to MBR and 146 patients to SBR. The 30-day overall surgical-related complication rate of patients MBR group was higher than SBR group (54.3% vs. 23.9%, p<0.001). Bowel specific complications affected 9 patients in MBR and 15 patients in SBR (25.7% vs. 10.5%, p=0.035). Rate of bowel diversion was 100% in MBR group vs. 26.7% in SBR group (p=0.021). Finally, 17 patients started chemotherapy after 6 weeks in MBR group compared to 33 women in SBR group (54.8% vs. 22.6%, p<0.001).

Conclusions: Our data show that MBR during OC surgery is associated to a higher rate of overall and bowel specific complication compared to SBR. However, patients in the MBR group had more extensive surgery. All patients in MBR group had a bowel diversion. This information should be taken in account when consenting patient likely to undergo MBR during debulking surgery.

BGCS0146

Seven years review of ovarian masses in post-menopausal women within a single cancer unit

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Introduction: Ovarian masses with low RMI (Risk of Malignancy Index <250) are suitable for laparoscopic management. In spite of the well-known advantages of laparoscopic surgeries, one concern is spillage of cyst contents within peritoneal cavity and potential spread if the mass is cancerous. We aimed to assess predictive value of pre-operative imaging, low RMI and selection of patients for laparoscopic management of ovarian masses within our gynaecological cancer unit.

Methods: We identified postmenopausal women with ovarian masses (n=325) from pathology database between 2010 and 2017 and looked at their pre-operative assessment, surgical modality and subsequent histology.

Results: 139/325 women had a RMI <250 and were included for further analysis. 104/139 (75%) had laparoscopic procedure. 127/139 of these women were found to have non- cancerous masses making the negative predictive value for low RMI within the department 92%. 11/139 of the women were found to have primary ovarian cancers despite low RMI and 5 of these were treated laparoscopically (3 cases of surgical spill) while 6 women had pelvic clearance via laparotomy (3 cases of surgical spill). 55% (n=6) were mucinous cancers and rest were endometriod and clear cell cancers (n=2 each). 1/139 was a metastatic cancer. There were no cases of cancer when USS had shown unilocular/multilocular cyst with no solid areas or papillary projections. Odds Ratio of cancer outcome where USS had shown papillary projections was 7.4(p=0.003) and OR of 4(p=0.049) when USS had shown cysts with solid areas.

Conclusions: This service improvement project has shown that within our cancer unit the negative predictive value of low RMI is high. Presence of solid areas and or papillary projections appear to be good predictors of ovarian cancer in women with low RMI. We aim to use the local data to counsel women about safety of laparoscopic approach in dealing with ovarian masses with low RMI.

BGCS0147

Treatment of gynaecological cancer related lower limb lymphoedema with liposuction: A case series.

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Introduction: Lower limb lymphoedema is a well recognised complication of pelvic surgery for gynaecological malignancies. The initial phase is characterised by accumulation of fluid resulting in pitting oedema, if left untreated fibrocyte and adipocyte activation leads to the gradual deposition of fat and fibrotic solids. Liposuction serves as a means of debulking the excess fat and is reserved for patients who fail to respond to conservative measures or who develop fat hypertrophy. Aim: To evaluate outcomes in patients with gynaecological cancer related lymphoedema treated with liposuction.

Methods: A prospective analysis of 23 patients who underwent liposuction followed by compression therapy. Excess volume is calculated using conical measurements taken at 4cm intervals beginning at the malleoli and progressing proximally to the level of the greater trochanter. Power assisted liposuction of the lower leg is carried out via multiple longitudinal stab incisions under a general anaesthetic as an inpatient. Patients are required to wear compression garments for life. Limb volumes are calculated at each follow-up appointment.

Results: To date 25 lower limbs in 23 patients have underwent circumferential liposuction for treatment of lymphoedema secondary to a gynaecological malignancy. All patients had previous cervical malignancy requiring hysterectomy and lymphadenectomy. 83% received adjuvant radiotherapy. Duration of lymphoedema prior to liposuction ranged from 4 to 28 years. Mean age at time of liposuction was 51 years (range 37-67). Estimated volume excess in the affected limb ranged from 229ml to 12 litres. Mean percentage reduction was 102% at 6 months and 95% at 1 year. Longer term follow-up of 4 patients at 5 years post liposuction revealed a mean percentage reduction of 109%.

Conclusions: Our experience of liposuction combined with compression garments has demonstrated significant and sustainable reduction in limb volume in patients with lower limb lymphoedema secondary to gynaecological malignancy.

BGCS0148

Fluorescent Robotic Indocyanine Endoscopic Node Detection (FRIENDS) Study; value of sentinel lymph node dissection in robotic surgery for early stage cervical cancer.

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Introduction: To assess the detection rate of sentinel lymph nodes (SLNs) using Indocyanine Green (ICG) during robotic surgery for early stage cervical cancer.

Methods: This is a prospective, observational study included women undergoing robotic surgery for early stage (FIGO ≤IB1) cervical cancer at Royal Marsden Hospital. From March 2015 until October 2017, 53 consecutive women were included and had SLN dissection using ICG. Thereafter, completion of surgery consisting of either conisation, trachelectomy, or (radical) hysterectomy was performed followed by pelvic lymphadenectomy if indicated according to hospital guidelines. No ultra-staging was applied.

Results: A mean of four SLNs (SD 2.8) per patient were identified. SLNs were detected most 18 frequently in common iliac, external iliac and obturator chains. Unilateral and bilateral SLN detection rates were 100% and 94%, respectively. Positive SLNs were detected in five (9.6%) patients. No additional positive nodes were found in the full lymphadenectomy samples. The sensitivity and negative predictive value of SLN dissection were both 100%.

Conclusions: Prospective analysis of the largest cohort of patients in a single centre to date has demonstrated that the use of ICG in robotic SLN dissection for early stage cervical cancer is feasible. In this setting, SLN dissection has the potential to replace a full lymphadenectomy and reduce morbidity. Replacement of ultra-staging with perioperative frozen section analysis of SLN to determine the extent of lymph node dissection might be justified.

BGCS0149

Unravelling chemo-resistant cells in high-grade serous ovarian cancer (HGSOvCa) using single-cell sequencing technology

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Introduction: Resistance to chemotherapy is a common problem in HGSOvCa, a phenomenon that may be linked to the presence of heterogeneous tumour cell populations. To identify potential chemo- resistant cell populations, we have undertaken single-cell sequencing (SCS) on tumour biopsies obtained from patients with HGSOvCa before and after chemotherapy.

Methods: Tissue biopsies were obtained from a patient diagnosed with HGSOvCa before and after neoadjuvant chemotherapy. Primary cultures were established and dissociated into single cell suspensions. Individual cells were subjected to SCS using Drop-Seq. Bioinformatics was applied to cluster cells according to transcriptomic profiles. Results were validated by immunohistochemical staining of the primary tumour to identify target genes.

Results: Within the chemotherapy-naïve HGSOvCa culture, we identified 8 distinct tumour populations (Figure 1). One subpopulation (Cluster 6) over-expressed genes associated with a cancer stem cell phenotype (ALDH1A3, TSPO, SFN), while another (Cluster 2) preferentially expressed genes upregulated in platinum-resistance (HMGB2, PRC1). The chemotherapy-exposed culture showed only 4 distinct tumour populations, one of which was identical to the population in the chemotherapy-naïve culture which expressed platinum-resistance genes, suggesting this population is inherently chemo-resistant.

Conclusions: Using SCS, we have demonstrated that tumour heterogeneity exists within HGSOvCa. Interestingly, we found that one subpopulation of tumour cells highly expressed genes associated with chemo-resistance and these cells survived after 3 chemotherapy cycles. Our findings suggest that chemo-resistance is probably an inherent problem and opens up an opportunity to utilise SCS technology in guiding therapy for HGSOvCa.

BGCS0151

An evaluation of the diagnostic accuracy of transvaginal ultrasound and MRI in ovarian masses

Dr Catherine Magee Guys and St. Thomas' NHS Foundation Trust Mr Ahmad Sayasneh Guys and St. Thomas' NHS Foundation Trust

Introduction: The RCOG recommends that transvaginal ultrasound is the most effective way of assessing ovarian cysts and should be used for initial assessment in both pre- and post-menopausal women. They also advise that MRI should not be used routinely for initial assessment but should be a second-line imaging modality for the characterisation of ovarian cysts when ultrasound is inconclusive. Within current practice however, this advice is often deviated from and there can be discrepancies between ultrasound and MRI diagnoses. This study therefore aimed to calculate the sensitivity and specificity of transvaginal ultrasound and MRI, as well as their accuracy in characterising ovarian masses.

Methods: Histology results were obtained for 100 women who had undergone surgery for an ovarian mass within the last year. Their imaging was reviewed retrospectively and the transvaginal ultrasound and /or MRI diagnosis was recorded as benign, malignant (including borderline) or unclassifiable. Using this information, the sensitivity, specificity and accuracy of each imaging modality was calculated.

Results: 55 patients had a transvaginal ultrasound, of which 8 had ovarian masses which could not be classified. When the mass was characterised, the sensitivity was 73.9% and the specificity was 83.3%. 77 patients had an MRI scan, of which one was indeterminate. The sensitivity of an MRI scan was 98.1% but the specificity was only 13.0%. This was reflected in the relatively high number of false positives (20 out of 76 patients) Overall, these results gave an accuracy of 78.7% for transvaginal ultrasound and 72.3% for MRI.

Conclusions: This study demonstrates that for this small population, a transvaginal ultrasound was more accurate but less sensitive for characterising ovarian masses than MRI, which falsely characterised a proportion benign cases as malignant. A further study was therefore carried out comparing the diagnoses when an individual had undergone both a transvaginal ultrasound and MRI.

BGCS0153

ARID1A in endometriosis-associated ovarian cancer

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Introduction: Ovarian cancer carries a poor prognosis due to late presentation and chemotherapy resistance. We aimed to identify the prevalence of ARID1A mutations in ovarian clear cell adenocarcinoma (OCCA) and ovarian endometrioid adenocarcinoma (OEA) with associated endometriosis, and to correlate this to BAF250a (ARID1A protein product) immunohistochemistry. New agents targeting chromatin remodelling complexes are in development for women with ARID1A mutations, including EZH2 inhibitors. Robust biomarkers are needed.

Methods: We identified 53 formalin fixed paraffin embedded OCCA and OEA samples with paired endometriosis and normal tissue. To identify somatic mutations, we performed exome sequencing of 40 genes on tumour and normal sample DNA on an Illumina Mi-seq platform using 150bp paired-end sequencing chemistry. We performed BAF250a immunohistochemistry on all tumours and associated endometriosis in 16 samples.

Results: Six of 23 OCCAs had 8 high/moderate impact/modifier ARID1A mutations. Seven of 23 OEAs had 10 high/moderate impact/modifier ARID1A mutations. One of 7 mixed samples had 2 modifier mutations (Table 1). BAF250a was absent on immunohistochemistry of all 5 OCCAs with high impact ARID1A mutations, but present in 2 OEAs with high impact mutations and tumours with moderate impact/modifier mutations. There is a statistically significant difference in BAF250a staining ($p=0.0082$) between samples with and without ARID1A mutations. BAF250a was present in most endometriosis samples, even when absent in paired tumour. There was no significant correlation ($p=0.2348$, $r=0.3136$) between BAF250a levels in tumour and endometriosis.

Conclusions: 26.1% of OCCAs, 30.4% of OEA and 14.3% of mixed tumours had high/moderate impact or modifier mutations. High impact ARID1A mutations in OCCA caused loss of BAF250a, a component of SWI/SNF chromatin remodelling complex. BAF250a immunohistochemistry in tumour is highly correlated with sequencing results and appears to be a reliable biomarker of ARID1A loss of function mutation and could be used to identify eligible patients for clinical trials in OCCA and OEA.

	High impact mutation	Moderate impact/Modifier mutation
Ovarian Clear Cell Adenocarcinoma	5	3
Ovarian Endometrioid Adenocarcinoma	2	8
Mixed Ovarian Clear Cell and Endometrioid Adenocarcinoma	0	2
Mixed Ovarian Endometrioid and High Grade Serous Carcinoma	0	0

Table 1. Summary of *ARID1A* mutations in the 53 endometriosis-associated ovarian cancer.

BGCS0155

A study to compare the diagnostic accuracy of transvaginal ultrasound and MRI for ovarian masses

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Introduction: The RCOG recommends that transvaginal ultrasound is the most effective way of assessing ovarian cysts and should be used for initial assessment. They also advise that MRI should not be used routinely for initial assessment but as a second-line imaging modality for the characterisation of ovarian cysts when ultrasound is inconclusive. Within current practice however, this advice is often deviated from, and there can be discrepancies between ultrasound and MRI diagnoses. To follow our previous study, we looked at women who underwent a transvaginal ultrasound and MRI prior to their surgery, and the accuracy of the diagnoses made from each modality.

Methods: Histology results were obtained for 100 women who had undergone surgery for an ovarian mass within the last year. Those patients who had both an MRI and transvaginal ultrasound were included in the study. The diagnoses from each imaging modality were compared with each other and with the histology results.

Results: 25 patients had both a transvaginal ultrasound and MRI from which diagnoses were made. For this group, the sensitivity of the transvaginal ultrasound scan was 82.4% with a specificity of 62.5%. This included 3 false negative and 3 false positive diagnoses. For MRI, the sensitivity was 94.1% and the specificity 37.5%, which included 1 false negative and 5 false positives. There were 8 ovarian masses that were indeterminate on ultrasound – these patients all had an MRI of which 7 diagnoses were correct and one was a false positive.

Conclusions: For some patients, there are discrepancies between the transvaginal ultrasound and MRI diagnoses. Neither imaging modality should override the other when deciding patient management. A multidisciplinary team meeting should include discussion of all images, ideally with the health professionals who have carried out the scan and reported the MRI. A larger study is required to further assess the impact of this.

BGCS0156

Significance of Paracardiac Fat Pad Lymph Nodes in Epithelial Ovarian Cancer- A retrospective study

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Introduction: Epithelial ovarian cancer (EOC) accounts for 4% of all new cancer diagnoses in females in the UK and is the UK's sixth leading cause of cancer-related deaths in women. Enlarged paracardiac fat pad lymph nodes (PFPN) have been described as being potentially important in staging and prognostic significance. We report on the significance of PFPN and their correlation to prognosis

Objectives:

1. To assess significance of PFPN in relation to peritoneal and omental disease and Stage of ovarian cancer.
2. Do PFPN indicate advanced intra-abdominal disease or metastatic spread to the chest?

Methods: Royal Surrey County Hospital in Guildford, Surrey is a cancer centre serving a catchment of approximately 1.5 million. It has maintained a dedicated gynae-oncology database since 2005. A three year retrospective study of 65 cases with atleast Stage 3c EOC was identified through the database. Pre-operative computed tomography (CT) scans reviewed for reported PFPN, peritoneal and omental disease. CTs reviewed by study radiologist as 'gold standard' for PFPN as often under-reported. Stratification of PFPN by Stage, reported peritoneal and omental disease. Determination of impact of PFPN on correlation between peritoneal/omental disease on pre-op CT and at surgery.

Results: 28/65 (43%) patients had PFPN detected by study radiologist but only 3 (11%) had been reported. Of the PFPN group, 25% were Stage IVb compared to 22% in the non-PFPN group, however there was a much greater proportion of patients with reported peritoneal/omental disease in the PFPN group (71% compared to 51% where PFPN absent). Correlation between disease on pre-op CT and at surgery is greater in those patients with PFPN (peritoneal: 53.5%, omental: 54%) than without PFPN (peritoneal: 30%, omental: 22%). (Table 1)

Conclusions: Our data and review of the literature suggest that it is certainly a strong correlation between peritoneal and omental disease and the presence of PFPN, however, the peritoneal and omental disease is usually already detectable on CT by the time PFPN present. On occasions when the PFPN are present without obvious peritoneal or omental disease, there is still a strong likelihood of disease being found at surgery and this should be considered in the pre-operative planning and prompt closer evaluation of the pre- operative CT imaging. PFPN are under-recognised. With PFPN, there can be greater confidence that reported peritoneal/omental disease will concur with surgical findings. Without PFPN, false negative reports for peritoneal disease of 40.5% and omental disease of 54%.

Table 1. Concordance between reports and surgical findings

Paracardiac nodes Absent (n=37)

Peritoneal Disease

	At Surgery	
	YES	NO
Reported YES	11 (30%)	5 (13.5%)
Reported NO	15 (40.5%)	6 (16%)

Omental Disease

	At Surgery	
	YES	NO
Reported YES	8 (22%)	0
Reported NO	20 (54%)	9 (24%)

Paracardiac Nodes Present (n=28)

Peritoneal Disease

	At Surgery	
	YES	NO
Reported YES	15 (53.5%)	1 (3.5%)
Reported NO	9 (32%)	3 (11%)

Omental Disease

	At Surgery	
	YES	NO
Reported YES	15 (54%)	0
Reported NO	7 (25%)	4 (14%)

BGCS0157

A critical review of elective gynaecological oncology surgery patients requiring elective admission to the critical care unit based on a peri-operative triage system using cardiopulmonary testing: focusing on critical care interventions, surgical approach and peri-operative analgesia.

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Introduction: The cardiopulmonary exercise test (CPET) is a method of objectively evaluating a patient's functional capacity to cope with surgery and studies have suggested it has weight for making decisions regarding their perioperative care. This study aims to look at CPET results in conjunction with surgical approach (open or minimal access), critical care (CrCU) management and peri- operative analgesia.

Methods: Data for patients at Royal Preston Hospital (RPH) admitted to CrCU after undergoing gynaecological oncology surgery during the 12-month period of April 2017 – March 2018, was generated from core hospital databases. Data regarding CPET assessment results, surgical approach, CrCU management, peri-operative analgesia use and CrCU length of stay (LOS) and hospital length of stay (LOHS) were assessed.

Results: 100 patient cases were analysed, only 75 had CPET data and thus for analysis against CPET only those patients were used. Main findings were, patients with VE/O 2 and VE/CO 2 40.0- 44.9ml/kg/min required advance cardiovascular support; patients with VE/O 2 of 25.0- 29.9ml/kg/min required greater time on metaraminol (56.5hours); significant negative correlations exist between log[VE/O 2] and VO 2peak and time on metaraminol, patients undergoing minimal access surgery required (39.4hours) more time on metaraminol and finally all patients receiving combined spinal epidural (CSE) anaesthetic required metaraminol administration.

Conclusions: This concludes that patients with any of the following are more likely to require and benefit from admission to CrCU; VE/O 2 and VE/CO 2 of 40.0-44.9ml/kg/min, VE/O 2 of 25.0-29.9ml/kg/min, minimal access surgery and CSE.

BGCS0158

Co-relation between the ACS and p Possum Calculator to improve patient understanding of the risk of Post-operative Morbidity and Mortality in women undergoing open and robotic surgery for gynaecological malignancies

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Introduction: It is widely known that despite the informed consent process, patient's understanding of the potential post-operative complications is often poor. Several calculators are used to calculate the risk of post-operative morbidity and mortality offering varying risk assessments. One such calculator is the P-POSSUM risk scoring which is widely accepted in the United Kingdom for post- operative mortality and morbidity risk prediction. However published data suggests that it may overestimate risk which may cause undue patient anxiety. The ACS NSQIP (American College of Surgeons National Surgical Quality Improvement Program) surgical risk calculator on the other hand is a validated web based tool based on 21 preoperative risk factors for the prediction of 8 post- operative outcomes.

Objectives: A baseline audit to explore both these tools and the co-relation between them and understand if they could be used to enhance patient understanding of risk in a subsequent prospective study. Performed by evaluating the P-POSSUM and ACS NSQIP to assess its validity and relevance in gynaecological oncology patients.

Methods: Data collection undertaken through a dedicated gynaeoncology database at a tertiary referral cancer centre by both the anaesthetic and gynaeoncology team. Data collated on 153 patients undergoing robotic surgery and 167 women undergoing laparotomy for suspected or diagnosed gynaecological malignancy in a retrospective manner Any missing data was collected from the patient notes. Following data lock with the actual post-op event/complication that occured in this retrospective cohort, the risk calculators were used to calculate the risk scores for each patient.Mortality and morbidity predictions using the Portsmouth modification of the POSSUM and ACS algorithm were compared to the actual outcomes separately.

Results: POSSUM reports on mortality and morbidity only, the ACS NSQIP reports on individual complications as well. Surprisingly there was significant concordance between the actual complication that occurred and the predicted risk. p POSSUM does not reflect the complexity of the actual procedure undertaken due to classification based on number of procedures undertaken, the ACS NSQIP records the actual operation.

Conclusions: This preliminary data is being evaluated in the entire data set of > 1050 robotic and open cases and suggests that further validation needs to be performed to evaluate if the risk scores may be used to inform patients pre-operatively of their risk of complications and is currently being rolled out in a multi-centre model.

BGCS0159

Robotics in Gynaecological Oncology- Enhanced Recovery outcomes following 1050 cases in the Guildford Epicenter Program

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Introduction: Application of minimal invasive surgery in gynaecological oncology has been reported since 1980's. Uptake of laparoscopic surgery among gynaecologists has been poor with only 14% reduction in open surgery. Rate-limiting step appears to be advanced laparoscopic skills required for complex surgery which appears less widespread. We established a robotics program in December 2009 and started robotic surgery (RS) for women with gynaecological cancers from mid 2010. Eight years hence, we report our experience of RS.

Methods: Royal Surrey County Hospital in Guildford, Surrey is a cancer centre serving a catchment of approximately 1.5 million. It has maintained a dedicated gynae-oncology database since 2005. Primarily designed to function as an administrative electronic patient records system with a parallel function of collecting clinical data regarding outcomes. Additional information about patient deaths has been updated on a regular basis by matching the records against the hospital administrative system which is updated from NHS spine. Prospective, observational study in a tertiary gynaecological oncology centre. Patient demographics, intra and post-operative data recorded.

Results: (1050) cases have been performed. Procedures varied from simple hysterectomy and pelvic node sampling for endometrial cancer to radical hysterectomy and systematic pelvic node dissection for cervical cancer. Other specialist procedures such as secondary debulking for isolated ovarian cancer recurrence, trachelectomy, parametrectomy and ovarian transposition have also been undertaken. BMI ranged from 18-63(Mean 44). Median estimated blood loss overall was 50mls (5- 2500). Median hospital stay was 1 day. Lymph node yield was comparable (20-56).

Conclusions: Prior to introduction of our robotics program a review of our records revealed that atleast 64 % of the women especially obese patients underwent open surgery. The biggest advantage to patients is the reduced blood loss, shortened hospital stay, reduced post-operative pain due to less torque on trocars and varied applications even in gynaeonc surgery. Camera positioning by the surgeon, no camera shake, 3D image leading to greater appreciation of surgical anatomy along with better ergonomics and less fatigue are benefits to surgeons. RS plays an important role in the delivery of the Enhanced Recovery Program and offers women undergoing surgery for gynaecological cancer improved outcomes.

BGCS0160

AUDIT: OVARIAN CANCER (OC) INITIAL INVESTIGATION AND REFERRAL PATHWAY IN OUH IN THAMES VALLEY CANCER NETWORK (TVCN)

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Introduction: We analyzed the OC initial investigation and referral pathways in OUH Thames Valley cancer network in order to assess the compliance to NICE QS 18 guideline.

Methods: We review patients submitted to Multi-Disciplinary Team (MDT) meeting between May-June 2016 referred by General Practitioner to the gynaecologic oncologic clinic of Churchill Hospital of Oxford for symptoms suggestive of OC and/or because a pelvic mass +/- raised CA 125. Outcomes: Quality measures indices (QMI) by NICE QS 18 guidelines.

Results: We reviewed 116 patients for pelvic mass suggestive of OC. Median age was 65 years (range 22-94). Among 116, 64 (55%) were from Oxford and 52 (45%) from other centers. 89/116 women (77%) were discussed for pelvic mass, 14/116 (12%) after neoadjuvant chemotherapy and 13/116 (11%) for relapse. QMI are detailed in table 1.

Conclusions: CA 125 QMI, notwithstanding the good percentage achieved (97%) should be offered in any case. After a not conclusive pelvic ultrasound, 82% were

offered CT scan but the other 18% were already have been offered an MRI, therefore 100% of patients were offered an II level instrumental examination. Only 50% of patient with indeterminate pelvic mass were offered MRI but the other 50% were offered an II level instrumental diagnostic procedure (CT scan or ultrasound biopsy). Overall only 72% of patients had final diagnosis of OC or borderline tumour justifying the treatment in oncology. This data seems quite acceptable considering sensibility and specificity of the single instrumental, clinical and biochemical diagnostic methods in order to safely and accurately manage a patient with OC initial suggestion and considering that sometimes only histology can settle the final diagnosis. In conclusion the OC initial investigation and referral pathway in the OUH in the TVCN appeared satisfying the NICE 18 QS guidelines in all its quality standard measurements.

Table 1: NICE 18 QS Quality Standard Measures Indices (QMI) of the audit.

1)CA 125 test offered to all women aged 50 years or over reporting one or more symptoms occurring persistently or frequently that suggest ovarian cancer.	97%
2) Ultrasound of abdomen and pelvis offered to all women with raised CA 125 within 2 weeks of receiving the CA125 test results.	100%
3) All women with normal CA125, or raised CA125 but normal ultrasound, with no confirmed diagnosis but continuing symptoms, are reassessed by their GP within 1 month.	100%
4)Women with a risk of malignancy (RMI I) score of 250 or greater are referred to a specialist gynaecological cancer multidisciplinary team.	100%
5) As initial staging investigation in women who are offered staging for ovarian cancer, following ultrasound, undergo CT of the abdomen and pelvis.	83%
5bis) As initial staging investigation in women who are offered staging for ovarian cancer, following ultrasound, undergo CT of the abdomen and pelvis or MRI.	100%
6)The result of CT for staging of ovarian cancer, have to be reported by a radiologist who is a core member of the specialist gynaecological cancer multidisciplinary team	100%
7) If ultrasound shows an indeterminate adnexal mass is prescribed an MRI for further characterisation.	50%
7) If ultrasound shows an indeterminate adnexal mass is prescribed an MRI for further characterisation or CT scan or ultrasound biopsy.	100%
8)Overall SENSITIVITY (true positive rate) of the ovarian cancer initial investigation and referral pathway.	72%

BGCS0161

Overall Survival in Non-Endometrioid Malignancies (NEME) of the Uterus.

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Introduction: At diagnosis,15% of endometrial biopsies will correspond to the more aggressive endometrial cancers, NEME, including carcinosarcoma (CS), serous papillary (SP) and clear cells (CC) histologic types. We analysed this cancer groups and their overall survival (OS).

Methods: From a prospective database, we retrieved NEME patients' data undergone hysterectomy, salpingo-oophorectomy, pelvic lymphadenectomy and omentectomy between 2010-2018. We described clinical and histological characteristics calculating OS in each subgroup. Main outcomes were preoperative stage assessed by computerized tomography (CT), surgical stage and OS.

Results: We collected 90 patients: 29 (32%) CS, 42 (47%) SC and 19 (21%) CS. For Patients' clinical and histologic characteristics see table 1. Nine patients were not submitted to pelvic lymphadenectomy for advanced stage. Patients lost at FU were respectively 2 in CS, 3 in SC and 3 in CC subgroup. Median FU was 14 months in CS cohort: OS 92% at 6 months, 81% at 12 months and 67% at 24-56 months. Median FU was 20 months in SC cohort: OS 100% at 6 months, 98 % at 12 months, 92% at 18 months, 90% at 30 months and 87% at 48-60 months. Median FU was16 months in CC cohort: OS 100% at 6-12 months, 88% at 18 -56 months.

Table 1: Characteristics of 90 patients with NEME.

	Carcinosarcomas (29 patients)	Serous Cell (42 patients)	Clear Cell (19 patients)
Median age (range), ys	74 (51-87)	71 (52-88)	67 (54-66)
ASA class I-II	24 (83%)	39 (93%)	16 (84%)
ASA class III	5 (17%)	3 (7%)	3 (16%)
CT scan FIGO[a] stage			
I	21 (73%)	35 (84%)	
II	1 (3%)	1 (2%)	12(63%)
IIIA-B	-	3 (7%)	-
IIIC	5 (17%)	1 (2%)	1 (5%)
IV	2 (7%)	2 (5%)	3 (16%)
			3 (16%)
Surgical FIGO[a] stage			
I	14 (49%)	27 (65%)	13 (69%)
IA	12 (42%)	23 (56%)	11 (58%)
IB	2 (7%)	4 (9%)	2 (11%)
II	5 (17%)	1(2%)	1 (5%)
IIIA-B	3 (10%)	2(5%)	3 (16%)
IIIC1	4 (14%)	8(19%)	2(10%)
IVA-B	3 (10%)	4(9%)	-
LVS positive	17 (59%)	14 (34%)	8 (42%)
LVS negative	9(31%)	24 (57%)	9 (48%)
LVS unknown	3(10%)	4 (9%)	2(10%)
No. of Pelvic LA	24/29 (83%)	41/42(98%)	16/19 (84%)
Median no. of Pelvic Nodes	14 (range 2-33)	14 (range1-33)	10 (range 3-24)
No. of patients with **positive nodes**	5/24 (21%)	8/41 (19%)	2/16 (12%)
No. of patients with **bulky nodes**	2/24 (8%)	-	1/16 (6%)

Legend: NEME, Non Endometrioid Malignancies of Endometrium;

FIGO, International Federation of Gynaecology and Obstetrics;
ASA: American Society of Anaesthesiology physical classification
CT-scan, computerised tomography.
[a]: Pecorelli S. Revised FIGO staging for carcinoma of the vulva, cervix and endometrium. Int J Gynaecol Obstet. 2009 May;105(2):103-4
LVS: lymph vascular involvement
LA: lymphadenectomy

Conclusions: While CS and SC presenting stage I by CT scan in 73%-84%, confirmed by final histology only in 49%-65%, in CC almost the same percentage of preoperative stage I (63%) is confirmed at final histology (69%). While in CS and CC nodal metastases are confirmed at final histology in almost the same percentage than by CT scan, in SC 87% of nodal metastases at final histology were not suspected preoperatively. 5ys OS, considering the high-risk group under analysis, is quite good, thanks to adjuvant treatment but lower in CS group than in CC and SC ones.

BGCS0162

Sentinel node biopsy alone is safe in managing early stage cervical cancer.

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Introduction/background: The incidence and mortality of cervical cancer in the UK has been drastically reduced by organised cervical screening. The role of sentinel node mapping in the surgical management of early stage cervical cancer has been evolving over the past 20 years. Accuracy and negative predictive value of sentinel node biopsy has been shown to be good. Limited international data suggests that SLN biopsy alone may be a safe alternative to complete lymphadenectomy. We present the first UK oncological safety data on SLN biopsy alone in managing early stage cervical cancer.

Methods: At West Kent Oncology Centre, SLN mapping and biopsy has been performed since 2004 using colorimetric (methylene blue) and radioactive (Tc 99 colloid) contrasts. The validity of this technique within our setting has been published (NPV 100%). Since 2010, in selected patients, the pelvic lymph node status has been based on SLN biopsy only without pelvic lymphadenectomy. The procedure is limited to patients, whose tumour is 2 cm or less. The 'central' surgery included cone, (radical) trachelectomy or hysterectomy. The data was prospectively recorded in a database.

Results: In 81 patients we intended to perform SLN biopsy only. Median age was 36, BMI was 25 and ASA was 1. In 80 patients at least one SLN was detected and in one patient no SLN detected (1.2%); unilateral (18 [22.2 %]) and bilateral (61 [75 %]) SLN detection was achieved in the rest. The median number of SLN was 1 per hemipelvis and 2 per patient. Cone resection (6.1 %), simple trachelectomy (7.4 %), simple hysterectomy (22.2 %) radical trachelectomy (7.5%) and radical hysterectomy (55.6 %); no procedure in one case 1.2%). Grade of disease was G1 (3.8%), G2 (79%) and G3 (17.2). Stage of disease was: stage 1a1 (12.3%), stage 1A2 (16%) and stage 1B1 (71.6%). Ultrastaging (US) was performed in all patients. The median follow up period is 34 months. In one patient with G3 disease, pelvic recurrence occurred after 28 months. The rate of recurrence at 2 and 3 years are 0 % and 1.2% respectively.

Conclusions: Our experience of SLN biopsy only, is comparable to the literature reports of oncological outcomes following lymphadenectomy. This is the first UK study confirming that SLN biopsy only is safe, in selected early stage cervical cancer.

BGCS0163

Patients with recurrent gynaecological cancer referred for pelvic exenteration but not operated on: exclusion criteria and outcomes.

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Introduction: Pelvic exenterative surgery (PES) for recurrent gynaecological cancers (RecGC) after radiotherapy or chemo-radiotherapy is performed most often with curative intent. Case selection is critical and involves excluding extra-pelvic disease and evaluation of the likelihood of achieving histologic clear margins (R0). As little is known or reported on patients who were referred for but did not have exenterative surgery we collected data to on those patients referred to the Royal Marsden Hospital to determine the exclusion criteria and outcomes.

Methods: A prospective database of all patients referred with RecGC between 2004 -2017 for PES was analysed for case selection criteria and survival after the diagnosis of recurrence of cancer, and after referral for PES. The main inclusion criterion was central pelvic relapse. Patients with pelvic sidewall relapse(with or without central relapse) were excluded from these analyses.

Results: 179 patients were referred with presumed central pelvic relapse, with datasets on 87 of 93 patients who did not have PES, (52% of referrals). The initial cancer diagnosis was cervical n=48 (55%) , endometrial n=21 (24%), vaginal n=8 (9%), vulval n=4 (4.5%), ovarian n=3 (3.75%) and other n= 3 (3.75%). Exclusion criteria were: (1) review of referral or repeat imaging indicated R0 not achievable, n= 49, 56.5% (2) patient choice, n=17, 20%. (3) metastatic disease n=15, (17%) - in 6 metastases were found on laparoscopy. (4) n=5, 5.5% of patients were considered unfit for surgery and n =1, 1% was abandoned intra-operatively due to progressive disease. Cervical cancer patients had a median survival after date of diagnosis of recurrence of 11 months (mean 17.8 months) compared to median survival of 34 months (mean 32.6 months) in endometrial cancer patients. Median survival for recurrent gynaecological cancer patients excluded from PES was 15 months.

Conclusions: Half of patients with RecGC referred for PES did not undergo surgery. The main exclusion criteria were (1) R0 considered not feasible (2) metastatic disease (3) patient choice. The data suggest there may be concern about possible late referral for PES and underestimation of the extent of disease on referral imaging.

BGCS0164

Clinician experience of clinical issues and challenges preventing delivery of effective, high quality and safe care within gynaecology oncology.

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Introduction: The surgical environment within the NHS is dynamic and surgeons require the ability to manage the wider clinical environment not just to achieve task or procedural based competency. Additional factors such as increasing

patient complexity and volume can also impact on service delivery and the ability to provide safe and effective clinical care.

Methods: A pre-test questionnaire to participants on the BGCS commissioned Human factors in Gynaecological Oncology course. Free text questions on what the perceived current issues and challenges are in preventing delivery of effective, high quality safe care within gynaecology oncology; which challenge is felt to be of primary concern and why; barriers to change; and how success is measured. Thematic analysis was performed on responses to identify common themes between responders

Results: The most common themes when looking at the current challenges faced were heavy workload (63%), local NHS management (37%), lack of resources (32%), staffing levels (26%), lack of funding (26%) and lack of appropriately trained staff (26%). Less common themes included issues with team working, communication, NHS infrastructure and higher-level government policy. Workforce development/ training was highlighted as the challenge of primary concern by the responders. Current methods reported for resolving clinical issues within trusts included simulation training, theatre efficiency monitoring, Datix reporting and improving staffing levels.

Conclusions: Clinicians felt that a heavy clinical workload, lack of adequate staffing numbers and/or access to trained staff impacted on the safe and effective delivery care within gynaecology oncology. Peer discussion and shared learning of successful quality improvement projects and good practice through Human Factors training may help to support clinicians in making changes in their local clinical environment.

BGCS0166

Evaluation of Albumin levels pre and post-surgery in relation to nutritional status following surgery for ovarian cancer.

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Introduction: Hypoalbuminemia has been reported as a reliable predictive marker to stratify the risks associated with the surgery for patients with Ovarian tumour. This study aimed to evaluate the relationship between preoperative and postoperative albumin levels and nutritional status and their predictive value on post-operative surgical outcomes.

Methods: Retrospective review of all cases of ovarian cancer who underwent surgery in the period from 1/1/15-30/4/18 at the Christie Cancer Centre. Data analysis done using Wizard & SPSS

Results: 320 cases identified. 3% of patients had hypoalbuminemia prior to surgery and 82% on the first day post-surgery (mean drop of Alb by 11.7 ± 4.8 g/l). 93.7% of patients had oral diet, which commenced on first day post op (mean: 1.86 +/-1.6 day). Pre-operative hypoalbuminemia correlated to increased nutritional risk scores post operatively. Patients who were hypoalbuminemic preoperatively were more likely to have a longer length of stay, and slower mobilisation ($p<0.001$). Patients on TPN post op had also a significant higher mean LOS (14.5 vs 5.7 days), slower to achieve independent mobilisation (6.9 vs 3.3 days), and slower to achieve alb levels of >33 g/l (day 8 post op vs day 3 post op) in comparison to patients on oral feeding ($p<0.001$) although there was no difference on their surgical complexity scores ($p>0.05$). There was no statistical significant difference among patients with normal of low albumin level pre- operatively in relation to post op complications or readmission rate. ($p>0.05$).

Conclusions: Pre-operative hypoalbuminemia is a negative predictive factor for post operative recovery. More research should look at the benefits of enteral nutrition, as well as enhanced recovery after surgery (ERAS) programmes.

BGCS0167

Delayed Primary Debulking Surgery for Advanced Ovarian cancer

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Introduction: Treatment modalities for stage III/IV ovarian carcinoma includes debulking surgery and/or chemotherapy. Current literature describes strong evidence for primary debulking surgery [surgery followed by 6 cycles of chemotherapy] and interval debulking surgery (3/4 cycles of chemotherapy followed by surgery followed by 3/2 cycles of chemotherapy). However, there is not much published data for delayed primary debulking surgery (6 cycles of chemotherapy followed by surgery). This study aims to evaluate the safety of delayed primary debulking surgery in patients.

Methods: Retrospective study of all cases of Ovarian/ Fallopian tube/Primary peritoneal cancer that underwent delayed debulking surgery upon completion of 6 cycles of chemotherapy, in the period: July 2014 – January 2018.

Results: 35 patients were identified with a mean age of 66 (range 40-81). 58.6% of them had cardiovascular disease and 24.1% of them had COPD. 17% of patients were of stage 4 and 83% of stage 3c. In 91% of cases histopathology type was of High Grade Serous. 14.3% of them underwent bowel resection and 14.2% upper abdominal surgery as part of their debulking surgery. In 76% of these cases complete macroscopic debulking has been achieved. Intra- operative complications rates were 5.7% post-operative complications were 11.4% and 30-day mortality was 0%. 77.1% of study population is alive at the end of study with 60 months follow up. Median disease free interval was 19.97 [7-48] months and overall survival was 28.5 [8-60] months. One-year-survival is 90.3%, and recurrence rate was 62.8%. 40% of live patients have recurrence.

Conclusions: Delayed primary debulking surgery is a safe surgical option for patients that did not had the opportunity to undergo surgery in an earlier stage. Survival data are promising and more studies are needed to establish the best management following delayed primary debulking surgery.

BGCS0168

Association of Elevated Pre-operative HbA1c and Post-operative Complications in Non- diabetic Patients Undergoing Gynaecological Oncology Surgery

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Introduction: HbA1c testing provides the average blood glucose for a patient over the previous 8-12 weeks. Normal is below 42mmol/mol and an elevated result may be associated with a greater risk of adverse post-operative outcomes. The objective of this project was to evaluate the association between elevated pre-operative HbA1c and post-operative complications in non-diabetic patients undergoing major gynaecological oncology surgery.

Methods: Retrospective study of all patients undergoing major gynaecological oncology surgery at The Christie Hospital. Data was collected using hospital electronic records throughout the time period of January 2017 to April 2018. It included pre-operative HbA1c, age, BMI, co-morbidities, length of stay and post-operative complications.

Results: A total of 476 women were included in the study. The mean age was 59.9 (SD 15.2) years old and BMI was 29.0 (SD 7.6). HbA1c was measured in 364 out of 476 patients (76.4%). HbA1c was normal (<42mmol/mol) in 245, borderline (42-47mmol/mol) in 76 and elevated (>47mmol/mol) in 42 patients. Overall infection rate was 8.8%.Patients with borderline HbA1c had almost double the incidence of infections compared to patients with normal HbA1c (15.8% vs 6.5%. $p=0.038$). The majority of infections were urinary infections. There was a significant difference in rate of infection between patients with a normal HbA1c (<42mmol/mol) and those with an HbA1c of over 42mmol/mol.

Conclusions: There is an association between elevated HbA1c and infective complications especially in patients with a borderline HbA1c (42-47mmol/mol). It is suggested that intervention is made earlier in this group to prevent post-operative complications and improve long term outcomes.

BGCS0169

Infralevator Pelvic Exenteration in Gynaecological Cancers: the Christie experience & outcomes

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Introduction: The purpose of the study was to look at all the infralevator pelvic exenterations performed at the Christie Hospital over the last 7 years and investigate survival and complication rates.

Methods: Retrospective review of infralevator exenterations for cervical, endometrial, vaginal & vulval cancers with curative intent done between April 2010-Sep 2017. Data analysis done using Wizard & SPSS

Results: 24 case identified (total, anterior & posterior pelvic exenterations, with or without plastics involvement for perineal reconstruction). Mean age was 60.6 y.o (SD 5.4) and mean BMI 27.8 (sd 3.1), range 18 – 47.25% of them were smoker and 46% of them had cardiovascular disease. 29.2% of the patients had a tumour size of more than 5cms and 91.7% of these tumours were either grade 2 or 3. Mean operative time was 408 (SD 54.2) min and mean blood loss was 870.8 (SD178.5) ml 95.8% of patients had a clear margin of resection. There was no 30-day mortality and the overall rate of grade 3 and 4 post-operative complications (Clavien Dindo) within 30 days was 37.5%. Serious complication rates were significantly higher in obese patients with a BMI of >30 (50% vs 31.2%). Long term morbidity identified in 16.7% (stenosed urostomy, ureteric stricture, fistula) of cases. Overall survival (OS) at 1 year was 100 %, 71 % at 2 years, 64 % at 3 years and 48 % at 5 years. Mean disease free survival was 51.7 months and mean OS was 62.9 months. OS was significantly better for clearance margin >5mm vs <5mm ($p<0.05$). Tumour size (>5 vs <5cm) has no statistically different impact on progression free survival or overall survival ($p>0.05$).

Conclusions: Pelvic exenteration can be performed with acceptable complication rate and mortality, with very good oncological outcomes in specialist centres providing the service. Clearance of resection margins directly correlates to overall survival.

BGCS0170

Incisional hernia in patients with advanced ovarian cancer.

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Introduction: To evaluate the incidence and risk factors for the development of incisional hernia (either symptomatic or not) after midline laparotomy for advanced (stage 3 or 4) ovarian cancer

Methods: We retrospectively identified all patients with stage 3 or 4 ovarian cancer who underwent cytoreductive surgery as primary treatment(N=102) in our centre, in the period between September 2014 and August 2016. All records were reviewed for evidence of incisional abdominal wall hernias either on imaging or clinical diagnosis. Clinico-pathological factors were evaluated to establish possible predictive factors in this patient cohort.

Results: We identified 102 cases with a mean follow up of 28.5 months. At 24 months follow up 20.2% (18/89) of these patients had developed an incisional hernia. 50% (9/18) were symptomatic and were reviewed for abdominal wall repair. The mean interval between surgery and first clinical or imaging evidence of hernia was 13.5 months. Significant risk factors were obesity, diabetes and current or ex-smoking status ($p<0.05$). Age, chemotherapy pre-operatively, bevacizumab and cardiovascular disease were not associated with an increased rate of incisional hernia. Incisional hernia occurred in 45% (10/22) of patients with a BMI higher than 30.

Conclusions: The development of incisional hernia is a significant late post-operative complication occurring in 20.2% of patients post-surgery for advanced ovarian cancer in our cohort. This is consistent to published data reporting an incidence of 20-24%. Incisional hernia is difficult to manage in this patient group due to the high risk of disease recurrence, ongoing chemotherapy and shortened life expectancy. These findings warrant further investigations into prophylaxis and alteration of surgical techniques in abdominal wall closures for patients undergoing midline laparotomies for advanced ovarian disease.

BGCS0173

Acute Kidney Injury: Incidence in first line management of advanced ovarian cancer. A multicentre prospective trainee-led study

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Introduction: Treatment of patients with advanced ovarian cancer poses multiple risks such as platinum based chemotherapy, radical surgery and major fluid shift. Evidence from non-cardiac surgery suggests that even mild Acute Kidney Injury (AKI) is associated with increased short term mortality and progressive renal impairment.

Methods: A trainee-led study evaluated the incidence of AKI in patients recruited for SOCQER-2 (Surgery in advanced Ovarian Cancer: Quality of life Evaluation Research – a prospective multicentre observational study from September 2015 to September 2016). Renal function test results were collected preoperatively, day1-2, day3-5 postoperatively and 6 weeks to 6 months after surgery. RIFLE criteria (Table 1) were used to identify stages of AKI. Data on patient characteristic and surgical intervention was used to analyse associated risk factors and outcomes.

Results: Two hundred and thirty-five patients were recruited from 12 centres in the UK. 193 patients were eligible for assessment of AKI and results were available for 184(95%) patients with median age of 63(21–82) years and median albumin level of 40(13–52) g/l. At any time point, 50/184(27.2%) patients demonstrated signs of AKI. 15 out of 33(45%) peri-operative AKI events were managed with renal supportive steps (e.g. fluid challenge, cessation of nephrotoxic drugs). 17 patients sustained AKI preoperatively, 11 of these had further episodes postoperatively. Advancing age (p=0.005), deteriorating performance status (p=0.003) and preoperative albumin <35 g/L(p=0.018) were associated with higher incidence of AKI. Higher peritoneal carcinomatosis index or surgical complexity score were not associated with increased AKI. No patient required renal replacement therapy.

Conclusions: Incidence of AKI in first line management of ovarian cancer is 27%; this may have implications on longer term outcome. Peritoneal carcinomatosis scores and surgical complexity did not affect incidence; conversely patient's general fitness and nutrition are good predictors. Awareness and supportive measures may reduce incidence and prevent associated adverse outcomes.

Table 1: Incidence & timings of AKI

Incidence of AKI according to RIFLE criteria *(Risk, Injury, Failure, Loss & End stage – Bellomo et al, Critical care, 2004)*	Patients (n) who sustained AKI during first line management of Ovarian cancer	%
RIFLE - Risk (Increased Serum Creatinine x 1.5 or GFR decrease >25%)	35	19
RIFLE - Injury (Increased Serum Creatinine x2 or GFR decrease >50%)	9	4.9
RIFLE - Failure (Increased Serum Creatinine x3 or GFR decrease > 75% or Serum Creatinine > 4gms/dl)	6	3.3
RIFLE - Loss / End stage Persistent Acute renal failure = complete loss of kidney function > 4 weeks End stage kidney disease (> 3 months)	0	0
Total (n=184)	50	27.2
Timing of AKI in relation to surgery (15 patients had more than one episode of AKI)		
Preoperative	17	9.2
Postoperative (until discharge)	16	8.7
6 weeks to 6 months	32	17.4

BGCS0174

Evaluation of information leaflets on systematic panel genetic testing in epithelial ovarian cancer – patient's perspective

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Introduction: Germline (BRCA1/BRCA2/RAD51C/RAD51D/BRIP1) and somatic genetic (BRCA1/BRCA2) testing is offered to women with high-grade non-mucinous epithelial-ovarian cancer(OC). There remains uncertainty on amount/level of information OC patients need in a patient information- sheet (PIS) as an adjunct to counselling prior to decision making. We evaluate the usefulness, acceptability, emotional impact and preference for 'long' versus standard 2-page 'short/gist' PIS.

Methods: A 'long' PIS was developed in collaboration with clinical geneticists, MDT-members, patients and OC charities, in addition to a standard 'gist' version. All patients underwent face-to-face pre-test genetic counselling undertaken by a cancer-MDT member (surgical/medical). 114 patients were given a 'long' and 'short' version of the PIS prior to face-to-face genetic- counselling. Specially developed pre- and post-counselling questionnaires evaluated 'gist' and 'long' information-sheets. Baseline demographics were collected. Descriptive statistics and non- parametric significance testing was undertaken with SPSS-v24.

Results: The mean age at diagnosis was 62.6 years(SD=8.9). Patients were offered genetic-testing during treatment for primary/recurrent disease (50.9%;n=58) and during remission (47.4%;n=54). Genetic-testing uptake was 100%. 79%/84% were not-at-all worried , 86%-91% not-at-all upset and 66%-54% were somewhat/a-lot reassured with the long/short PIS. Pre-counselling, 57.9%(66) participants preferred the 'long' PIS compared to 26.3%(30) who chose the 'short' PIS. The choice of PIS was not associated with stage or being in treatment/remission but was associated with age at diagnosis. Younger women preferred the 'long' PIS (p=0.01). Following pre-test counselling, 73.7%(84) chose the 'long' PIS and 21.1%(24) the gist-version (p<0.01). 93.1%(106) felt counselling made decision-making easier and 31.5% (36) stated it changed the decision they made. 23%(26) felt that they could make the genetic-testing decision without pre-test counselling.

Conclusions: Our findings show most (73%) OC patients preferred a longer PIS as an adjunct to pre-test counselling, particularly those of younger age. The longer PIS did not detrimentally impact their emotional well-being. Most women benefited from pre-test counselling.

BGCS175

Human Factors within Gynaecology Oncology: Evaluation of a BGCS commission course

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Introduction: Human related errors have been shown to increase risk of near misses and death in surgery, with the total number of minor errors made increasing the likelihood of serious harm. Human Factors, also called Ergonomics, is an evidence-based scientific discipline and profession that uses a design-driven systems approach to achieve two closely related outcomes of performance and well-being.

Methods: The BGCS commission development of a training program on 'Human Factors in gynaecology oncology' in collaboration with leading UK Human Factors experts. It was delivered in a one day course which consisted of theory based lectures followed by three interactive workshops demonstrating different methods of systems based analysis (including Hierarchical Task Analysis and Accimaps) to approach clinical problems and interactive peer led discussion. Pre/post-course questionnaires to evaluate their motivations for attending the course, pre-course expectations and experiences of the course.

Results: There were 21 participants including 7 senior trainees (subspecialty and ST6+) and 12 gynaecology consultants (centre/unit). The most common reason for choosing to attend the course was 'improving patient safety' (53%), followed by 'organisational safety' (42%), 'innovation of care' (32%), 'improving healthcare efficiency' (26%) and 'improving leadership' (26%). 'A greater understanding of Human Factors issues' was the most frequently reported aim of the day (84%). All participants strongly agreed or agreed that the application of Human Factors science was directly relevant to their clinical work and 17 (81%) had thought about an issue that would change their current clinical practice during the course.

Conclusions: A desire to improve NHS quality and safety outcomes appear to be the major motivating factors for clinicians attending Human Factors training. Participants were satisfied with the delivery of the BGCS course and were likely to change clinical practice as a result of attending.

BGCS0176

Understanding Complications in Gynaecological Oncology Surgery – The UCIGS Project Surgeons immediate, mid and long-term attitudes to complications.

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Introduction: 'The only surgeon without complication is the surgeon who does not operate'. Everyone who has operated has had complications. When it happens to an individual surgeon it is difficult no matter how big or small the complication is. Previous studies have focussed on determining complication rates in gynae-oncology. This project aims to understand and evaluate the surgeons' reaction to adverse events linked to procedures.

Methods: Data was collected prospectively (January2015-September2017) through semi-structured qualitative interviews and thematically analysed by two researchers using content analysis. Eleven gynaecological oncology consultants were involved in the project. The study covers different cancer centres across the United Kingdom, and was selected to be representative geographically and ethnographically. Questions were grouped in four main areas. The first was to focus on what the intraoperative complication mean for a surgeon. The second investigated reactions in theatre after complication. The third assessed how teaching subspecialty trainee to deal with complications. The fourth analysed different approaches to debriefing patients when complications had happened.

Results: Surgeons described feelings of negative emotions in the immediate aftermath of a complication. Descriptions included "feeling awful", "feeling bad about it", "wanting to walk away", "deep seated feelings of dread". Attitudes following this included "Going home and feeling awful about it for a few weeks", a need to speak specifically to a non-medical colleague as well as seeking support from their immediate professional circle. Long-term reflections included "At the end of the day, she was cured of her cancer, but at what price? It was terrible."

Conclusions: This is one part of a larger study looking at the effect of major surgical complications on gynaecological oncologists. It shows the depth of feeling and level of reflection that complications cause in surgeons as well as some of the coping strategies that have been adopted to deal with the negative emotions generated by this difficult topic.

BGCS0177

Why we should not abandon minimal access radical surgery for early-stage cervical cancer: Gateshead's retrospective analysis of 137 laparoscopic C1 radical hysterectomies.

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Introduction: NCCN Cervical Cancer guideline 2018 promotes the use of minimally-invasive or open radical hysterectomy for Stage 1A2 to 2A disease.

The authors of the unpublished LACC trial hypothesised that cervical instrumentation and, possibly CO2 effect, caused the 4-fold increase in cumulative recurrence rate in minimally-invasive compared to open surgery.

At Gateshead, we do not instrument the uterus during laparoscopic radical hysterectomy and node dissection(TLRH).

We also offer small volume cases(<500mm3) the option of conservative surgery (LLETZ or TLH).

Methods: Retrospective review of case records and electronic databases for patients undergoing TLRH from April 2010-April 2018 at Northern Gynaecological Oncology Centre, Gateshead, with a diagnosis of Stage 1A1 with LVSI to 1B1 cervix cancer. The same search was performed for women choosing LLETZ or TLH. Results are presented for those having TLRH; LLETZ/TLH; and as a collective group.

Results: 187 women underwent surgery for 1A1 with LVSI to 1B1 cervical cancer (including 137 TLRH and 50 LLETZ/TLH), performed by a group of 3 site-specialised Consultants. 137 procedures were type C1 TLRHs. Of these,74/137(54%) women had tumour >2cm size. 9 had positive lymph nodes (7 received adjuvant treatment). In addition, 9 received adjuvant treatment for narrow vaginal margins or positive parametria. There were 7 recurrences detected at a median 8months follow-up (range 4-87months), giving 5.1% recurrence rate. With only 3 deaths, overall survival was 97.8% at a median follow-up of 37months (range 1-96months). 37 of these patients had sentinel node mapping, without recurrence. 50 other women had LLETZ/TLH, without recurrence. Therefore, overall recurrence rate for early-stage cervical cancer was 7/187 (3.7%).

Conclusions: Despite having a higher proportion of large tumours(>2cm) in our radical surgery cohort, our recurrence and survival data compares favourably to the LACC trial. Centres need to consider technical aspects and case selection before considering abandonment of minimal access radical surgery.

BGCS0178

The development of a tissue engineering biosinspired model for ex vivo studies of ovarian cancer

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Introduction: Approximately 7284 new cases of ovarian cancer were diagnosed in 2013 making it the second most common gynaecological cancer. Standard treatment consists of combination chemotherapy and surgery. While epithelial ovarian cancer (EOC) does respond to platinum based chemotherapy, over 70% of these women subsequently develop drug resistance which has been an avenue for future research. There were however 4128 deaths in 2014 with a 5 year survival of 46% which has only been small improvements over decades. Optimising disease treatment and targeted therapies are key to improving survival.

Drug resistance in EOC is being investigated and it is evident that factors that can affect the treatment outcome are likely to be derived not only from mutational and cellular heterogeneity, but also as a result of the modifying effects of a complex and dynamically changeable microenvironment, i.e., the extracellular matrix and stromal cell composition that could vary between patients as well as within a specific patient. Therefore, it is evident that personalisation of treatment needs to take place.

Currently used 2D models for drug screening are unreliable in capturing tissue level heterogeneity and microenvironmental changes. Xenograft models are considered to be the Gold Standard in terms of evaluating anticancer drug activity in vivo at the preclinical stage, however, animal models, are very expensive, complex to operate and even humanized xenografts are still inaccurate as they result from the combination of different species. A challenging and promising approach for a fast, low cost targeted optimisation of treatment of ovarian cancer for a specific individual is ex vivo modelling. Ex vivo modelling of ovarian cancer considers a 3D tissue engineering approach, as it is increasingly recognised by the scientific community that 3D modelling of tumours offers several advantages over conventional 2D monolayer experiments. These include more realistic growth kinetics, intracellular signalling characteristics and the opportunity to recapitulate tissue-level heterogeneity.

Methods: A review of the literature was undertaken and suggested that most studies were undertaken with with ovarian cancer cell lines (Table 1)

Results: Nineteen papers were identified based on the inclusion and exclusion criteria. Of these 1/19 was undertaken with primary cells derived from women with ovarian cancer. The remaining 18/19 studies were undertaken with cell lines.

Conclusions: Despite the advantages of using cancer cell lines to set up a platform/system, i.e., availability, consistency/reproducibility, cancer cell lines are not as informative as patient derived cells, as they are usually much more resistant to drug treatment. Furthermore, they have been optimised to grow in a 2D environment and they cannot account for patient and tumour heterogeneity, therefore making personalised medicine impossible.

There is a clear need for the development of an accurate, robust, 3D system which will enable the culture and drug screening of patient derived ovarian tumours. Such a system will allow screening of drugs as well as genetic analysis of the cancer of a specific individual, therefore, optimising/tailoring the treatment towards that individual. Furthermore, such an in vitro 3D system which would account for the tumour microenvironment (TME) heterogeneity, would help elucidate developmental and evolutionary aspects of the disease. Finally, for the development of such system with a tangible clinical outcome a systematic rigorous experimentation with patient derived tumours (and not with cell lines) is essential.

BGCS0179

A Case of Primary Small Cell Ovarian Cancer of Non-Hypercalcaemia Type

Dr Jessica Leese. Royal Cornwall Hospital Trust, Truro, Cornwall. Miss Sophia Julian. Royal Cornwall Hospital Trust, Truro, Cornwall. Dr Hanne-Brit Smethurst. Royal Cornwall Hospital Trust, Truro, Cornwall

Introduction: A 77-year-old parous woman presented with abdominal discomfort and haematuria. A CT scan revealed a 7cm pelvic mass, right hydroureter and peritoneal nodularity. A CT thorax revealed a 1cm pulmonary nodule within the left lower lobe. She was not deemed suitable for primary surgical debulking, so an USS guided biopsy of the pelvic mass was undertaken; the result was in keeping with small cell carcinoma following MDT likely ovarian in origin. She was referred for palliative chemotherapy with carboplatin and etoposide of which she has undergone 6 cycles and an interval CT shows resolution of her pulmonary nodule and an incidental pulmonary embolism.

Methods: A Pubmed search was performed using key words including “small cell ovarian carcinoma” and “SCCOPT”

Results: Small cell ovarian carcinoma comprises 1% of all ovarian carcinomas and is highly malignant. There are two subtypes; pulmonary, which is extremely rare, but more common in older patients, with an average age at presentation of 59 years and hypercalcaemic type which is seen in a younger age group. The prognosis is poor; most patients “died within the year or had early recurrence.” Even with disease limited to the ovaries at presentation, overall survival is poor with recurrence rates of 40%. Current evidence suggests that radical surgery has limited benefit except for those with apparent stage 1 disease, and that etoposide and anthracyclines are useful and can be offered to patients regardless of stage.

Conclusions: As small cell ovarian carcinoma is rare, there is limited evidence to guide management. Diagnosis can often be delayed especially in those with pulmonary type, and the disease is often advanced at the time of diagnosis. Reporting of new cases alongside evaluation of existing cases can help to improve our knowledge and understanding of this rare carcinoma

BGCS0180

Management of suspicious ovarian masses: the value of expert multidisciplinary opinion

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De Jong D - Leeds Teaching Hospitals NHS Trust
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Nugent D - Leeds Teaching Hospitals NHS Trust
Swift S - Leeds Teaching Hospitals NHS Trust
Thangavelu A - Leeds Teaching Hospitals NHS Trust
Theophilou G - Leeds Teaching Hospitals NHS Trust

Introduction: In our cancer centre, patients with suspected early stage ovarian malignancy undergo a full staging laparotomy with total abdominal hysterectomy, bilateral salpingo-oophorectomy, infracolic omentectomy, peritoneal washings with pelvic and para-aortic lymphadenectomy. However, lymphadenectomy can be associated with additional morbidity and we wanted to assess whether this can be omitted for cases where radiological opinion suggests borderline tumour at most.

Methods: Women who underwent staging laparotomy for suspected borderline or early stage malignant ovarian tumour were identified from the electronic Patient Pathway Manager System between January and December 2016. Age at diagnosis, RMI score, MDT review of pre-operative imaging, histopathological data and post-operative disease stage data were collected. 5 subgroups were identified depending on pre-operative radiological suspicion. Expert radiological opinion and RMI were then correlated with histopathological results.

Results: 90 patients were identified. The median age at surgery was 62 years old. The histopathological result showed malignancy, borderline tumour and benign condition in 44%, 31% and 25% respectively. The RMI was calculated in 78% of the cases, with sensitivity and specificity of 65% and 60%, and we acknowledge that the incomplete data set might have had an impact on these results. The overall correlation between imaging and histopathology was 75% and reached 82% in the borderline/malignant group. No malignancy was identified in the borderline and benign/borderline groups, with a sensitivity of expert opinion of 100% in this data set.

Conclusions: The subjective opinion of an expert radiologist seems to be the most effective and reliable pre-operative method of differentiating between benign and borderline tumours from malignant tumours of the ovary. After multidisciplinary discussion and in agreement with BGCS guidance, lymphadenectomy will be omitted in our department for those cases where radiological opinion suggests borderline tumour at most. We plan to re-audit our practice in 6 months.

	Histopathological results		
Imaging suspicion	Malignant	Borderline	Benign
Malignant (n46)	31	6	9
Borderline/ Malignant (n23)	8	11	4
Borderline (n14)	-	10	4
Benign/ Borderline (n5)	-	1	4
Benign/ Malignant (n2)	1	-	1

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PRESCRIBING INFORMATION

LYNPARZA™ ▼ (olaparib) 150mg FILM-COATED TABLETS
LYNPARZA™ ▼ (olaparib) 100mg FILM-COATED TABLETS

Consult Summary of Product Characteristics before prescribing.

Indication: As monotherapy for the maintenance treatment of adult patients with platinum-sensitive relapsed high-grade epithelial ovarian, fallopian tube or primary peritoneal cancer who are in response (complete or partial) to platinum-based chemotherapy.

Presentation: 150mg and 100mg olaparib film-coated tablets.

Dosage and administration: Treatment should be initiated and supervised by a physician experienced in the use of anticancer therapies. Recommended dose is 300mg (two 150mg tablets) twice daily, equivalent to a total daily dose of 600mg. The 100mg tablet is available for dose reduction. Recommended dose reduction is to 250mg (one 150mg tablet and one 100mg tablet) twice daily, equivalent to a total daily dose of 500mg. If further dose reduction is required, then reduction to 200mg (two 100mg tablets) twice daily, equivalent to a total daily dose of 400mg is recommended. Treatment should start no later than 8 weeks after completion of the final dose of the platinum-containing regimen and continue until progression of underlying disease. Lynparza is also available as a 50mg capsule. **The tablets should not be substituted for the capsules on a milligram-to-milligram basis due to differences in the dosing and bioavailability of each formulation. Specific dose recommendations for each formulation should be followed.** If a dose is missed, take next normal dose at its scheduled time. The tablets should be swallowed whole and not chewed, crushed, dissolved or divided. May be taken without regards to meals. **Dose adjustments:** Treatment interruption to manage adverse reactions such as nausea, vomiting, diarrhoea, anaemia and dose reduction can be considered. Concomitant use of strong or moderate CYP3A inhibitors is not recommended and alternative agents should be considered. If a strong CYP3A inhibitor must be co-administered, recommended dose reduction is to 100mg (one 100mg tablet) twice daily, equivalent to a total daily dose of 200mg. If a moderate CYP3A inhibitor must be co-administered, recommended dose reduction is to 150mg (one 150mg tablet) twice daily, equivalent to a total daily dose of 300mg. **Elderly:** No adjustment in starting dose is required. There are limited clinical data in patients aged 75 years and over. **Renal impairment:** Recommended dose is 200mg (two 100mg tablets) twice daily, equivalent to a total daily dose of 400mg for patients with moderate renal impairment (creatinine clearance 31 to 50 ml/min). Can be administered in patients with mild renal impairment (creatinine clearance 51 to 80 ml/min) with no dose adjustment. No studies have been conducted in patients with severe renal impairment or end-stage renal disease (creatinine clearance ≤ 30 ml/min) and is not recommended for use. It may only be used in patients with severe renal impairment if the benefit outweighs the potential risk with careful monitoring of renal function and adverse events. **Hepatic impairment:** Can be administered in patients with mild or moderate hepatic impairment (Child-Pugh A or B) with no dose adjustment. Not recommended in patients with severe hepatic impairment.

Contraindications: Hypersensitivity to the active substance or to any of the excipients. Breast-feeding during treatment and for 1 month after the last dose.

Warnings and precautions: Haematological toxicity: Treatment should not be started in patients until they have recovered from haematological toxicity caused by previous anticancer therapy. Baseline testing followed by monthly monitoring of complete blood counts is recommended for first 12 months of treatment and periodically thereafter. Treatment should be interrupted and appropriate haematological testing should be initiated if patient develops severe haematological toxicity or blood transfusion dependence. **Myelodysplastic syndrome/Acute Myeloid Leukaemia (MDS/AML):** If confirmed while on treatment, it is recommended that Lynparza should be discontinued and the patient treated appropriately. **Pneumonitis:** Interrupt Lynparza treatment and promptly investigate as appropriate. Discontinue Lynparza if pneumonitis is confirmed and treat patient appropriately.

Drug interactions: The recommended Lynparza monotherapy dose is not suitable for combination with myelosuppressive anticancer medicinal products. Caution and close monitoring if vaccines or immunosuppressant agents are co-administered. **Effect of other drugs on Lynparza:** Strong CYP3A inhibitors (e.g. itraconazole, telithromycin, clarithromycin, protease inhibitors boosted with ritonavir or cobicistat, boceprevir, telaprevir) or moderate CYP3A inhibitors (e.g. erythromycin, diltiazem, fluconazole, verapamil) are not recommended. If co-administered, the dose of Lynparza should be reduced. It also not recommended to consume grapefruit juice. Strong CYP3A inducers (e.g. phenytoin, rifampicin, rifapentine, carbamazepine, nevirapine, phenobarbital, and St John's Wort) are not recommended with Lynparza as the efficacy of Lynparza could be substantially reduced. The magnitude of the effect of moderate to strong inducers (e.g. efavirenz, rifabutin) on olaparib exposure is not established, therefore the co-administration of Lynparza with these medicinal products is also not recommended. **Effect of Lynparza on other drugs:** Caution and appropriate clinical monitoring is recommended when sensitive CYP3A substrates or substrates with a narrow therapeutic margin (e.g. simvastatin, cisapride, cyclosporine, ergot alkaloids, fentanyl, pimozide, sirolimus, tacrolimus and quetiapine) or P-gp substrates (e.g. simvastatin, pravastatin, dabigatran, digoxin and colchicine) are combined with Lynparza. Lynparza may reduce efficacy of hormonal contraceptives. Lynparza may increase the exposure to substrates of BCRP (e.g. methotrexate, rosuvastatin), OATP1B1 (e.g. bosentan, glibenclamide, repaglinide, statins and valsartan), OCT1, MATE1, MATE2K (e.g. metformin), OCT2 (e.g. serum creatinine), OAT3 (e.g. furosemide and methotrexate). Caution if co-administered with any statin.

Pregnancy and lactation: Women of childbearing potential should not become pregnant while on Lynparza and not be pregnant at the beginning of treatment. A pregnancy test should be performed prior to treatment and effective contraceptive should be used during therapy and 1 month after receiving last dose. The efficacy of some hormonal contraceptives may be reduced if co-administered with olaparib. Therefore, an additional non-hormonal contraceptive method and regular pregnancy tests should be considered during treatment. Lynparza could cause foetal harm to a pregnant woman. No studies have been conducted with Lynparza in breastfeeding women.

Ability to drive and use machines: Asthenia, fatigue and dizziness have been reported and patients who experience these symptoms should observe caution when driving or using machines.

Undesirable events: Consult SmPC for full list of side effects. Very common: Nausea, vomiting, diarrhoea, dyspepsia, dysgeusia, decreased appetite, fatigue (including asthenia), headache, dizziness, anaemia, cough. Common: Thrombocytopaenia, neutropenia, leukopenia, upper abdominal pain, stomatitis, rash, increase in blood creatinine. Uncommon: Lymphopenia, hypersensitivity, dermatitis, mean corpuscular volume elevation.

Legal category: POM.

Marketing authorisation number: EU/1/14/959/002 and 004

Presentation & Basic NHS cost: 56 Film-Coated Tablets 150mg (7 blisters of 8 tablets each): £2,317.50 (14-days), 56 Film-Coated Tablets 100mg (7 blisters of 8 tablets each): £2,317.50 (14-days)

Marketing Authorisation Holder: AstraZeneca AB, SE-151 85 Södertälje, Sweden.

Further information is available from: AstraZeneca UK Ltd., 600 Capability Green, Luton, LU1 3LU, UK.

Date of preparation: 04/2018

ONC 18 0004

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to AstraZeneca on 0800 783 0033

PRESCRIBING INFORMATION

LYNPARZA™ ▼ (olaparib) 50mg HARD CAPSULES

Consult Summary of Product Characteristics before prescribing.

Indication: As monotherapy for the maintenance treatment of adult patients with platinum-sensitive relapsed *BRCA*-mutated (germline and/or somatic) high grade serous epithelial ovarian, fallopian tube or primary peritoneal cancer who are in response (complete response or partial response) to platinum-based chemotherapy.

Presentation: 50mg olaparib hard capsules.

Dosage and administration: Treatment should be initiated and supervised by a physician experienced in the use of anticancer therapies. Breast cancer susceptibility gene (*BRCA*) mutation (either germline or tumour) needs to be confirmed by a validated test prior to treatment. Recommended dose is 400mg (8 capsules) twice daily, equivalent to a total daily dose of 800mg. Take at least 1 hour after food; refrain from food preferably for up to 2 hours afterwards. Treatment should start no later than 8 weeks after completion of the final dose of the platinum-containing regimen and continue until progression of underlying disease. **Lynparza capsules (50mg) should not be substituted for Lynparza Tablets (150mg and 100mg) on a milligram-to-milligram basis due to differences in the dosing and bioavailability of each formulation. Specific dose recommendations for each formulation should be followed.** If a dose is missed, take next normal dose at scheduled time. **Dose adjustments:** Treatment interruption to manage adverse reactions such as nausea, vomiting, diarrhoea, anaemia and dose reduction can be considered. Concomitant use of strong or moderate CYP3A inhibitors is not recommended and alternative agents should be considered. If a strong CYP3A inhibitor must be co-administered, recommended dose reduction is to 150mg twice daily or dose reduction to 200mg twice daily with a moderate CYP3A inhibitor. **Elderly**: No adjustment in starting dose is required. There are limited clinical data in patients aged 75 years and over. **Renal impairment:** Recommended dose is 300mg twice daily for patients with moderate renal impairment (creatinine clearance 31 to 50 ml/min). Can be administered in patients with mild renal impairment (creatinine clearance 51 to 80 ml/min) with no dose adjustment. No studies have been conducted in patients with severe renal impairment or end-stage renal disease (creatinine clearance ≤ 30 ml/min) and is not recommended for use. It may only be used in patients with severe renal impairment if the benefit outweighs the potential risk with careful monitoring of renal function and adverse events. **Hepatic impairment:** Can be administered in patients with mild or moderate hepatic impairment (Child-Pugh A or B) with no dose adjustment. Not recommended in patients with severe hepatic impairment.

Contraindications: Hypersensitivity to the active substance or to any of the excipients. Breast-feeding during treatment and 1 month after the last dose.

Warnings and precautions: Haematological toxicity: Treatment should not be started in patients until they have recovered from haematological toxicity caused by previous anticancer therapy. Baseline testing followed by monthly monitoring of complete blood count is recommended for first 12 months of treatment and periodically thereafter. Treatment should be interrupted and appropriate haematological testing should be initiated if patient develops severe haematological toxicity or blood transfusion dependence. **Myelodysplastic syndrome/Acute Myeloid Leukaemia (MDS/AML):** If confirmed while on treatment, it is recommended that Lynparza should be discontinued and the patient treated appropriately. **Pneumonitis:** Interrupt Lynparza treatment and promptly investigate as appropriate. Discontinue Lynparza if pneumonitis is confirmed and treat patient appropriately.

Drug interactions: The recommended Lynparza monotherapy dose is not suitable for combination with myelosuppressive anticancer medicinal products. Caution and close monitoring if vaccines or immuno-suppressant agents are co-administered. **Effect of other drugs on Lynparza:** Strong CYP3A inhibitors (e.g. itraconazole, telithromycin, clarithromycin, protease inhibitors boosted with ritonavir or cobicistat, boceprevir, telaprevir) or moderate CYP3A inhibitors (e.g. erythromycin, diltiazem, fluconazole, verapamil) are not recommended. If co- administered, the dose of Lynparza should be reduced. It is also not recommended to consume grapefruit juice. Strong CYP3A inducers (e.g. phenytoin, rifampicin, rifapentine, carbamazepine, nevirapine, phenobarbital, and St John's Wort) are not recommended with Lynparza as the efficacy of Lynparza could be substantially reduced. The magnitude of the effect of moderate to strong inducers (e.g. efavirenz, rifabutin) on olaparib exposure is not established, therefore the co- administration of Lynparza with these medicinal products is also not recommended. **Effect of Lynparza on other drugs:** Caution and appropriate clinical monitoring is recommended when sensitive CYP3A substrates or substrates with a narrow therapeutic margin (e.g. simvastatin, cisapride, cyclosporine, ergot alkaloids, fentanyl, pimozide, sirolimus, tacrolimus and quetiapine) or P-gp substrates (e.g. simvastatin, pravastatin, dabigatran, digoxin and colchicine) are combined with Lynparza. Lynparza may reduce efficacy of hormonal contraceptives. Lynparza may increase the exposure to substrates of BCRP (e.g. methotrexate, rosuvastatin), OATP1B1 (e.g. bosentan, glibenclamide, repaglinide, statins and valsartan), OCT1, MATE1, MATE2K (e.g. metformin), OCT2 (e.g. serum creatinine), OAT3 (e.g. furosemide and methotrexate). Caution if co-administered with any statin.

Pregnancy and lactation: Women of childbearing potential should not become pregnant while on Lynparza and not be pregnant at the beginning of treatment. A pregnancy test should be performed prior to treatment and effective contraception should be used during therapy and 1 month after receiving last dose. The efficacy of some hormonal contraceptives may be reduced if co-administered with olaparib. Therefore, an additional non-hormonal contraceptive method and regular pregnancy tests should be considered during treatment. Lynparza could cause foetal harm to a pregnant woman. No studies have been conducted with Lynparza in breast-feeding women.

Ability to drive and use machines: Asthenia, fatigue and dizziness have been reported and patients who experience these symptoms should observe caution when driving or using machines.

Undesirable events: Consult SmPC for full list of side effects. Very common: Nausea, vomiting, diarrhoea, dyspepsia, dysgeusia, decreased appetite, fatigue (including asthenia), headache, dizziness, anaemia, cough. Common: Neutropenia, thrombocytopenia, leukopenia, upper abdominal pain, stomatitis, rash, increase in blood creatinine. Uncommon: Hypersensitivity, dermatitis, lymphopenia, mean corpuscular volume elevation.

Legal category: POM.

Marketing authorisation number: EU/1/14/959/001.

Presentation & Basic NHS cost: 448 Hard Capsules (4 bottles of 112 capsules): £3550.

Marketing Authorisation Holder: AstraZeneca AB, SE-151 85 Södertälje, Sweden.

Further information is available from: AstraZeneca UK Ltd., 600 Capability Green, Luton, LU1 3LU, UK.

Date of preparation: 04/2018

ONC 18 0009

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SEE ME

I have platinum-sensitive relapsed ovarian cancer

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Progression-free for longer vs. placebo[1]

Study 19

Lynparza capsules, compared to placebo, was shown to significantly **reduce the risk of disease progression or death by 65%** (HR 0.35; 95% CI = 0.25-0.49; p<0.00001); providing a median **improvement in PFS of 3.6 months** (8.4 vs. 4.8 months) in women with high-grade platinum-sensitive relapsed (PSR) ovarian cancer regardless of *BRCA*m status[1*]

SOLO2

Lynparza tablets, compared to placebo, was shown to significantly **reduce risk of disease progression or death by 70%** (HR = 0.30; 95% CI = 0.22-0.41; p<0.0001); providing a median **improvement in PFS of 13.6 months** (19.1 vs. 5.5 months) in women with g*BRCA*m high-grade PSR ovarian cancer[1]

Lynparza monotherapy has been associated with adverse reactions generally of mild or moderate severity (CTCAE 1 or 2) and generally not requiring treatment discontinuation. The most frequently observed adverse reactions across clinical trials in patients receiving Lynparza monotherapy (≥ 10%) were nausea, vomiting, diarrhoea, dyspepsia, fatigue, headache, dysgeusia, decreased appetite, dizziness, and anaemia[1]

Lynparza tablets are indicated as monotherapy for the maintenance treatment of adult patients with platinum-sensitive relapsed high-grade epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in response (complete response or partial response) to platinum-based chemotherapy[1]

Lynparza tablets (150 mg and 100 mg) should not be substituted for Lynparza capsules (50 mg) on a milligram-to-milligram basis due to differences in the dosing and bioavailability of each formulation. Therefore, the specific dose recommendations for each formulation should be followed[1]

Adverse events should be reported. Reporting forms can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to AstraZeneca on 0800 783 0033

*Lynparza capsules are indicated as monotherapy for the maintenance treatment of adult patients with platinum-sensitive relapsed BRCA-mutated (germline and/or somatic) high grade serous epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in response (complete response or partial response) to platinum-based chemotherapy.

Reference:
1. Lynparza 100mg and 150mg film-coated tablets Summary of Product Characteristics, May 2018. Available at: https://www.medicines.org.uk/emc/product/9204/smpc. Last accessed June 2018.

GB-12586; Date of preparation: June 2018

MSD AstraZeneca