BGCS 2017

British Gynaecological Cancer Society

Annual Scientific Meeting

15th – 16th June 2017,
Technology and Innovation Centre, Glasgow

In Collaboration with:

NCRI National Cancer Research Institute

Final programme and book of abstracts

BGCSConference.com

@BGCSConference #BGCS2017

Lynparza™
olaparib
capsules 50 mg

I have ovarian cancer.

TEST ME

for BRCAm.

TREAT ME

with Lynparza (olaparib).

Lynparza is 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.[1]

AstraZeneca

LYNPARZA™ 50 MG HARD CAPSULES (olaparib) PRESCRIBING INFORMATION. Consult Summary of Product Characteristics before prescribing.

Indication: 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:** Recommended dose is 400mg (eight capsules) twice daily, take at least one 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. 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. **Dose adjustments:** Treatment interruption and dose reduction may be considered to manage adverse reactions such as nausea, vomiting, diarrhoea and anaemia. Recommended dose is 200mg twice daily. Reduction to 100mg twice daily can be considered if required. If a strong or moderate CYP3A inhibitor must be co-administered, the recommended olaparib dose reduction is 150mg twice daily with a strong CYP3A inhibitor or 200mg twice daily with a moderate CYP3A inhibitor. **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. Not recommended for use in patients with severe renal impairment or end-stage renal disease (creatinine clearance ≤ 30 ml/min) since no data in such patients. Lynparza may only be used in severe renal impairment if the benefit outweighs the potential risk, and patient should be carefully monitored for renal function and adverse events. **Hepatic impairment:** Can be administered to patients with mild hepatic impairment (Child-Pugh A) with no dose adjustment. Not recommended for use in patients with moderate or severe hepatic impairment. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients. Pregnancy and breast-feeding. **Warnings and precautions:** *Haematological toxicity:* Treatment should not be started until there is a full recovery 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 taking Lynparza, treat appropriately. Where additional anticancer therapy is recommended, discontinue Lynparza. **Pneumonitis:** Interrupt Lynparza treatment and promptly investigate as appropriate. Discontinue Lynparza if pneumonitis is confirmed. **Drug interactions:** Not suitable for combination with other anticancer medicinal products. Caution and close monitoring if vaccines or immunosuppressant agents are co-administered. **Effect of other drugs on olaparib:** Co-administration with strong or moderate CYP3A inducers is not recommended (e.g. phenytoin, rifampicin, carbamazepine and St John's Wort). Efficacy of olaparib may be reduced if combined. Olaparib co-administration with strong (e.g. itraconazole, clarithromycin) or moderate (e.g. ciprofloxacin, diltiazem) CYP3A inhibitors is not recommended. If a strong or moderate CYP3A inhibitor must be co-administered, the dose of olaparib should be reduced. It is also not recommended to consume grapefruit juice while on olaparib therapy. P-gp inhibitors may increase exposure to olaparib. Effect of olaparib on other drugs: In particular, caution should be exercised if olaparib is administered in combination with any statin. The efficacy of hormonal contraceptives may be reduced if co-administered with olaparib. Caution and appropriate clinical monitoring recommended when sensitive CYP3A substrates or substrates with a narrow therapeutic margin (e.g. simvastatin, cyclosporine, fentanyl, and quetiapine) or P-gp substrates (e.g. simvastatin, digoxin, colchicine) are combined with olaparib. Appropriate clinical monitoring is recommended for patients receiving this type of medication. Olaparib may increase the exposure to substrates of OATPB1 (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). **Pregnancy and lactation:** Women of childbearing potential should not become pregnant while on Lynparza. A pregnancy test should be performed prior to treatment and effective contraceptive should be used during therapy and 1 month after receiving last dose'. **Ability to drive and use machines:** Asthenia, fatigue and dizziness have been reported. **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, neutropaenia, lymphopaenia, mean corpuscular volume elevation, and increase in blood creatinine. *Common:* Thrombocytopaenia, upper abdominal pain, stomatitis.

Legal category: POM. **Marketing authorisation number:** EU/1/14/959/001. **Basic NHS cost:** 448 Hard 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.

LYNPARZA is a trade mark of the AstraZeneca group of companies.

Date of preparation: 12/2016

ONC 16 0041

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.

Reference: 1) Lynparza Summary of Product Characteristics

GB-5180; Date of preparation: May 2017

CONTENTS

Welcome 2
Next Meeting 3
Scientific Programme 4
Invited Speakers 8
General Information 10
Venue Floorplans 13
List of Exhibitors and Sponsors 15
Satellite Symposia 10
Oral Abstracts 19
Poster Abstracts 27
Author Index 157

Platinum Sponsor
Medtronic

Bronze Sponsors
Astra Zeneca

WELCOME

Dear Colleagues,

On behalf of the Organising Committee, I would like to welcome you to the 2017 Annual Scientific Meeting of the British Gynaecological Cancer Society (BGCS). We want the BGCS annual meeting to reflect the interests of all disciplines who share a common goal in improving gynaecological cancer care. We have worked closely with the NCRI and Dutch Gynaecological Oncology Society to put together a varied and interesting educational programme.

We very much hope that you enjoy the programme and actively contribute in all sessions to bring out the best of debate and discussion. There will also be plenty of opportunities to network with old and new colleagues at the social events. Enjoy your visit to Glasgow, a city with something for everyone.

Dr Kevin Burton **Professor Nick Reed,**
Chairs of the Local Organising Committee, West of Scotland Cancer Network

Local Organising Committee

Kevin Burton
Nick Reed
Iain McNeish
Smruta Shanbhag
Elaine Leung
Sophie Hepple
David Millan

www.bgcsconference.com

In Collaboration with:

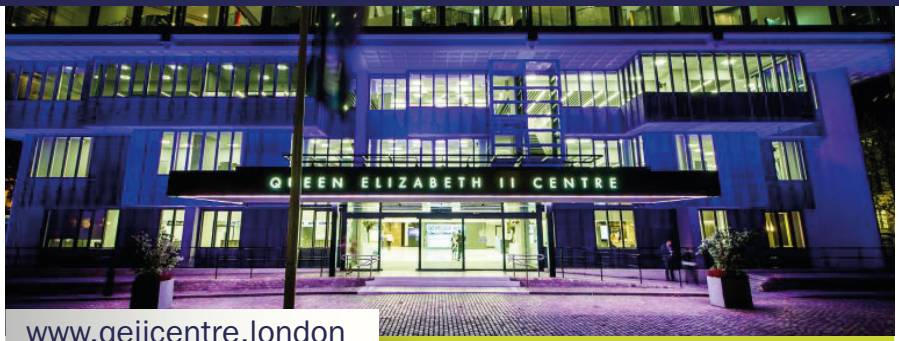
NCRI National Cancer Research Institute

Conference Organisers

BGCS 2017 Secretariat
c/o In Conference Ltd, Unit 1, Q Court, Quality Street, Edinburgh, EH4 5BP Scotland, UK
Tel: +44(0)131 336 4203 Email: bgcs@in-conference.org.uk
Web: http://bgcsconference.com

SAVE THE DATE

BGCS2018



www.qeiicentre.london

5th and 6th July 2018
QEII Centre, Westminster, London

Representation from across the multi-disciplinary team

In collaboration with
NCRI and NFGON

NCRI National Cancer Research Institute

NFGON THE NATIONAL FORUM OF GYNAECOLOGICAL ONCOLOGY NURSES

For more information
contact ISO.health
41 Corsham St,
London, N1 6DR

Email: bgcs@isohealth.co.uk
Website: www.bgcs.org.uk

BRITISH GYNAECOLOGICAL CANCER SOCIETY

SCIENTIFIC PROGRAMME

Thursday 15th June 2017		Location
07:30 - 18:00	Registration & Speaker Preview Open	Level 2 Foyer
10:00 - 10:10	**Welcome** *Kevin Burton and Nick Reed, Joint Chairs of the Scientific Committee*	Main Auditorium
10:10 - 11:30	**Plenary Session 1: Endometrial Cancer – From Lab to Bedside** **Chairs:** *Kevin Burton & Nick Reed*	Main Auditorium
10:10 - 10:35	**Clinical Applications of POL E Mutation and Immunotherapy in Endometrial Cancer** *Richard Edmondson, The University of Manchester, UK*	
10:35 - 11:05	**Choosing the Best Adjuvant Treatments - PORTEC 3 and 4** *Carien L Creutzberg, Leiden University Medical Center, The Netherlands*	
11:05 - 11:30	**NACT and Delayed Surgery for Endometrial Cancer** *Nick Reed, Beatson Oncology Centre, UK*	
11:30 – 12:45	**Plenary Session 2: Vulva Cancer** **Chairs:** *Nadeem Siddiqui & Andy Nordin*	Main Auditorium
11:30 - 12:00	**Evolution of Plastic Surgery in Vulval Cancer – What can we learn** *John Telfer, NHS Greater Glasgow and Clyde, UK*	
12:00 - 12:25	**HPV as a Predicator of Invasive Cancer Outcome** *Sarah Bell, University of Glasgow, UK*	
12:25 – 12:45	**NACT or concomitant chemo-radiotherapy – optimal management of locally advanced Vulva cancer** *Alex Taylor, The Royal Marsden NHS Foundation Trust, UK*	
12:45 - 14:00	Lunch / Exhibition / Poster Viewing	Level 2 and 3 Foyer

14:00 - 15:35	**Joint Session with NCRI – Clinical Trials Showcase** **Chairs:** *Iain McNeish & Richard Edmondson*	Main Auditorium
14:00 - 14:30	**Clinical Trials Update 1 : Ovary** *Ros Glasspool, University of Glasgow, UK*	
14:30 - 14:55	**Clinical Trials Update 2 :Cervix and Vulva** *Emma Hudson, South Wales Cancer Centre, UK*	
14:55 – 15:20	**Clinical Trials Update 3 : Uterine Tumours** *Richard Edmondson, St Mary's Hospital, UK*	
15:20 – 15:35	**Dutch Gynaecological Oncology Group** *Carien L Creutzberg, Leiden University Medical Center, The Netherlands*	
14:00 – 15.35	**Parallel Unit Lead Session**	Conference Room 2
14:00 – 14:05	**Welcome** Andy Nordin	
14:05 – 14:25	**Non-surgical management of endometrial cancer/atypical hyperplasia** Nithya Ratnevelu (Gateshead)	
14:25 – 14:45	**Cancer Genetics at Unit Lead Level** Robin Crawford (Cambridge)	
14:45 – 15:05	**The ROCkeTS Study & IOTA Rules** Sudha Sundar (Birmingham)	
15:05 – 15.15	**Laparoscopic surgery for endometrial cancer - evidence & audit** Partha Sengupta (Durham)	
15.15 – 15.25	**The role of Cadaveric Surgery in gynaecological training** Partha Sengupta (Newcastle)	
15.25 – 15.35	**Discussion on role of BGCS for Unit Leads**	
15:35 – 16:10	**Tea/Coffee/Exhibition/Poster Viewing**	Level 2 and 3 Foyer

16:10 – 17:30	**Plenary Session 3: Rare Cancers Updates** **Chairs:** *Nick Reed & David Millan*	Main Auditorium
16:10 – 16:30	**SCC in Ovarian Dermoids** *Iain McNeish, University of Glasgow, UK*	
16:30 – 16:45	**Pathology of NET in Genital Tract Tumours** *Glenn McCluggage, Belfast Health and Social Care Trust, UK*	
16:45 – 17:05	**RANGO. Rare Tumour Registry and Data Base** *Marcia Hall, Mount Vernon Hospital, UK*	
17:05 – 17:25	**Update on INTERLACE and STATEC** *Mary McCormack and Tim Mould*	
17:30- 18.00	**AGM**	
19:30 – 20.00 20.00 - 23.00	**Welcome Reception Courtesy of the City of Glasgow** **BGCS Conference Dinner** *(Must be booked in advance)*	The Barony Hall 1 McLeod Street, (off High St) Glasgow, G4 0RA

Friday 16th June 2017		Location
07.30 - 17:00	Registration & Speaker Preview Open	Level 2 Foyer
07:50 - 08:50	TESARO Breakfast Symposium 	Conference Room 6 & 7
09:00 - 10:00	**Plenary Session 4: Ovarian Cancer** **Chairs:** *Charlie Gourley & Smruta Shanbhag*	Main Auditorium
09:00 - 09:20	**Unraveling Tumor Heterogeneity Using Next Generation Imaging: Radiomics, Radiogenomics and Habitat Imaging in Ovarian Cancer** *Evis Sala, Memorial Sloan Kettering Cancer Center, USA*	
09:20 - 09:40	**Personalising Surgery in Ovarian Cancer** *Sadaf Ghaem-Maghami, Imperial College London, UK*	
09:40 - 10:00	**OVHIPEC – Dutch experience with HIPEC** *Willemien van Driel, Antoni van Leeuwenhoek, The Netherlands*	
10:00 – 11:20	**Plenary Session 5: Cervical Cancer** **Chairs:** *Rosie Harrand & John Shepherd*	Main Auditorium
10:00 - 10:20	**FPS/Conservative Management of Early Cervix Cancer** *Philippe Morice, Gustave Roussy, France*	
10:20 – 10:40	**Imaging in Early Cervical Cancer: How Best to Detect Tumours <2cm** 1 The European view *Andrea Rockall, Imperial College London, UK* 2 The North American approach *Evis Sala MSKCC, USA*	
10:40 – 11:00	**EORTC 55994 : NACT and Surgery vs CCRT for Cervix Cancer - Trial Update** *Gemma Kenter, Antoni van Leeuwenhoek, The Netherlands*	
11:00 – 11:20	**Fertility Options for Women Requiring Radical Therapy ACS Perspective** *Scott Nelson, University of Glasgow, UK*	
11:20 - 11:50	**Tea/Coffee/Exhibition/Poster Viewing**	Level 2 and 3 Foyer

09:20 – 13:00	**NFGON Parallel Session**	Conference Room 2
09:20 – 09.30	**Welcome** *Natalie Percival, President NFGON and Advanced Nurse Practitioner, The Royal Marsden NHS Foundation Trust, UK*	
09:30 - 10:00	**Menopause** *Keith Spowart – Department of Obstetrics and Gynaecology*	
10:00 - 10:30	**Telephone follow up** *Rhona Scott -Macmillan Nurse Specialist Gynaecology*	
10:30 - 11:00	**Genetics** *Catherine Watt – Principal Genetic Counsellor*	
11:00 - 11:30	**Tea / Coffee**	
11:30 - 12:15	**"Share your Experience"** *Round the table discussions*	
12:30 - 13:00	**Nurse Led Endometrial Cancer Follow Up** *Rae Roan – Clinical Nurse Specialist*	

11:50 - 13:10	**Proffered Papers "FLITS"** **Chairs:** *Phil Roland & Scott Fegan*	Main Auditorium
11.50-12.00	**O – 1** **Significant Gaps in Support for Women Post Cervical Cancer Treatment: Data from the Largest Survey on Long Term Consequences of Treatment.** *Claire Cohen, Jo's Cervical Cancer Trust, London, United Kingdom*	
12.00-12.10	**O - 2** **Loss of Pten Induces an Immunosuppressive Environment and Influences Survival and Platinum Sensitivity in High Grade Serous Ovarian Cancer** Malcolm Farquharson, Wolfson Wohl Cancer Research Centre, Glasgow, UK	
12.10-12.20	**O – 3** **Current Detection Rates and Time to Detection of all Identifiable Brca Carriers in the Greater London Population** *Faiza Gaba, Barts Cancer Institute, London, UK*	
12.20-12.30	**O – 4** **The Role off OSR2 in Non-Uterine Pelvic High Grade Serous Carcinoma: A Novel Tumour Suppressor?** *James Beirne, Centre for Cancer Research and Cell Biology, Belfast, UK*	
12.30-12.40	**O – 5** **Long Term Results from RT3 VIN: A Multi-Centre, Randomised, Phase II Trial Of Cidofovir Or Imiquimod Treatment For Vulval Intraepithelial Neoplasia 3** *Sadie Jones, Cardiff University, UK*	
12.40-12.50	**O – 6** **Using the DNA Damage Response to Identify Platinum -Sensitive High-Grade Serous Ovarian Cancer; The Synergy Between Homologous Recombination and Nucleotide Excision Repair** *Zahra Faraahi, University of Manchester, UK*	
12.50-13.00	**O – 7** **Follow Up Of Low Risk Endometrial Cancer In a Nurse Led Telephone Clinic** *Erica McGaughnay, NHS Tayside, Dundee, UK*	
13.00-13.10	**O – 8** **Inhibition of Maternal Embryonic Leucine-Zipper Kinase is a Novel Therapy for Non-Uterine Pelvic High Grade Serous Carcinoma.** James Beirne, Centre for Cancer Research and Cell Biology, Belfast, UK	

13:10 - 14:15	Lunch / Exhibition / Poster Viewing *(Exhibition closes after lunch)*	Level 2 and 3 Foyer
13:15 - 14:15	AstraZeneca Lunch Symposia 	Conference Room 6 & 7
14:15 – 15:00	**Update from ASCO/SGO** **Chairs:** *Raj Naik & Azmat Sadozye*	Main Auditorium
14:15 - 15:00	1. Surgical Topics *Christina Fotopoulou, Imperial College London, UK* 2. Medical Topics *Iain McNeish, Institute of Cancer Sciences, University of Glasgow, UK*	
15:00 – 15:40	**Plenary Session 6: Imaging** **Chairs:** *Sophie Hepple & Evis Sala*	Main Auditorium
15:00 – 15:30	**Imaging MAPPING and BEYOND** *Andrea Rockall, Imperial College London, UK*	
15:30 – 15:40	**Discussion**	
15:40 - 16:40	**Plenary Session 7: Surgical Topics** **Chairs:** *Kevin Burton & Simon Crawford*	Main Auditorium
15:40 – 16:00	**General Surgical Management of Exenteration** *Pete Chong, NHS Greater Glasgow and Clyde, UK*	
16:00 – 16:15	**Evidence Base Supporting Robotic Surgery for Endometrial Cancer** *Thomas Ind, St George's Hospital, London*	
16:15 - 16:35	**ESMO Vulva cancer Guidelines** *Ate van der Zee, University Medical Center Groningen, The Netherlands*	
16:35 – 16:40	**Prizes for Best Oral and Poster Presentations**	
16:40	***Close of Conference***	

SATELLITE SYMPOSIA

Friday 16th June 07:50 – 08:50 **Level 3 : Conference Room 6 & 7**

TESARO Breakfast Symposium

Chair: Professor Charlie Gourley, University of Edinburgh

A paradigm shift in Ovarian Cancer

Sessions:

1. **Molecular characterisation of HGSOC**
   Professor Charlie Gourley, University of Edinburgh
2. **A new treatment landscape for HGSOC**
   Dr Rebecca Kristeleit, UCL Cancer Institute
3. **Expanding the nurses role in the management of HGSOC**
   Natalie Percival, Royal Marsden Hospital, London

Friday 16th June 13:15 – 14:15 **Level 3 : Conference Room 6 & 7**

AstraZeneca Lunch Symposia

Prevention, prognosis and PARP inhibitors – the value of BRCA testing in ovarian cancer

Speakers

Mr Raj Naik, Queen Elizabeth Hospital
Prof. Charlie Gourley, University of Edinburgh
Dr Geoff Hall, The Leeds Teaching Hospitals
Ms Natalie Percival, The Royal Marsden NHS Foundation Trust

Followed by Question and Answer Session

(Lunch can be taken into the room)

Indicated for the treatment of advanced ovarian cancer in women who have failed a first-line platinum-based chemotherapy regimen

CAELYX 2mg/ml CONCENTRATE FOR SOLUTION FOR INFUSION PRESCRIBING INFORMATION ACTIVE INGREDIENT: Doxorubicin hydrochloride in a pegylated liposomal formulation. Please refer to Summary of Product Characteristics (SmPC) before prescribing. **INDICATION(S):** Monotherapy for patients with metastatic breast cancer, where there is an increased cardiac risk. Treatment of advanced ovarian cancer where a first-line platinum-based chemotherapy regimen has failed. With bortezomib for progressive multiple myeloma in patients who have received at least one prior therapy and already undergone or are unsuitable for bone marrow transplant. Treatment of AIDS-related Kaposi's sarcoma (KS) in patients with low CD4 counts (< 200 CD4 lymphocytes/mm^3) and extensive mucocutaneous or visceral disease (may be used as first-line systemic chemotherapy, or as second line chemotherapy in patients with disease that has progressed with, or in patients intolerant to, prior systemic chemotherapy comprising at least two of the following agents: a vinca alkaloid, bleomycin and standard doxorubicin (or other anthracycline)). **DOSAGE & ADMINISTRATION:** Administer as an intravenous infusion. See SmPC for instructions on preparation and special precautions for handling. Do not administer as a bolus injection or undiluted solution. **Breast/Ovarian cancer:** Administer 50 mg/m^2 intravenously once every 4 weeks for as long as the disease does not progress and the patient continues to tolerate treatment. **Multiple myeloma:** 30 mg/m^2 on day 4 of the bortezomib 3 week regimen as a 1 hour infusion given immediately after the bortezomib infusion, for as long as the patient responds satisfactorily and tolerates treatment. **AIDS-related KS:** 20mg/m^2 intravenously every 2 - 3 weeks. Avoid intervals shorter than 10 days to prevent drug accumulations and possible increased toxicity. See SmPC for dose modification. Treatment should last for 2-3 months to achieve a therapeutic response and continued as needed to maintain response. **Children:** Not recommended in patients below 18 years of age. **Renal and Hepatic Impairment:** See SmPC for details. **CONTRAINDICATIONS:** Hypersensitivity to doxorubicin hydrochloride or any of the excipients. Must not be used in AIDS-related KS that may be effectively treated with local therapy or systemic alfa-interferon. **SPECIAL WARNINGS & PRECAUTIONS:** Do not use interchangeably with other doxorubicin hydrochloride formulations. Frequently monitor ECG for reduction of QRS which may indicate cardiac toxicity; consider monitoring of cardiac function (i.e. echocardiography or MUGA). Patients with history of cardiovascular disease should only receive Caelyx if the benefits outweigh potential risk. Caution in patients who have received prior anthracycline therapy, dosage adjustment may be needed. Myelosuppression should be monitored by periodic blood counts during treatment. Examine patients regularly for any oral discomfort/oral ulceration as very rare cases of secondary oral cancer have been reported. Infusion-associated reactions, resulting very rarely in convulsions, may occur. **SIDE EFFECTS:** *Very common:* Palmar-plantar erythrodysesthesia, alopecia, rash, myelosuppression (leukopaenia, anaemia, neutropaenia, thrombocytopaenia), nausea, vomiting, stomatitis, constipation, diarrhoea, anorexia, neuralgia, headache, asthenia, fatigue, pyrexia, mucositis NOS. *Common:* Pharyngitis, folliculitis, fungal infection, cold sores (non-herpetic), herpes simplex, herpes zoster, oral candidosis, oral moniliasis, upper respiratory tract infection, thrombocythemia, lymphopaenia, anxiety, depression, insomnia, allergic reaction, dehydration, electrolyte abnormalities (hypokalaemia, hyperkalaemia, hypomagnesaemia, hyponatraemia, hypocalcaemia), paraesthesia, somnolence, dizziness, peripheral neuropathy, syncope, lacrimation, blurred vision, conjunctivitis, retinitis, ventricular arrhythmia, cardiovascular disorder, vasodilation, hypotension, orthostatic hypotension, hypertension, flushing, phlebitis, epistaxis, dyspnoea, cough, abdominal pain, dyspepsia, esophagitis, gastritis, dysphagia, mouth ulceration, oral pain, glossitis, upper abdominal pain, dry skin, skin discolouration, bullous eruption, dermatitis, erythematous rash, pruritus, exfoliative dermatitis, allergic dermatitis, leg cramps, bone pain, musculoskeletal pain, breast pain, vaginitis, scrotal erythema, dysuria, oedema, influenza-like illness, infusion-associated acute reactions, weight loss, other laboratory abnormalities (increases in alkaline phosphatase, AST and bilirubin). **Refer to SmPC for other side effects. PREGNANCY:** Do not use during pregnancy. Use effective contraceptive measures during treatment and for 6 months after stopping therapy. **BREAST-FEEDING:** Not recommended. **INTERACTIONS:** Caution when giving any other cytotoxic agents, especially myelotoxic agents at the same time. **LEGAL CATEGORY:** Prescription Only Medicine. **PRESENTATIONS, PACK SIZES, PRODUCT LICENCE NUMBERS & BASIC NHS COSTS:** 1 vial per pack, 20 mg/ 10 ml, EU/1/96/011/001, £360.23. 1 vial per pack, 50 mg/ 25 ml, EU/1/96/011/003, £712.49. **MARKETING AUTHORISATION HOLDER:** JANSSEN-CILAG INTERNATIONAL NV, Turnhoutseweg 30, B-2340 Beerse, Belgium. **FURTHER INFORMATION IS AVAILABLE FROM:** Janssen-Cilag Ltd, 50-100 Holmers Farm Way, High Wycombe, Buckinghamshire, HP12 4EG UK. ©Janssen-Cilag Ltd 2013 Prescribing information last revised: 19 September 2013. PIVER190913

Reporting suspected adverse reactions is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Janssen-Cilag Ltd on 01494 567447.

PHGB/CAE/0517/0002.
Date of preparation: May 2017.

CAELYX
(pegylated liposomal doxorubicin hydrochloride)

janssen
PHARMACEUTICAL COMPANIES OF Johnson & Johnson

GENERAL INFORMATION

Conference Dinner

Thursday 15th June 19.30 – 23.00
Barony Hall , 1 McLeod St, (off High St) Glasgow, G4 0RA, UK

The Dinner will include a welcome reception followed by a 3-course dinner with drinks and tickets must have been booked in advance. Please ask at the Registration Desk for a late ticket availability.

Certificate of Attendance

In order to receive a Certificate of Attendance, please ensure that you complete the on-line delegate survey which will be emailed to you at the end of the conference..

Exhibition

To enable us to keep registration fees as low as possible, it is critical that we have the support of commercial organisations at the conference. Please take time to visit our sponsors and exhibitors in the exhibition area on Level 2. The Exhibition will be open at the following times:

Thursday 15th June 09.30hrs – 18.00hrs
Friday 16th June 08.00hrs – 14.30hrs

Insurance

The Conference Organisers cannot accept any liability for personal injuries or for loss or damage to property belonging to delegates, either during, or as a result of the meeting. Please check the validity of your own personal insurance before travelling.

Registration/Information Desks

All delegates will receive their badge holder with lanyard and all relevant conference information upon arrival at the Technology and Innovation Centre. The registration desk will be located in the foyer area of Level 2.

Posters – Level 3

Posters can be displayed from 08.00hrs on Thursday 15th June.

Posters will be available to view for the duration of the conference and must be removed by 17.00hrs on Friday 16th June. Any posters not removed by this time will be destroyed..

THEME	
Chemotherapy	P – 1 to P – 4
Gynaecological Cancer Surgery	P – 5 to P – 82
Novel Biomarkers	P – 83 to P – 85
Pathology	P – 86 to P – 106
Quality of Life	P – 107 to P – 116
Radiotherapy	P – 117 to P – 121
Reconstructive Surgery	P – 122 to P – 123
Targeted Agents	P – 124 to P – 129

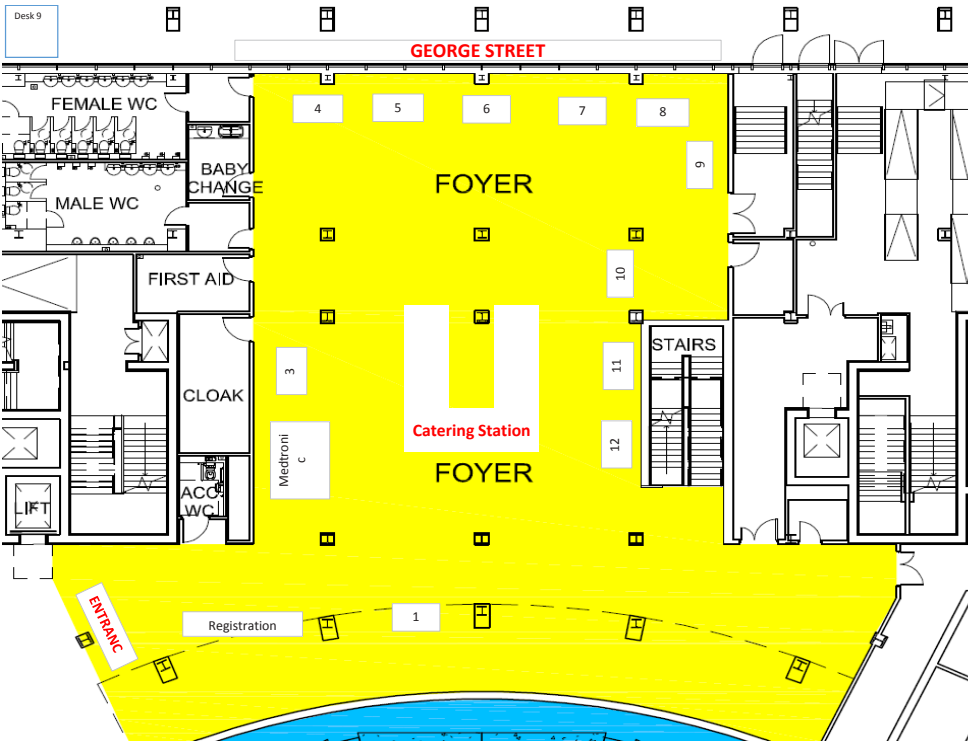
The Registration and Information Desks will be open at the following times:

Thursday 15th June 07.30 – 18.00
Friday 16th June 07.30 – 17.00

Speaker Presentation Check In (Level 3 : Conference Room 1)

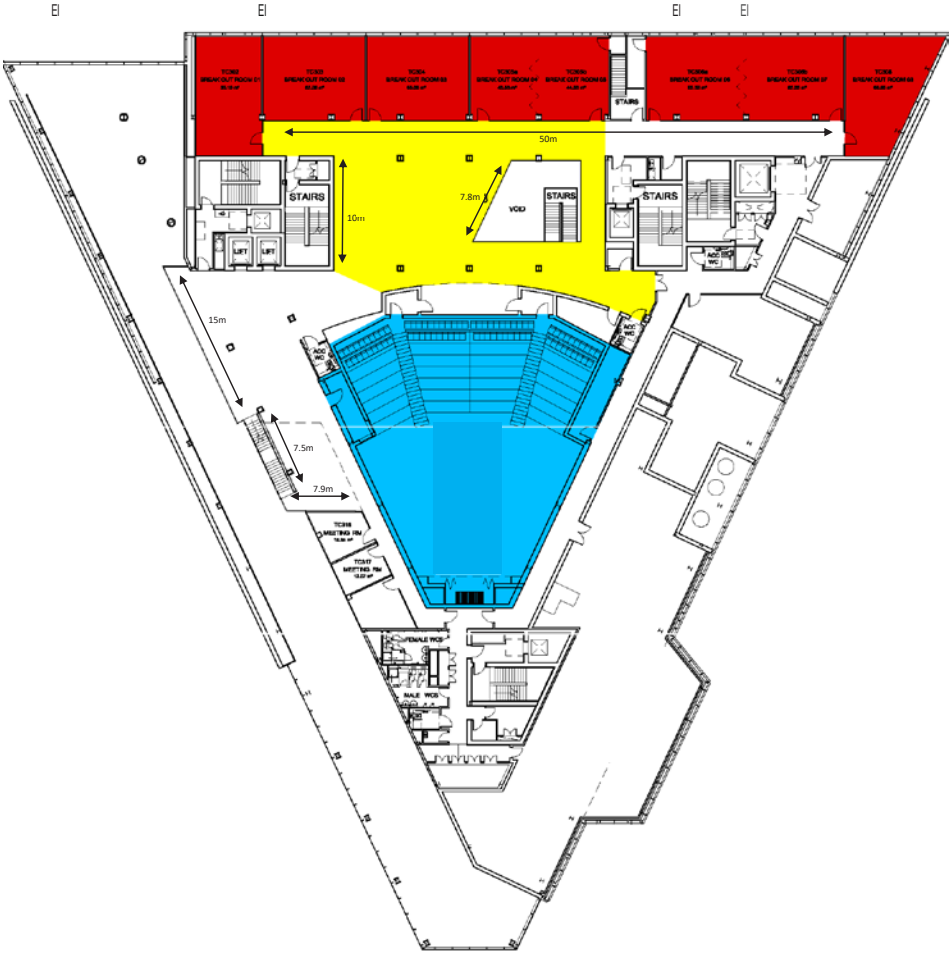
Presenters must check in their presentation at least four hours before they are due to speak. On the first day, the Speaker Presentation Room will be open from 08.00 – 17.30 and priority will be given to speakers in the morning session.

It will not be possible to check in presentations in the main plenary room. Staff will be on-hand in the Speaker Preview room to assist. Presenters do not need to bring a laptop as presentations will be loaded onto a main computer.



TIC Building, Level 2, Foyer

No	Company
1	BGCS
2	Medtronic
3	
4	BBRaun
5	Elemental Healthcare
6	Jo's Cervical Cancer Trust
7	Roche
8	Target Ovarian Cancer
9	Stericom
10	SMC Ltd
11	AstraZeneca
12	TESARO


50m
10m
7.8m
15m
7.5m
7.9m
STAIRS
LIFT
LIFT
VOID
STAIRS
STAIRS
MALE WCS
FEMALE WCS

LIST OF EXHIBITORS AND SPONSORS

We gratefully acknowledge the following organisations and companies for their generous support and sponsorship of the BGCS 2017 Meeting:

PLATINUM SPONSOR

MEDTRONIC UK LTD

Building 9, Croxley Business Park, Hatters Lane, Watford, Herts, WD18 8WW, UK

Contact: Kelly Sheanon UK/Ireland Energy Product Manager

Tel: +353 (0) 87 9151771

Email: kelly.sheanon@medtronic.com **Website:** www.medtronic.com

As a global leader in medical technology, services and solutions, Medtronic improves the lives and health of millions of people each year. We use our deep clinical, therapeutic and economic expertise to address the complex challenges faced by healthcare systems today. Let's take healthcare Further, Together. Learn more at Medtronic.com.

BRONZE SPONSOR

ASTRAZENECA

Horizon Place, 600 Capability Green, Luton. LU1 3LU, UK

Website: www.astrazeneca.co.uk

AstraZeneca is a global, innovation-driven biopharmaceutical business that focuses on the discovery, development and commercialisation of prescription medicines, primarily for the treatment of cardiovascular, metabolic, respiratory, inflammation, autoimmune, oncology, infection and neuroscience diseases. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide. For more information please visit: www.astrazeneca.co.uk

EXHIBITORS

B. BRAUN MEDICAL UK LTD

Thorncliffe Park, Sheffield, S35 2PW, UK

Contact: Sam Miller

Tel: 44 (0) 7972 007 376 **Fax:** +44 (0) 114 225 9111

Email: sam.miller@bbraun.com **Website:** www.b.bbraun.co.uk

B. Braun Medical strives to improve the lives of people throughout the world using our innovative product portfolio. The Aesculap Endosurgical division are delighted to attend the BGCS annual scientific meeting and showcase our portfolio including our EinsteinVision 3D Camera System and our advanced energy device, Caiman seal & cut.

BGCS

Contact: Mrs Deborah Lewis

Tel: +44(0) 7753 251675

Email: administrator@bcgs.org.uk **Website:** www.bgcs.org.uk

The BGCS is the UK's professional society dedicated to the specialty of gynaecological oncology. The Society's activities include development of clinical practice guidelines and policy formulation on a range of issues including commissioning of gynaecological cancer services, training and professional development, scientific research and innovation. The BGCS also actively collaborates with the range of gynaecological cancer charities, the NHS and other health service agencies and international partner organisations. The Society is a rich mix of surgical, medical and clinical oncologists, unit leads, radiologists, pathologists, scientists and nurse specialists. Our objective is to advance the science and art of gynaecological oncology for the benefit of the women.

ELEMENTAL HEALTHCARE LTD

Elemental House, Shefford Park Farm, Great Shefford, Hungerford, Berkshire, RG17 7ED

Contact: Melanie Goodall

Tel: +44 (0) 844 412 0020

Email: melanie@elementalhealthcare.co.uk

Website: www.elementalhealthcare.co.uk

Elemental Healthcare Ltd is a leading distributor providing innovative solutions in Minimally Invasive Surgery.

PINPOINT fluorescence imaging technology:

- Increasing Sentinel Lymph Node Detection Rate in Gynaecological Malignancies
- Provide accurate staging of cervical and endometrial cancer
- Prevent under/over-treating and associated complications with interventions such as pelvic lymphadenectomy.

JO'S CERVICAL CANCER TRUST

CAN Mezzanine, 49-51 East Road, London, N1 6AH, UK

Contact: Meghan Herring

Tel: +44 (0) 20 7250 8311

Email: info@jostrust.org.uk **Website:** www.jostrust.org.uk

Jo's Cervical Cancer Trust (www.jostrust.org.uk) is the UK's only charity dedicated to those affected by cervical cancer and cervical abnormalities. It offers a range of online and face to face support and information including: information materials, a Helpline 0808 802 8000, online forum, local support groups and an Ask The Expert service.

ROCHE PRODUCTS LTD

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

Contact: Alexa Urspruch

Tel: +44(0) 1707 366000

Email: alexa.urspruch@roche.com **Website:** www.roche.co.uk

Roche is the world's largest biotech company, with truly differentiated medicines in oncology, immunology, infectious diseases and neuroscience. Roche is also the world leader in in vitro diagnostics, tissue-based cancer diagnostics, and a frontrunner in diabetes management. Roche's personalised healthcare strategy aims at providing medicines and diagnostics that enable tangible improvements in the health, quality of life and survival of patients. Roche in the UK employs over 2,000 people in pharmaceuticals and diagnostics.

SCIENTIFIC MEDICAL & CLINICAL LTD (SMC LTD)

Units 6&7, Carrowreagh Business Park, Dundonald, BT16 1QQ

Contact: Vinay Mansukh

Tel: +44(0) 7800 84 84 64 **Fax:** 02890410137

Email: vmansukh@smcni.com **Website:** www.bovie-medical .com

SMC Ltd is a medical device company focusing on innovative technology. J-Plasma® is an advanced energy device combining the unique properties of cold helium plasma with RF energy. Helium plasma focuses RF energy for greater control of tissue effect, enabling a high level of precision and virtually eliminating unintended tissue trauma.

STERICOM LTD

Units 1 & 2 Higham Mead, Chesham, HP5 2AH, UK

Contact: Lucy Dicks

Tel: +44 (0) 1494 794315

Email: sales@stericom.com **Website:** www.stericom.com

Stericom Ltd. Designs & supplies specialist equipment for surgeons and practitioners working in gynaecology and in outpatient colposcopy.Our product range includes the innovative sterile single-use Kolpo-Kut/® /cervical biopsy forceps and the patented Surgitools MIS range for TLH & LAVH.

TARGET OVARIAN CANCER

2 Angel Gate, City Road, London, EC1V 2PT, UK

Contact: Katherine Pinder, Head of Supportive Services

Tel: +44 (0) 20 7923 5475

Email: info@targetovariancancer.org.uk

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,
- provide much-needed support to women with ovarian cancer

We're the only charity fighting ovarian cancer on all three of these fronts, across all four nations of the UK. We work with women, family members and health professionals to ensure we target the areas that matter most for those living with ovarian cancer.

TESARO UK LTD

1 Chalfont Park, Gerrards Cross, SL9 0BG

Contact: Dr Nikki Roebuck

Tel: +44 (0) 1753-910398

Email: nroebuck@tesarobio.com

Website: http://www.tesarobio.co.uk/uk/contact-us

Founded in 2010, TESARO is a biopharmaceutical company devoted to providing transformative therapies to people bravely facing cancer. We see new possibilities to responsibly develop and commercialise innovative treatments where others may not. Relationships are vital to the success of our business, and we are committed to being a trusted partner to the cancer community.

ORAL ABSTRACTS

O - 1

SIGNIFICANT GAPS IN SUPPORT FOR WOMEN POST CERVICAL CANCER TREATMENT: DATA FROM THE LARGEST SURVEY ON LONG TERM CONSEQUENCES OF TREATMENT.

Cohen C[1], **Shoosmith R**[1], Music R[1]

[1] *Jo's Cervical Cancer Trust, London, United Kingdom*

In the UK it is estimated that there are 81,000 women alive today who are living with & beyond a cervical cancer diagnosis. 78% diagnosed are between the ages of 25-64. Around 2/3rds of women will survive over five years. Diagnosis & subsequent treatment can have implications on quality of life which can result in high morbidity due to the impact of surgery, toxicity & radiation damage.

In 2015 Jo's Cervical Cancer Trust commissioned research to understand the long term impact on women who have been treated for cervical cancer. Two methods were used for data collection: a paper questionnaire (sent to patients who completed National Cancer Patient Experience Survey 2010-2015) & an online version. This methodology was produced with the intention to be used across other pelvic cancers groups.

866 women responded to the survey with 54% diagnosed between 2 – 5 years ago.

The data showed significant numbers of women experienced difficulties with a range of physical impacts but too few are having conversations about this with a doctor. This is particularly the case for those with bowel & bladder problems (50%), those who have problems with their sex life (2/3rd with negative changes had not told a doctor); & those whose fertility has been affected. Of those who received management & support services less than 50% said that these services met all of their needs; 9% said these services met very few or none of their needs.

More must be done to ensure women are able to access physical & emotional support mechanisms to ensure quality of life after cancer treatment is not reduced. There is a clear need for robust referral & care pathways to be put in place & recognition that there is a disparity between clinician & patient measurements of care outcomes.

O - 2

LOSS OF PTEN INDUCES AN IMMUNOSUPPRESSIVE ENVIRONMENT AND INFLUENCES SURVIVAL AND PLATINUM SENSITIVITY IN HIGH GRADE SEROUS OVARIAN CANCER

Farquharson M[1], **Walton J**[1], Dowson S[1], Ennis D[1], Mason S[2], Clark W[2], Bailey P[1], Upstill-Goddard R[1], Blyth K[2], McNeish I[1]

[1]*Wolfson Wohl Cancer Research Centre, Institute of Cancer Sciences, University of Glasgow, , ,* [2]*CRUK Beatson Institute, Glasgow,*

PTEN loss is a common event in high grade serous ovarian cancer (HGSOC). The Cancer Genome Atlas (TCGA) previously showed homozygous deletion of PTEN in 6% of HGSOC cases and, following re-analysis, it was demonstrated that 36% of tumour cells had heterozygous PTEN loss. PTEN is a phosphatase whose function is to regulate the PI3K/Akt pathway. PTEN loss is a negative prognostic factor in HGSOC and activation of the PI3K/Akt pathway may lead to chemotherapy resistance.

Using CRISPR/Cas9 gene editing, we have generated single (Trp53-/-) and double (Trp53-/-; Pten-/-) knockout derivatives of the ID8 mouse ovarian cancer cell to explore the role of these genes in tumorigenesis and platinum sensitivity in HGSOC.

Trp53-/-; Pten-/- cells have reduced Pten protein expression and show increased basal Akt phosphorylation following serum starvation. We found no difference in platinum sensitivity in-vitro between Trp53-/- and Trp53-/-; Pten-/- cell and, consistent with recent studies, we found that both were found to be HR competent using the γH2AX/RAD51 assay.

In-vivo, loss of Pten significantly reduced survival (median 45 days for Trp53-/- vs 34 days for Trp53-/-; Pten-/-, p = <0.0001****). The addition of cisplatin (5mg/kg on days 28, 35, 42) extended median survival to 80.5 days and 69 days respectively. Histological data showed no difference in F4/80 (macrophage marker) and CD3 staining between the genotypes but there was a significant reduction in F4/80 staining following cisplatin treatment (p = 0.01*). Flow cytometry analysis of the mice ascites and RNA sequencing of tumour deposits is still on-going.

The loss of Pten has a negative impact on survival in murine models of HGSOC. In addition, Pten loss is associated with a poorer response to cisplatin treatment in vivo but not in vitro. An immunosuppressive tumour microenvironment is a possible explanation for differences between the genotypes.

O – 3

CURRENT DETECTION RATES AND TIME TO DETECTION OF ALL IDENTIFIABLE BRCA CARRIERS IN THE GREATER LONDON POPULATION

Manchanda R[1,2], Blyuss O[3], Gordeev V[4], **Gaba F**[1,2], Jacobs C[5], Burnell M[3], Gan C[2], Taylor R[6], Tripathi V[5], Zaikin A[3], Antoniou A[7], Menon U[3], Jacobs I[8]

[1]Barts Cancer Institute, London, United Kingdom, [2]Department of Gynaecological Oncology, St Bartholomew's Hospital, London, United Kingdom, [3]University College London, London, United Kingdom, [4]Department of Infectious Disease Epidemiology, London School of Hygiene & Tropical Medicine, London, United Kingdom, [5]Department of Clinical Genetics, Guy's Hospital, London, United Kingdom, [6]South West Thames Molecular Genetics Diagnostic Laboratory, St George's University of London, London, United Kingdom, [7]Centre for Cancer Genetic Epidemiology, University of Cambridge, Cambridge, United Kingdom, [8]University of New South Wales, Sydney, Australia

Background
BRCA1/BRCA2 carrier identification offers the opportunity of early diagnosis and/or prevention to reduce burden of disease. Carrier detection rates across a population have not previously been estimated.

Aims
To evaluate BRCA1/BRCA2 detection rates Ashkenazi-Jewish (AJ) and general populations across greater London; estimate time-to-detection of all identifiable BRCA1/BRCA2 carriers; compare detection rates of London regional-genetic-services (RGS)

Methods
Data on BRCA1/BRCA2 carriers identified by NHS genetic laboratories between 1995-2014 were obtained from laboratory records and databases. Parabolic and Linear prediction models were developed and evaluated to fit the BRCA detection rate data. Parabolic-model: y=262.8-116.7*x+10.2*x^2. Linear-model: y=598.7+294.6*x. Models were used to predict time-to-detection of all detectable BRCA-carriers in general and AJ populations in the four RGS from 2015 onwards. Time taken with doubled/tripled rates were compared to current linear rate. Data were evaluated for an "Angelina Jolie effect". The relative detection rates of the four RGS were compared over time.

Results
3040 general population and 505 AJ BRCA1/BRCA2 carriers have been identified by the RGS till 2014. Only 2.6% and 9.6% of total estimated carriers and 5.1% and 21.6% of detectable carriers have been identified in general and AJ populations respectively. Current detection rates mirror the linear rather than parabolic model. Even doubling current detection rates will not identify all detectable BRCA carriers in the general-population. Only parabolic and triple linear rates can identify detectable BRCA carriers by years 2098 and 2141 respectively. For the AJ population the linear-fit model can identify detectable carriers by 2049, and parabolic model by 2032. We did not find an 'Angelina Jolie' effect on carrier detection rates. There was a significant difference in BRCA detection rates between the 4 RGS over time ($p<0.001$).

Conclusion
Data highlight poor current BRCA detection rates and difficulty in detecting all identifiable carriers using current clinical protocols. New strategies are needed.

O – 4

THE ROLE OF OSR2 IN NON-UTERINE PELVIC HIGH GRADE SEROUS CARCINOMA: A NOVEL TUMOUR SUPPRESSOR?

Beirne J[1,2], Eddie S[1], Roddy A[4], McArt D[4], Abdullah-Alvi M[3], Aurel-Fuchs M[3], McCabe N[1], Buckley N[1], Salto-Tellez M[1,3], Kennedy R[1], Harley I[1,2], McCluggage W[5], Mullan P[1]

[1]Centre For Cancer Research And Cell Biology, Queen's University, Belfast, Belfast, United Kingdom, [2]Northern Ireland Centre for Gynaecological Cancer, Belfast City Hospital, Belfast, United Kingdom, [3]Northern Ireland Molecular Pathology Laboratory, Belfast, United Kingdom, [4]Department of Cancer Bioinformatics, Queen's University, Belfast, United Kingdom, [5]Department of Pathology, Royal Victoria Hospital, Belfast, United Kingdom

Introduction
Non-uterine pelvic high grade serous carcinoma (HGSC) is the most common, most aggressive, subtype of epithelial ovarian cancer. It carries a poor prognosis due to its typically late presentation. Pathological evidence shows carcinogenesis to originate in the distal tubal fimbriae (FT), via serous tubal intraepithelial carcinoma (STIC). Defining the molecular evolution would have major translational implications

Methods
Six cases of HGSC were identified through the Northern Ireland Gynaecological Cancer Centre. All were FIGO stage IIIC+ carcinomas with matched clinicopathological data. Gene expression profiling (GEP) (Almac Xcel®) and DNA methylation analysis (DNAme) (Illumina® Infinium HumanMethylation 450 BeadChip) were performed on the following formalin-fixed paraffin embedded (FFPE) tissue samples from each case: Normal FT, STIC, and HGSC. The GEP results were independently validated using RqPCR and the DNAme results validated using a pyrosequencing platform. The data was analysed bioinformatically. A novel target, OSR2, that was both genomically repressed and hypermethylated was identified. A stably overexpressed OSR2 HGSC-specific cell model was constructed. This was analysed by RqPCR, western blotting, along with dose response, cell growth, wound scratch, and soft agar assays.

Results
The overexpression of OSR2 was confirmed by both RqPCR and western blot. There is reduced sensitivity to paclitaxel and evidence of both reduced cell proliferation and anchorage-independant growth with OSR2 overexpression.

Conclusions
To our knowledge, this is the first study attempting to define the molecular evolution of a carcinogenic pathway utilizing GEP and DNAme techniques. We provide further evidence of the tubal origin of HGSC and present a novel tumour suppressor gene that is potentially a route for targeted therapy in HGSC.

O – 5

LONG TERM RESULTS FROM RT3VIN: A MULTI-CENTRE, RANDOMISED, PHASE II TRIAL OF CIDOFOVIR OR IMIQUIMOD TREATMENT FOR VULVAL INTRAEPITHELIAL NEOPLASIA 3

Jones S[1], Hurt C[4], Madden T[4], Fiander A[1], Nordin A[2], Naik R[3], Powell N[1], Tristram A[1]

[1]Cardiff University, Cardiff, United Kingdom, [2]East Kent Gynaecological Oncology Centre, Queen Elizabeth the Queen Mother Hospital, Margate, United Kingdom, [3]Northern Gynaecology Oncology Centre, Queen Elizabeth Hospital, Gateshead, United Kingdom, [4]Wales Cancer Trials Unit, Cardiff Univeristy, Cardiff, United Kingdom

Background
Vulval intraepithelial neoplasia (VIN) is a chronic vulval skin condition, which, if left untreated, may become cancerous. Currently the standard treatment for patients with VIN is surgery, but this does not guarantee a cure and can cause physical and psychological problems in women of reproductive age. The RT3 VIN trial demonstrated that topical treatment with cidofovir and imiquimod are effective in 46% of patients with acceptable levels of adverse events. This study reports the long-term (24 month) follow up of these patients as well as the long-term safety data.

Methods
Participants with complete response to treatment with either cidofovir or imiquimod were followed up for a further 24 months. All statistical analyses were pre-planned and conducted using Stata SE 14

Findings
The length of follow up was the same in each trial arm and was a median of 18.4 months (95% CI: 18.1-19.0 overall). At 18 months, 50% on imiquimod (95% CI: 33.6%-64.5%) and 69% of patient on cidofovir (95% CI: 51.2-82.0) remained lesion free. At 18 months, 71.6% on imiquimod (95% CI: 52.0-84.3) and 94% of patient on cidofovir (95% CI: 78.2-98.5) remained VIN free. There were no grade 4+ adverse events during follow up. There was no difference between trial arms in either the proportion of patients experiencing any grade 2+ adverse event during follow up (imiquimod: 24/42 (57%) vs. cidofovir: 27/41 (66%), $\chi 2=0.665$, $p=0.415$) or any grade 3+ during follow up (imiquimod: 3/42 (7%) vs. cidofovir: 6/41 (15%), $\chi 2=1.204$, $p=0.272$).

Interpretation
Long-term data indicates that response is maintained for longer following treatment with cidofovir compared to imiquimod with no difference in the rates of adverse events between the two drugs. Overall, the levels of adverse events and the absence of grade 4 events indicates acceptable safety of use of these drugs in this setting.

O – 6

USING THE DNA DAMAGE RESPONSE TO IDENTIFY PLATINUM -SENSITIVE HIGH-GRADE SEROUS OVARIAN CANCER; THE SYNERGY BETWEEN HOMOLOGOUS RECOMBINATION AND NUCLEOTIDE EXCISION REPAIR

Faraahi Z[1], McCormick A[2], Tyagi S[1], Gavrielides N[1], Price M[1], Woodhouse L[2], Edmondson R[1]

[1]University Of Manchester, Manchester, United Kingdom, [2]University of Newcastle , Newcastle , UK

Introduction

The capacity to repair damaged DNA is potentially an independent determinant of chemo-sensitivity in cancer. In high-grade serous ovarian cancer (HGSOC), platinum resistance is the main cause for the low overall 5-year survival rates of 20-30%. There is strong evidence that abrogation of nucleotide excision repair (NER) and homologous recombination repair (HR) correlates with platinum-sensitivity. We have developed clinically feasible assays to determine the functional NER and HR status of HGSOC and therefore sought to examine the link between NER and HR status in relation to platinum response.

Methods

Functional NER capacity (NERC) was determined by measuring benzopyrene (BPDE)-induced single-stranded DNA damage and repair using an alkaline comet assay. Competitive ELISA analysis of UV-induced thymine-dimer adduct repair was used to validate comet data. HR status was determined by a two fold increase in Rad51 foci following UV-C induced double strand DNA damage. We assessed the correlation between NERC, HR and cell survival following carboplatin treatment in HGSOC cell lines and patient samples. The effect of inhibiting pivotal NER genes (ERCC1, ERCC5 and XPA) on NERC was assessed by siRNA knockdown.

Results

Comet analysis showed 70% of HGSOC patient samples were NER defective (n=35) and these tumours were more sensitive to carboplatin (P=0.03). Cell line models supported this data in showing platinum-resistant PEO4 cells (IC50=174μM) had increased NERC compared to the platinum-sensitive PEO14 (IC50=23μM). NER/HR competent HGSOC patient samples had decreased sensitivity to carboplatin compared to NER/HR-defective cells (P=0.02). Furthermore, knockdown of XPA, ERCC1 and ERCC5 inhibited NER function and increased carbo-sensitivity in PEO4 cells but not NER-defective PEO14 cells.

Conclusion

Our functional NER and HR data support the clinical need for determining DNA repair status to improve prediction of response and resistance to chemotherapy. Further data is required to establish clinical correlations between NER status and platinum sensitivity.

O – 7

FOLLOW UP OF LOW RISK ENDOMETRIAL CANCER IN A NURSE LED TELEPHONE CLINIC

Duthie P[1], **McGaughay E[1]**, Singh A[1], Armstrong M[2], McMullen W[1], Ragupathy K[1]

[1]Nhs Tayside, Dundee, United Kingdom, [2]University of Dundee, Dundee, Scotland

Introduction
Since 2012, women with Grade 1 stage 1a endometrial cancer have been offered post operative follow up in our nurse led telephone clinic following MDT discussion.

Aim
To examine the feasibility and safety of such an approach

Methods
All grade 1 endometrial cancers treated in our cancer unit over a 3-year period (2011 – 2014) were audited for completeness of follow up and recurrence rate at 2 years

Results
Of 114 grade 1 endometrial cancers, 100 women (87%) were fit for surgery, in whom the final surgical stage was 1a in 66 (58%). Follow up data was obtainable for 63 of these 66 of whom, 45 (71%) were followed up in the telephone clinic, 12 (19%) in the out patient clinic and 6 (10%) were lost to follow up.

There were no recurrences in the first year and one recurrence (1.6%) in the second year. This patient had no symptoms at telephone follow up at one year but reported vaginal bleeding at 13 months at which point a localized vault recurrence was diagnosed. She remains disease free 2 years following radical radiotherapy.

Conclusion
Nurse led telephone follow up of low risk endometrial cancer (grade 1 stage 1a) is practical. 10 % of women have been lost to follow up. Recurrence rate was 1.6%.

We now plan to extend our nurse led telephone follow up to women with uncomplicated grade 1 stage 1b cancers with clear follow up protocols and open access for symptomatic women. We also need to ensure women are not lost to follow up.

Nurse led telephone follow up also gives the opportunity to discuss lifestyle issues and weight reduction which we feel is at least as important as cancer follow up in this highly co-morbid group of women (mean BMI =34; range=20 to 49)

O – 8

INHIBITION OF MATERNAL EMBRYONIC LEUCINE-ZIPPER KINASE IS A NOVEL THERAPY FOR NON-UTERINE PELVIC HIGH GRADE SEROUS CARCINOMA.

McDermott C[1], **Beirne J**[1,2], Lyons-Ewing D[1], Feeney L[1], Buckley N[1], McArt D[3], Roddy A[3], McCabe N[1], Salto-Tellez M[4], Kennedy R[1], Harley I[1,2], McCluggage W[5], Mullan P[1]

[1]Centre For Cancer Research And Cell Biology, Queen's University, Belfast, Belfast, United Kingdom, [2]Northern Ireland Centre for Gynaecological Cancer, Belfast City Hospital, Belfast, United Kingdom, [3]Department of Cancer Bioinformatics, Queen's University, Belfast, United Kingdom, [4]Northern Ireland Molecular Pathology Laboratory, Belfast, United Kingdom, [5]Department of Pathology, Royal Victoria Hospital, Belfast, United Kingdom

Introduction
Non-uterine pelvic high grade serous carcinoma (HGSC) is the most common, most aggressive, subtype of epithelial ovarian cancer. It carries a poor prognosis due to its typically late presentation. The underlying molecular profile of HGSC has been shown to be driven by dysregulated mitotic activity. A key driver of this being Maternal Embryonic Leucine-Zipper Kinase (MELK).

Methods
Six cases of HGSC were identified through the Northern Ireland Gynaecological Cancer Centre. All were FIGO stage IIIC+ carcinomas with matched clinicopathological data. Gene expression profiling (GEP) (Almac Xcel®) was performed on the following formalin-fixed paraffin embedded (FFPE) tissue samples from each case: Normal FT, STIC, HGSC, and Omental metastases. The GEP results were independently validated using RqPCR. Bioinformatic analysis of the data revealed dysregulated mitotic activity to be a driver of malignant transformation from normal FT to STIC.

A siRNA screening assay was designed to assess the potential of MELK as a key regulator of the mitotic activity. This was analysed by RqPCR, western blotting and cell viability assays. Subsequently, a novel MELK-inhibitor, OTSSP167, was analysed, using drug-screening assays, on a HGSC-specific cell model in comparison with platinum-taxol "standard-of-care".

Results
The inhibition of MELK by siRNA has a significant impact on HGSC cell viability and there is evidence of downstream inhibition of a number of key mitotic genes (identified from the GEP dataset). The novel MELK-inhibitor has a significantly greater chemotherapeutic activity on the HGSC cell model compared to standard of care.

Conclusions
MELK overexpression in HGSC is likely to be a key driver of malignant transformation. Inhibiting this pathway with OTSSP167 is a potential therapeutic strategy for patients suffering from HGSC.

POSTER ABSTRACTS

P-1

PROGNOSIS OF EPITHELIAL OVARIAN CANCER PATIENTS (EOC) WITH ABDOMINAL WALL METASTASIS (AWM)

Mehmood T[1]

[1]*Shaukat Khanum Memorial Cancer Hospital and Research Centre, Lahore, Pakistan*

Objective
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 tumor 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 tumor, 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.

P-2

PREDICTION OF SUCCESS OF CYTOREDUCTIVE SURGERY IN ADVANCED OVARIAN CANCER BASED ON CA125 REDUCTION DURING NEOADJUVANT CHEMOTHERAPY

Jones R[2], Hudson E[2], Hanna L[2], Drews F[1], Jones R[1], Ewelina R[1], Howells R[1], Lim K[1], **Sharma A[1]**

[1]UHW Department of Gynaecological Oncology, Cardiff, United Kingdom, [2]Department of Medical Oncology at Velindre Hospital, Cardiff, United Kingdom

Objective
To review correlation of Cancer-Antigen-125 (CA125) reduction during neoadjuvant chemotherapy (NACT) and success of surgical cytoreduction in advanced epithelial ovarian cancer.

Methods
A retrospective analysis of 50 consecutive patients (05/2015 to 02/2017) in a tertiary cancer centre with stage IIIC/IV epithelial ovarian cancer having undergone 3-6 cycles of NACT prior to interval debulking surgery (IDS).

Results
All patients had advanced epithelial ovarian cancer, 42 (84%) FIGO stage IIIC, 1 (2%) stage IVA and 7 (14%) stage IVB. Histologically, 49 (98%) were high grade serous adenocarcinomas and one (2%) poorly differentiated adenocarcinoma. Neoadjuvant chemotherapy (NACT) consisted of mostly 3 cycles (11 patients, 22%) or 4 cycles (23 patients, 46%) of either Carboplatin only, or combined with Paclitaxel. Eight patients respectively received 5 or 6 cycles (16%) NACT. Amongst our patients, 29 (58%) achieved complete cytoreduction, 14 (28%) had <=10mm residual disease (optimal debulking) and 7 (16%) >10mm.

CA125 at baseline varied between 31 U/ml and 19435 U/ml (median 783 U/ml). Preoperative levels dropped consistently (-259 to 16397 U/ml, median 737) except for in one case, where CA125 rose from 119 U/ml to 378 U/ml (good radiological response). The median reduction was 93.15%. The median time from the last CA125 to operation was 28 days (6 – 83 days).

Prior to IDS, CA125 levels were lower in the complete cytoreduction group (226 U/ml vs 421 U/ml, p=0.002) compared to patients with residual disease. CA125 reduction prior to surgery was higher for these patients (94.8% vs 91.0%, p>0.05) but only reached statistical significance when including patients with <10mm residual disease (94.1% vs 81.4%, p=0.031). A CA125 reduction by >=80% led to 81.4% <=10mm residual disease. A reduction rate of >=90% (p=0.05) was statistically significant for optimal debulking.

Conclusion
Significant reduction of CA125 following NACT is an independent factor for optimal cytoreduction.

P-3

IMPACT OF CHEMOTHERAPY ON SURVIVAL FOR LOW RISK VERSUS HIGH RISK EARLY STAGE OVARIAN CANCER.

Mehmood T[1]

[1]*Shaukat Khanum Memorial Cancer Hospital and Research Centre, Lahore, Pakistan*

Background
Past analyses have demonstrated that adjuvant chemotherapy is indicated for high-risk early stage ovarian cancers (EOCs) (stages IC and II, grade III cancers) only, though prospective trials are limited in this disease setting. Identifying low-risk patients minimizes chemotherapy toxicities in those with tumors least likely to recur.

Methods
We retrospectively analyzed 130 women diagnosed with EOCs between 2010 and 2015. Records were reviewed and coded for patient characteristics, surgical information, and outcomes.

Results
Adjuvant post-operative chemotherapy was given to 67.1% of EOC patients; it was administered to 92.8% classified as "high risk" vs. 52.2% for "low risk" patients. Additionally, age, stage, grade, and histology were associated with likelihood of chemotherapy administration ($p = 0.004$, $p < 0.0001$, $p < 0.0001$, $p < 0.0001$, respectively). Chemotherapy use was not significantly associated with 10-year recurrence-free survival (RFS) or overall survival (OS) among all patients ($p=0.4$, $p=0.2$). When stratified by risk, high-risk patients had significantly lower RFS and OS ($p=0.04$, $p=0.05$). Among high-risk patients, those who received chemotherapy had higher 10-year RFS than those who did not (71.2% vs. 46.7%), but this did not reach significance ($p = 0.07$), and there were no significant differences in OS ($p = 0.3$). In the low-risk cohort, RFS did not reach significance, but those who received chemotherapy had a 10-year OS benefit ($p = 0.03$).

Conclusions
Patient factors predictive of chemotherapy administration were identified, but the overall cohort did not demonstrate a chemotherapy survival benefit. Although the standard recommendation for low risk EOC is observation, a majority were given chemotherapy, yielding a statistically significant OS benefit contrary to past reports. Conversely, we could not demonstrate a significant RFS or OS benefit for chemotherapy administration in the high-risk group. The survival impact of chemotherapy for EOC patients remains ill-defined and requires further research.

P-4

EVIDENCE OF A SUSTAINED IMPROVEMENT IN OVERALL SURVIVAL FOR ADVANCED OVARIAN CANCER IN MERSEYSIDE AND CHESHIRE

Cossar L[1], Shaw D[1], Chatterjee M[1], Wong H[1], Lord R[1]

[1]*Clatterbridge Cancer Centre, Wirral, United Kingdom*

In 2012, the 'Overview of Ovarian Cancer in England: Incidence, Mortality and Survival' published by the National Cancer Intelligence Network (NCIN) highlighted the Merseyside and Cheshire region as a poor performance outlier in one-year and five-year survival outcomes for ovarian cancer, demonstrating a relative survival between 2 and 3 standard deviations from the national average. In response to this finding, regular internal reviews of local practice and survival have been undertaken to ensure improving standards of care and monitor patient outcomes, with an emphasis on those diagnosed with advanced (stage III-IV) ovarian cancer.

Analysis of the data collected has demonstrated a significant and sustained improvement in overall survival in two successive cohorts of patients with advanced ovarian cancer (2012-2013, 2013-2014) when compared to a historical cohort contemporaneous with the NCIN review (2006-2009). This finding may be due to the observed improvements in performance status at diagnosis, surgical resection rates and the increased use of combination chemotherapy regimens and biological therapies.

P-5

CHALLENGES OF MANAGEMENT OF CERVICAL CANCER IN A DEVELOPING COUNTRY: A REVIEW OF PRACTICE IN AMINU KANO TEACHING HOSPITAL, KANO, NIGERIA

Yakasai I[1], Abdullahi J[2], Warshu Haruna I[2]

[1]Bayero University Kano, Nigeria, Kano, Nigeria, [2]Aminu Kano Teaching Hospital, Kano, Nigeria

Background

Cervical cancer is the most common cancer and leading cause of cancer death amongst Nigerian women and sub-Saharan Africa. Primary prevention through the use of effective vaccines against oncogenic Human Papilloma viruses and organized cervical screening are the main preventive tools. Sadly, these are rudimentary or non-existent in Low and Middle Income Countries of Africa, Asia and Latin America that have high cervical cancer burden. Our Hospital in Northern Nigeria a limited-capacity facility serves as referral centre for gynaecological oncology to estimated population of 22 million.

Objectives

To identify the challenges in the management of patients admitted with cervical cancer.

Method

We retrospectively reviewed the case files of fifty one patients with cervical cancer admitted between July 2014- June 2016 and extracted information on clinical presentation, interventions and outcome of care.

Results

Cervical cancer accounted for 53% of all gynaecological cancer admissions with 11% in-hospital case fatality. Mean age of patients 52.1years and standard deviation 10.4 ranges (32-70 years). Majority of patients had parity at least five and about half married into polygamous settings. Most were of low socioeconomic status.

Commonest indication for admission was severe anaemia with or without features of uraemia. About half were diagnosed with FIGO stage 3 disease (12 patients at stage 3b). 11% had early disease (stage 2a and below).

Blood Transfusion (86.7%), Salvage Haemodialysis (27.5%) were main interventions. Two patients each had percutaneous Nephrostomy and Hysterectomy. Staging and Biopsy was done for all, 56.9% referred for radiotherapy.

Conclusion

Late Presentation, low socioeconomic status, lack of health insurance, absence of organised cervical cancer screening and absence of in-house radiotherapy service pose significant challenge to the optimal management of cervical cancer in our clime.

P-6

APPLICATION OF RAPID EVAPORATIVE IONIZATION MASS SPECTROMETRY (REIMS) iKNIFE FOR REAL-TIME IDENTIFICATION OF CERVICAL DISEASE.

Tzafetas M[1], Mitra A[1], Kalliala I[1], Bodai Z[1], Rosini F[1], Phelps D[1], Savage A[1], Lyons D[2], Flora R[2], Ghaem-Maghami S[1], Takats Z[1], Kyrgiou M[1]

[1]Imperial College London, London, United Kingdom, [2]Imperial College Healthcare NHS Trust, London, United Kingdom

Cervical cancer and its precancerous form cervical intraepithelial neoplasia (CIN) commonly affect women of reproductive age. Fertility-preserving trachelectomy procedures are available, but if the excisional margins are not cancer-free, as is the case in 33% of procedures, these women must undergo a hysterectomy, therefore losing their child-bearing potential. Rapid Evaporative Ionization Mass Spectrometry (REIMS) analyzes electrosurgery-generated aerosols, using time-of-flight mass spectrometry to provide real time tissue identification without the need for sample preparation, raising the potential for use as an intraoperative diagnostic technique and improving the surgical and fertility outcome for one third of the women who undergo trachelectomy.

We conducted a pilot study showing that REIMS can differentiate between cancerous and healthy cervical tissue thus presenting an innovative technique that could drastically improve fertility-sparing operations.

Cervical biopsies of 66 women were cut using a Covidien diathermy hand-piece. The surgical aerosol produced was transferred into a Waters Xevo G2-S mass-spectrometer. The tissue samples were then stained for histopathological validation. These diagnoses were used in multivariate statistical analysis of mass spectroscopic spectral data, including principal components and linear discriminant analysis performed using Offline Model Builder software. Correct classification rate was checked using leave one patient out cross-validation, with an overall result of 96%.

Frozen section is the current method for intraoperative assessment of margin status at the time of trachelectomy, and the concordance between intraoperative frozen section and final histology has been quoted as 84%, significantly lower than the preliminary results of REIMS. In addition to providing real-time information, thus reducing anaesthetic time, REIMS has the potential to improve the accuracy of intraoperative margin detection. This could potentially increase success rates of trachelectomy, leading to a truly advanced fertility sparing technique in modern surgery. This principle is also under investigation for use in CIN to be rolled out into the colposcopy clinic.

P-7

THE USE OF TRANSVAGINAL ULTRASOUND TRIAGE FOR ENDOMETRIAL ASSESSMENT OF POST-MENOPAUSAL BLEEDING IN WOMEN WITH A HISTORY OF TAMOXIFEN USE

Abdaal A[2], Mushtaq Y[2], Khasati L[2], Moneim J[2], Khan F[2], Ahmed H[2], **Bolton H**[1]

[1]Addenbrooke's Hospital, Cambridge, Hills Road, Cambridge, United Kingdom, [2]University of Cambridge Clinical School of Medicine, Cambridge, United Kingdom

Aim
To evaluate the role of transvaginal ultrasound (TVUS) triage in women with a history of tamoxifen treatment who present with post-menopausal bleeding (PMB).

Methods
A retrospective review was undertaken of patients who presented with symptoms of PMB and underwent ultrasound triage. Endometrial thickness (ET) and ultrasonographic features were then correlated with hysteroscopic and histopathological outcome data. The findings and outcomes for women with a history of tamoxifen use (tamoxifen group) were compared to those who had not taken tamoxifen (non-tamoxifen group).

Results
A total of 615 women with PMB underwent transvaginal ultrasound triage, of whom 53 had a history of current or previous tamoxifen treatment. An ET of greater than or equal to 5mm, or the presence of other abnormal features was used to triage women to further investigation by hysteroscopy and biopsy. ET was significantly greater in the tamoxifen group when compared with non-tamoxifen users (11mm vs. 6mm). Nearly all of the tamoxifen group were triaged to further investigation (98.1%), compared with significantly fewer in the non-tamoxifen group (68.3%). However, we found no significant differences in the incidence of endometrial pathology between the two groups who had been triaged by USS to hysteroscopy.

Conclusion
For women presenting with PMB, the use of transvaginal ultrasound as a triage tool is rarely helpful in evaluating women who have a history as tamoxifen use, as most will require further investigation with hysteroscopy and biopsy. A PMB protocol that omits TVUS for women with a history of tamoxifen use may be an appropriate and effective pathway for managing these patients. Adopting this approach may potentially be cost-effective as it reduces the number of scans required in the PMB clinic.

P-8

OPPORTUNISTIC SALPINGECTOMY: A SURVEY OF KNOWLEDGE AND ATTITUDES IN HEALTHCARE PROFESSIONALS

Bellamy J[2], Page A[2], Taylor S[2], **Bolton H[1]**

[1]Addenbrooke's Hospital, Cambridge, Hills Road, Cambridge, United Kingdom, [2]School of Clinical Medicine, University of Cambridge

Background
The tubal origin of high-grade serous ovarian cancer (HGSC) represents an opportunity to minimize the risk of ovarian cancer. The RCOG advises that 'women ….. who have completed their families should be carefully considered for prophylactic removal of the fallopian tubes with conservation of ovaries at the time of gynaecological or other intra-peritoneal surgery'.

Aims
To explore current knowledge and attitudes of relevant healthcare professions to the concept of the tubal origin of HGSC, and opportunistic salpingectomy.

Method
We retrospectively reviewed 100 cases of women undergoing surgery for ovarian cancer to identify those who had previously had abdominal surgery. We carried out surveys of professionals who may be involved in women undergoing gynaecological or abdominal surgery, including primary health care providers, obstetricians, gynaecologists and general surgeons who carried out pelvic surgery.

Results
Overall 49% of all patients having surgery for ovarian cancer had previously had abdominal surgery (with 22% having previously had a hysterectomy with tubal conservation). 19 of 21 primary care practitioners, and 12 of 15 surgeons were totally unaware of the tubal origin of HGSC. Obstetricians & Gynaecologists were better informed (17 of 26 were well informed). There was a lack of confidence in discussing or offering opportunistic salpingectomy across all specialties for a variety of reasons. The majority of professionals surveyed volunteered that written information for healthcare professionals and patients would be helpful, along with teaching sessions or direct surgical training from a specialist.

Discussion
There is limited knowledge around the tubal origin of HGSC amongst healthcare professionals who may be in a position to counsel or offer opportunistic surgery. Strategies to educate and alter attitudes of healthcare professionals may be required before we see a paradigm shift in offering the choice of this potentially life-saving opportunity to women.

P-9

METASTATIC SECONDARY OVARIAN CANCER FROM GASTROINTESTINAL PRIMARY (KRUKENBERG SYNDROME) DURING PREGNANCY: A CASE REPORT AND LITERATURE REVIEW.

Gkrozou F[1], Alsammoua S1

[1]*WSHT, Worthing Hospital, Worthing, United Kingdom*

Introduction
Cancer in pregnancy, including gastric cancer, is rare and often diagnosed at advanced stages. Well-recognised pregnancy-related symptoms, such as nausea and epigastric discomfort, can be the only symptoms which makes it a difficult diagnosis to establish.

Material and Methods
We present a case of 30 years old woman, on her first pregnancy. This lady was self-referred to A&E, on the 19th week, with epigastric pain and vomiting when her blood pressure was found to be elevated. Due to the early onset of hypertension, she had an abdominal scan which revealed the presence of a single live fetus and a pelvic mass. At 23 weeks gestation she then had an MRI scan, which revealed bilateral suspicious adnexal masses and a small gastric mass. After MDM discussion and patient counselling it was decided to proceed with laparotomy and removal of the larger right adnexal mass. She recovered well and the histology confirmed a poorly differentiated adenocarcinoma from upper GI origin (Krukenberg syndrome).She had two cycles of chemotherapy (Epirubicin and infusional 5FU) and the pregnancy proceeded uneventfully. The patient had an elective classic Caesarean Section at 33+5 weeks when the remaining left ovary and tube was removed at the same time. The outcome was a healthy male baby 2.05 kg and the histology of the left ovary confirmed a poorly differentiated adenocarcinoma, consistent with metastatic gastric adenocarcinoma. After delivery, the patient had 4 further cycles of epirubicin and oxaliplatin. The last CT scan has shown no measurable residual disease.

Conclusion
Cancer diagnosis in pregnancy is difficult and very complex and early detection is important for a better outcome. A therapeutic plan should be promptly made by a multidisciplinary team with full involvement of patient and family in decision making as any treatment option might have significant implications on mother and fetus.

P-10

DEBULKING SURGERY FOR ADVANCED STAGE OVARIAN CANCER: OUR EXPERIENCE IN ABERDEEN ROYAL INFIRMARY, THE NORTHEAST OF SCOTLAND GYNAECOLOGIC ONCOLOGY CENTRE

Kalampokas E[1], Young H[1], Bednarek A[1], Gurumurthy M[1], Cairns M[1]

[1]*NHS Grampian, Aberdeen, United Kingdom*

Background
Ovarian cancer (OC) is a common gynaecological cancer, characterized by patients' diversity to treatment and high mortality rate. Usually presents late in advanced stage which pose challenges to management. Recently, better understanding of the disease biology and application of aggressive surgery to achieve complete cytoreduction has led to longer survival amongst these patients.

Objective
Purpose of our study is to examine the clinical and demographic characteristics, surgical morbidity and outcomes of patients undergoing radical surgery for OC.

Methods and Population
A retrospective cohort study of women undertaking surgery for OC between February 2014 and September 2016 at Aberdeen Royal Infirmary (ARI).

Results
40 women (27.8%) were stage II, III and IV and 17 women (42.5%) had primary vs. 23 women (57.5%) who had interval debulking surgery. The procedures that were performed as part of debulking include rectosigmoid resection (n=10, 25.0%), small bowel resection (n=5, 12.5%), splenectomy (n=4, 10%) and total colectomy (n=3, 7.5%). Common complications included blood loss >1.5 lt. (n=9, 22.5%), hospitalization >7days (n=21, 52.5%), sepsis (n=10, 25%), reoperation (n=1, 2.5%). Surgery outcomes were: no residual disease (n=36, 90%), ≤10mm disease (n=3, 7.5%), and ≥10mm disease (n=1, 2.5%). Perioperative mortality, as death within 30-days of the surgical procedure, was 0%. Difference between different OC histologic types and variables examined was not statistically significant. We are also awaiting surgical outcomes of women having debulking in ARI who were referred from NHS Tayside and NHS Highlands. These results will be presented too.

Conclusions
Radical surgery for OC is related to acceptable morbidity after careful case selection. It would be important to assess the 5-year overall survival and assess Quality of Life of patients undergoing debulking surgery.

P-11

A CASE REPORT OF PRIMARY SMALL CELL OVARIAN CARCINOMA OF PULMONARY TYPE

Kalampokas E[1], Sharma V[2], Payne F[2], Miller I[2], Gurumurthy M[2]

[1]*Department of Gynaecologic Oncology, NHS Grampian, Aberdeen, United Kingdom,* [2]*Department of Histopathology, NHS Grampian, Aberdeen, United Kingdom*

Primary small cell ovarian cancer of pulmonary type (SCCOPT), first described in 1979, is a highly aggressive tumor with an incidence of less than 1% of all ovarian cancers. SCCOPT has been known to have a poor outcome with only 30% to 40% long-term survival. SCCOPT usually occurs in perimenopausal or postmenopausal women. A preoperative diagnosis is usually not obtained and is commonly interpreted as an epithelial ovarian cancer at presentation. Adjuvant chemotherapy with carboplatin and etoposide combination is offered after primary surgery. To date, only 8 cases of "pure" primary SCCOPT have been reported in literature.

We report a case of a 77-year old Caucasian woman who presented initially with a one-week history of abdominal discomfort. Blood tests were normal apart from slightly raised inflammatory markers and Ca125 of 50 u/ml. Calcium levels were normal. The RMI was found to be 450, hence a CT of the chest-abdomen-pelvis was performed and discussed at the MDT meeting. As there was no evidence of disease beyond pelvis, upfront surgery was performed in a gynecologic oncology center. At debulking surgery, a 15cm mostly solid pelvic mass of the right ovary was found. Total abdominal hysterectomy with bilateral salpingoophorectomy and omentectomy was performed uneventfully. Histology showed a tumour comprising areas of classical small-cell carcinoma morphology, showing cells with scant cytoplasm, stippled chromatin and nuclear moulding. However, other areas of the tumour were comprised of spindled cells and epithelioid cells with more abundant cytoplasm. Immunohistochemistry showed that the lesion was positive with the neuroendocrine markers CD56 and PGP 9.5, and showed dot-like positivity with the cytokeratin EMA, including in the spindled and epithelioid components. This constellation of features has been described in SCCOPT and is consistent with the diagnosis. We present the current treatment options and clinicopathological considerations of this extremely rare gynaecologic malignancy.

P-12

CHYLOUS ASCITES IN PRIMARY PERITONEAL CANCER: CASE REPORT AND LITERATURE REVIEW

La Russa M[1], Turnbull H[1], Duncan T[1]

[1]*Norfolk and Norwich University Hospital, Norwich, United Kingdom*

We report a case of chylous ascites found at interval debulking surgery (IDS) following three cycles of neoadjuvant chemotherapy for high-grade serous carcinoma. A strong positivity for oestrogen receptor was suggestive of primary peritoneal cancer.

Case Presentation
A 79-year old woman presented in accident and emergency complaining of chest pain and was admitted with a diagnosis of pulmonary embolism. Of note, she previously had surgical resection of a sigmoid carcinoma. A computed tomography scan showed diffuse peritoneal deposits, lesions within the omentum and some small pelvic masses. Her CA125 was 6.599 IU/ml. An image-guided omental biopsy confirmed high-grade serous carcinoma.

Imaging and histology findings were discussed in the multidisciplinary team meeting and the plan was for primary chemotherapy.

After three cycles of neoadjuvant chemotherapy the patient underwent IDS. Intraoperative findings included 6500mls of chylous ascites, enlarged lymph nodes throughout the length of the small bowel (SB) mesentery, and a few sites of disease on the stomach and SB serosa, right hemi diaphragm and lesser omentum. Frozen section of SB mesentery lymph nodes confirmed metastatic high-grade serous carcinoma. Given the extent of the mesenteric disease, cytoreduction was not attempted.

The procedure was uncomplicated with an estimated blood loss of 100mls. The recovery was uneventful and patient was discharged home seven days postoperatively.

Retrospective review of initial and interval CT images showed mesenteric nodes but none were above the 10mm threshold or considered to be abnormal.

Review of the literature
Chylous ascites is a rare (incidence 1 per 20,000) form of ascites, characterised by an accumulation of milky-white lymph fluid in the peritoneal cavity. It is due to an interruption in the lymphatic system. Intra-abdominal malignancy and liver cirrhosis represent the main causes. To our knowledge this is the first case of chylous ascites during IDS for primary peritoneal cancer.

P-13

THE ASSOCIATION OF PRE-OPERATIVE CONTRAST ENHANCED MRI FINDINGS WITH POST-OPERATIVE HISTOPATHOLOGICAL STAGING PARAMETERS IN ENDOMETRIAL CARCINOMA AND TO DETERMINE THEIR RELATIONSHIP WITH LYMPH NODE METASTASIS.

Khan B[1], Sadia R[1], Masroor I[1], Begum A[1], Sheikh I[1]

[1]*Aga Khan University Hospital, Karachi, Pakistan, Karachi, Pakistan*

Objective
The objectives of this study were:

1. To determine the association of pre-operative contrast enhanced MRI findings with post-operative histopathological staging parameters in endometrial carcinoma.
2. To determine the relationship of post-operative histopathological staging parameters to lymph node metastasis.

Methods
Retrospective analysis of 144 patients with endometrial carcinoma treated between 2011 and 2015 in Aga Khan University Hospital, Karachi was performed.

Results
Total of 144 patients were analyzed. The sensitivity, specificity, positive predictive values and negative predictive values of contrast enhanced magnetic resonance imaging for identifying myometrial invasion were 85.71%,89.47%,80.77% and 92.39% respectively, for identifying cervical invasion were ; 90.9%,100%,100% and 99.3% respectively and for identifying lymph node metastasis were and 85.7%,79.6%,17.6%and 99.1% respectively. On univariate analysis, stage of the disease ($p<0.001$), grade of the disease ($p<0.003$), histopathological type of the disease (endometroid vs clear cell and serous; $p<0.01$), peritoneal cytology ($p<0.02$), myometrial invasion ($p <0 .000$) and cervical invasion ($p<0.003$) showed significant association with nodal involvement.

Conclusion
Preoperative pelvic contrast enhanced magnetic resonance imaging has a moderately high sensitivity and specificity to predict stage of the disease in endometrial carcinoma. Pre-operative assessment together with contrast enhanced magnetic resonance imaging can help Gynae oncologists in clinical decision making and patient counselling.

P-14

AN AUDIT ON CATHETER – ASSOCIATED UTI IN A GYNAECOLOGICAL ONCOLOGY TERTIARY REFERRAL CENTRE

Limura E[1], Nobbenhuis M[1], Romano F[1], Ind T[1], Barton D[1], Butler J[1]

[1]*Royal Marsden Hospital, Chelsea, London, United Kingdom*

Introduction
From 1% to 30% of catheterized patients in UK hospitals develop catheter-associated UTI (CAUTI) following surgery. The relationship between duration of catheter in situ and development of CAUTI is well established. In major gynaecological procedures catheter use is essential. For that reason, the key control measure for the prevention of infection is limiting the usage and duration of catheter.

Aim
To assess the incidence of CAUTI and postoperative length of catheterisation for patients undergone gynaecological laparotomy in our tertiary referral centre and compare our rate to the national incidence rate.

Methods
60 consecutive patients, undergone gynaecological laparotomy and transurethral catheterization were included. CAUTI was defined as the onset of one or more of the following: temperature and/or raised inflammatory markers, not explained otherwise, suvrapubic tenderness and haematuria, all confirmed by a positive urine culture (MC&S).

Results
The median patients' age was 59 (range 17-87). The median WHO disability was 1 (range 0-3).The median ASA score was 2 (range 0-2).

All patients had 2 doses of antibiotics at induction (co-amoxiclav or ceftriaxone with metronidazole if penicillin allergic). The insertion, under sterile procedure, and maintenance of the catheter was according to the NICE guidelines. The mean catheterization duration was 89 hours (range 12 -480 hours). The catheter was removed when the patient was able to mobilize and there was no clinical reason for it to remain in situ. We found CAUTI in 8.3% (5 in 60 patients), significantly less than the 30% set as standard (p=0.00005). One of the 5 patients had a pre-operative UTI which didn't resolve afterwards.

Conclusion
Overall, in our department a strict adherence to the NICE guidelines and a constant surveillance to the catheterised patient led to a low incidence rate of UTI if compared to the data reported in literature.

P-15

A CASE OF PARANEOPLASMATIC DERMATOMYOSITIS AS AN INITIAL MANIFESTATION OF OVARIAN CANCER

Limura E[1], Clark J[2], Laios A[1], Romano F[1], Nobbenhuis M[1]

[1]Department of Gynaecological Oncology, Royal Marsden Hospital, Chelsea, London, United Kingdom, [2]Department of Medical Oncology, Royal Marsden Hospital, Chelsea, London, United Kingdom

Introduction
Dermatomyositis (DM) is rare with an incidence of less than 1 in 100, 000. Up to 30% of patients have an associated malignancy. Diagnosis is clinical, yet difficult. Paraneoplastic dermatomyositis is well recognized in relation to ovarian cancer (OC) and portends a poor prognosis.

Case report
We report a case of a previously healthy 67 year-old woman, who presented with widespread maculopapular and heliotropic upper eyelid rash, progressive decline in movements and difficulties with swallowing. She did not report any abdominal symptoms or weight loss. A clinical diagnosis of DM was made. An MRI of thighs showed proximal myositis. CK was 265. Antibody blood tests ruled out rheumatologic diseases. Subsequently, a CT TAP reported bilateral malignant adnexal masses, enlarged retroperitoneal nodes, omental cake and significant upper abdominal disease. The CA125 was 744. Omental biopsy confirmed the diagnosis of OC. The case was discussed at the MDT and the patient was scheduled to receive initially 3 cycles of neoadjuvant chemotherapy.

She was hospitalized for 7 weeks. IV prednisolone was initially administered before, switched to PO at the week of discharge. Both muscle and cutaneous disease responded somewhat to the steroids. Two cycles of Rituximab (RTX) were given with good therapeutic effect. In addition, she received 3 cycles of carboplatin/paclitaxel. After 6 weeks, her CK and CA125 were reduced to 23 and 47, respectively. Repeat CT TAP showed a favourable interval response with size reduction at all tumour sites.

Conclusion
Early recognition of DM as a primary manifestation of OC can assist with prompt cancer diagnosis. Conversely, OC should be suspected in women with DM and timely screening should be performed to help early OC detection. RTX appears sufficient to cure the myositis component of DM in OC patients. Whether RTX improves the prognosis of these women remains to be elucidated.

P-16

DERMATOFIBROSARCOMA PROTRUBERANS OF THE VULVA: A CASE REPORT

Datta M[1], Ghosh B[1], Mowatt D[1], Chachan S[2], Myriokefalitaki E[1], Smith M[1], Winter-Roach B[1], Slade R[1]

[1]The Christie Hospital NHS Foundation Trust , Manchester , United Kingdom, [2]Stepping Hill Hospital , Stockport , United Kingdom

We report the case of a 59 year old lady with dermatofibrosarcoma protruberans of the vulva.

This is the largest such tumour (17 centimetres) in reported literature.

The lady presented to the Accident and Emergency department of her local district general hospital in January 2016, with a 6 month history of shortness of breath and lethargy.

On clinical examination, she was found to have a very large, ulcerated mass arising from the mons pubis and involving the upper part of both the labia, at presentation.

She underwent a wide local excision of the vulva with primary closure in February 2016. Histology confirmed dermatofibrosarcoma protruberans with fibrosarcomatous transformation.

Re-excision of the scar (12cm x 5cm x 5 cm) with a rhomboid flap reconstruction was also done later.

She made an uneventful post-operative recovery and remains well and disease free, a year after her initial surgery.

Conclusion
DFSP of the vulva being a very challenging lesion, usually implies difficult surgical management.

If treated in a multidisciplinary environment, even in difficult cases that present with large lesions and compromising challenging areas, wide local excision can be used to achieve complete oncologic resection while minimizing functional damage for the patient.

P-17

LAPAROSCOPIC VERSUS ABDOMINAL RADICAL HYSTERECTOMY FOR PATIENTS WITH EARLY STAGE CANCER OF THE CERVIX. ASSESSMENT OF PERFORMANCE AND QUALITY IMPROVEMENT.

Abdallah K[1], Todd R[1], Kodampur M[1], Redman C[1]

[1]*Royal Stoke University Hospital, Stoke-on-Trent, United Kingdom*

Background/Rationale
The value of looking into treatment modalities of cancer cervix is derived from the fact that cancer cervix is women's second most common cancer and the accounts for the highest percentage of death from gynaecological cancers worldwide. Treatment modalities depend on staging of the disease. Staging of cancer cervix is mainly clinical rather than surgical. For women diagnosed with early stage cervical cancer, the recommended choice for treatment is radical hysterectomy. The procedure of radical hysterectomy has evolved over time. The approach to perform a radical hysterectomy has progressed from abdominal to laparoscopic to robotic approach.

Aim
This audit aims at assessment of our units' performance and progress in the introduction of laparoscopic radical hysterectomy for treatment of women with a diagnosis of early stage cancer cervix.

Objectives
Outcomes under assessment will include the patients' age, peri-operative complications, operative time, patient re-admissions, number of recovered lymph nodes and if adjuvant radiotherapy has been offered following the results of histology.

Key Findings
Our data will be compared to the data presented in the Cochrane review "Laparoscopically assisted radical vaginal hysterectomy versus radical abdominal hysterectomy for the treatment of early cervical cancer, 2016"

Methodology
Sample: A list of all patients diagnosed with cervical cancer over the period from 01/01/2011 to 20/10/2016 at the UHNM.

Audit type: Retrospective Local audit covering the Royal Stoke University Hospital cancer centre.

Design: All patients diagnosed with early stage cervical cancer and subsequently received surgical treatment in the form of radical hysterectomy were included.

Recommendations
1. Continue the positive shift to using LARH with careful patient selection for suitability of the proposed approach.
2. Re-audit the outcomes after 1 year to monitor points of progress and identify points for improvement.
3. Consider including cost implications and theatre utilisation data with the re-audit.

P-18

RISK REDUCTION SURGERY (RRS) FOR TUBO-OVARIAN CANCER IN AN IRISH GYNAECOLOGICAL PRACTICE: AN ANALYSIS OF INDICATIONS AND OUTCOMES

Thompson C[1], Norris L[2], O'Riain C[1], Gallagher D[1], Kamran W[1], Gleeson N[1]

[1]St James's Hospital Dublin, Dublin, Ireland, [2]Gynaecology Dept. Trinity Centre for Health Sciences, Dublin, Ireland

Background
High grade serous carcinoma (HGSC) is the most common tubo-ovarian cancer. The fallopian tube harbours the precursor lesion of serous tubal intraepithelial carcinoma (STIC). Bilateral salpingo-oophorectomy (BSO) is an effective risk reducing surgical (RRS) strategy for women at risk due to BRCA germline mutations (BRCAm). The value of RRS in those without defined genetic risk is unknown but these women represent a substantial cohort in prophylactic surgical practice.

Study design
Retrospective review of RRS cases at an Irish university teaching hospital.

Results
130 women underwent RRS. Median age was 48.3 years. Group 1 consisted of 46 women with known BRCAm. Group 2 consisted of 84 women; BRCAm negative (19) or without previous genetic testing (65). Group 1 were younger and more likely to be premenopausal. This group had one occult HGSC in a BRCAm 2 carrier. Group 2 had no STIC lesions or cancers, were older, more likely to have hysterectomy and other benign pathology. Three women had bilateral salpingectomy as an interim measure.

Conclusion
RRS in women with BRCAm is well established, however, more than 60% of women undergoing RRS were BRCAm negative or untested. No STIC lesions were identified. STIC may be less common than originally reported or transitory in nature. The removal of coincidental pathology may give added value to RRS in BRCAm negative or untested women. Counselling of individual high risk women without defined germline mutations remains a challenge for gynaecologists.

P-19

ENDOMETRIAL CANCER: TREATMENT AND THE IMPACT OF CO-MORBIDITIES

Killen S[2], **Kwek I**[2], Price J[1], Mccomiskey M[1]

[1]*Belfast HSC Trust, Belfast, United Kingdom,* [2]*Queens University Belfast, Belfast, Northern Ireland*

Introduction
The mainstay of treatment of endometrial cancer is hysterectomy with bilateral salpingo-oophorectomy. Study investigated how co-morbidities affect the treatment of endometrial cancer especially regarding the uptake of laparoscopic surgery.

Methods
A retrospective audit collected data for every patient treated for endometrial cancer at Belfast City Hospital in 2015. Primary audit standard of 100% surgical uptake was set, with a secondary audit standard of 50% surgeries to be completed laparoscopically. The patients' age, cancer grade, FIGO stage, co-morbidities, type of surgery, post-op complications and adjuvant treatment was recorded.

Results
185 women aged 31-91 (mean age 64 years) were studied. Most tumours (67%) presented at stage 1 and there were similar frequencies of tumours at grades 1, 2 and 3. 89% received surgery in the first instance, 6/21 of the patients who did not receive surgery were due to co-morbidities. Almost half of patients had a BMI >30 kg/m2. 15% of surgeries were vaginal and 50% laparoscopic whilst 32% were open. Nodal surgery rates will be presented and discussed. Laparoscopic surgery completion was similar for those with BMI <30 and 30-39.9 kg/m2 (45% and 55% respectively), however the laparoscopy rate dropped to 24% when patient BMI was ≥40 kg/m2. Post-operative complication rate was similar across the BMI classifications (20-22%) for laparoscopic surgery. Open surgery had complication rates of 43%, 44% and 79% for BMI cohorts of <30, 30-39.9 and ≥40kg/m2 respectively. Medical co-morbidities of endometrial cancer patients will be quantified and discussed.

Conclusion
Endometrial cancer patients have a high degree of obesity and co-morbidities. BMI rising to greater than 40 kg/m2 causes a marked reduction in likelihood of endometrial cancer surgery to be completed laparoscopically and causes post-laparotomy complication rate to rise. To increase laparoscopic surgery rate in this group, maximal planning and co-operation between anaesthetists and surgeons is required.

P-20

INCIDENTAL LYMPH NODE PIGMENTATION SECONDARY TO ORTHOPAEDIC BONE CEMENT

Pontefract D[1], Bowden A[1], Jaynes E[1], Hadwin R[1]

[1]*University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom*

History

We present this 85 year old woman with a history of significant post menopausal bleeding. Investigations demonstrated a high grade endometrial adenocarcinoma, and a total laproscopic hysterectomy, bilateral salpingo-oophorectomy with bilateral pelvic lymphadenectomy was undertaken. An unexpected intra-operative finding of significant black pigmentation of the right external iliac lymph nodes raised a differential diagnosis of an unidentified malignant melanoma. Formal paraffin histology confirmed FIGO stage IIIC1 serous adenocarcinoma of the endometrium and a single pelvic lymph node metastasis, but no evidence of malignant melanoma. Abundant black pigment-laden macrophages presumed secondary to orthopaedic bone cement were seen in addition to lymph node metastasis of her endometrial adenocarcinoma. The patient had previously undergone significant orthopaedic pelvic surgery with bilateral total hip replacements and revision hip surgery on the right side.

Discussion

The most important differential diagnosis of focal tissue pigmentation is malignant melanoma, however, dental amalgam, cosmetic tattoos and orthopaedic bone cement are recognised benign causes. Intra-operative frozen section could have been performed to assess for metastatic malignant melanoma. Literature review describes false positive tissue biopsies due to cellular atypia caused by bone cement and metallic debris. Biopsy interpretation may also be obscured by significant intra- and extra-cellular pigment.

Since cemented orthopaedic implants are relatively common in our aged gynaecological-oncology patients, we highlight this benign incidental finding masquerading as malignant pathology. Literature review supports formal paraffin histology for assessment.

P-21

PATIENT TRIGGERED FOLLOW UP FOR ENDOMETRIAL CARCINOMA: THE SOUTHAMPTON EXPERIENCE FROM 2013 TO 2016

Pontefract D[1], Crawford S[1]

[1]*University Hospital Southampton Gynaecological Oncology Group, Southampton, United Kingdom*

Background and Methods
Patients undergoing surgery for endometrial carcinoma at this Centre have traditionally attended Clinical Follow Up (CFU) for five years. Increasing workload and inconsistent availability of junior medical staff made CFU unsustainable, with negligible clinical benefit to patient outcome demonstrated by audit. Patient Triggered Follow Up (PTFU) passed local Clinical Governance requirements and was introduced in July 2013. Patients have access to several educational and support modalities, initiating further contact with the service when required. All contacts are documented contemporaneously and were analysed for women entering PTFU from 1/7/2013 to 31/12/2016. Outcomes for a cohort of women undergoing CFU following treatment between 1/1/2009 and 30/6/2013 were compared with Log-Rank (Mantel-Cox) and Kaplan Meier analyses.

Results
220 women were enrolled to PTFU including 16 women with FIGO stage II and 17 women with stage III disease. After enrolment, 7/220 (3.1%) did not accept PTFU and requested traditional clinical reviews. One patient moved to another area and one declined any form of follow up. 120/220 engaged in the Health and Wellbeing Workshop and a further 174 telephone consultations were initiated by women. Disease recurred or progressed in 19/220 (8.6%), leading to death in 9 women (4.1%), including one where patient-initiated clinical review and investigations of her bleeding failed to identify her recurrence. There were two further, unrelated deaths in the PTFU group, with overall survival of 95% to date. 242 women entered CFU with 45 deaths occurring in the comparable period of follow up and overall survival of 81.4% (p=0.013).

Conclusion
Preliminary analysis indicates that women find PTFU acceptable and recurrence can be detected. We have found no negative impact on survival overall. The apparent survival advantage (see Kaplan-Meier plot) may be due to deterioration prior to enrolment in PTFU or case selection unidentified at present; further assessment is required.

P-22

LYMPH NODE DISSECTION AND ADJUVANT CHEMOTHERAPY IN EARLY STAGE OVARIAN CANCER – A SINGLE INSTITUTE EXPERIENCE

Mehmood T[1]

[1]*Shaukat Khanum Memorial Cancer Hospital and Research Centre, Lahore, Pakistan*

Objective
To establish the impact of lymph node dissection on further clinical management and survival in patients with early-stage epithelial ovarian cancer (EOC).

Methods
We retrospectively analyzed 320 patients with a stage I-IIa and IIIA1 EOC treated at our institute between 2010 and 2015. For each patient the following data were collected: age, FIGO stage, grade, whether or not adjuvant chemotherapy was given, the number of lymph nodes removed and overall survival.

Results
320 patients were included of which 275 patients had a lymph node dissection. The overall survival of patients with lymph node dissection was better than of patients without, also after correction for FIGO stage, tumour grade and age. A significant correlation was found between the number of lymph nodes removed and overall survival. Patients without lymph node dissection that received adjuvant chemotherapy had a poorer survival compared to patients with lymph node dissection and without adjuvant chemotherapy.

Conclusions
In early-stage EOC lymph node dissection contributes to a better survival. Giving adjuvant chemotherapy to patients without lymph node sampling does not compensate for incomplete staging. An adequate lymph node dissection should be standard procedure in the staging of in early-stage EOC.

P-23

INGUINAL LYMPH NODE METASTASIS OF HIGH GRADE ENDOMETRIAL ENDOMETROID ADENOCARCINOMA.

Heron S, Milling-Smith O

[1]Forth Valley Royal Hospital, Larbert, United Kingdom, [2]Forth Valley Royal Hospital, Larbert, United Kingdom

Background

Most patients diagnosed with endometrial cancer are diagnosed in early stages, with less than 5% of patients presenting with advanced disease. Presentation at time of diagnosis with metastatic disease is rare and normally associated with high initial surgical stage and tumour grade2

Inguinal metastases are rare at presentation and fall into atypical sites of recurrence for this gynaecological malignancy.

Case

A 76 year old Para 3 with a history of breast cancer presented to clinic with postmenopausal bleeding. Hysteroscopy and endometrial biopsy was perfomed diagnosing a grade 3 endometroid adenocarcinoma of endometrium. Preoperative imaging to inform disease staging reported a suspicious inguinal node. Groin node biopsy confirmed adenocarcinoma consistent with her primary endometroid adenocarcinoma. Subsequently she underwent a PET CT and neoadjuvant therapy prior to surgical staging in the form of a laparoscopic hysterectomy, bilateral salpingo- oophorectomy and omental biopsy. Final pathology review identified disease confined to the uterus consistent with grade 3 endometroid adenocarcinoma of endmetroid subtype.

Conclusion

Inguinal node metastases at initial staging for endometrial cancer is uncommon and formal biopsy in this case was important to determine origin of metastatic disease. PET CT may have a role in identifying suspicious inguinal lymphadenopathy identified by physical examination or other modes of imaging studies.

P-24

A PILOT PREHABILITATION PROGRAM AS PART OF A COMPREHENSIVE ERAS PATHWAY FOR GYNAE-ONCOLOGY SURGERY

Madhuri T[1,2], Brown R[1], Jones C[1], Tailor A[1,2], Ellis P[1,2], Butler-Manuel S[1,2]

[1]Royal Surrey County Hospital NHS Foundation Trust, Guildford, United Kingdom, [2]University of Surrey, Guildford, United Kingdom

Objectives
Preoperative optimization is a fundamental element of ERAS programmes. Whilst prehabilitation programmes have been shown to improve parameters of functional capacity1, the lack of evidence for a beneficial effect on clinical outcomes means they are yet to be recommended in ERAS guidelines2. We sought to evaluate the impact of a pilot prehabilitation program on patients undergoing major open gynae-oncology surgery in conjunction with our existing ERAS pathway.

Methods
A total of 12 patients undergoing interval debulking surgery for gynaecological malignancies were invited to take part.

Each participant underwent a 5 week prehabilitation program consisting of two 1 hour supervised exercise classes a week, combining aerobic and resistance training. Patients were also given a home based exercise program to supplement this. Functional capacity was measured with 6 min walk test (6MWT), number of sit to stands in 1 minute (STS) and grip strength (kg) before and after the prehabilitation program.

Results
Median age was 67 (51-81) years. There was an average 66m improvement in the 6MWT, a 6 rep increase in STS and a modest 0.7kg improvement in GS.

The average length of hospital stay was 7.2 days compared to our average 6.5 days. There was a high level of satisfaction with the program with 100% of participants reporting beneficial effects on their feelings of health and wellbeing.

Conclusion
In this small pilot there was an overall improvement in functional capacity, with high satisfaction levels but with no change in hospital length of stay. A larger scale study is warranted to assess the significance of these findings.

P-25

COST-EFFECTIVENESS OF POPULATION BASED BRCA TESTING WITH VARYING ASHKENAZI JEWISH ANCESTRY

Manchanda R[1,2], **Patel S[1,3]**, Antoniou A[4], Levy-Lahad E[5], Turnbull C[6], Evans G[7], Hopper J[8], MacInnis R[9], Menon U[10], Jacobs I[11], Legood R[3]

[1]Centre for Experimental Cancer Medicine, Barts Cancer Institute, Queen Mary University of London, United Kingdom, [2]Department of Gynaecological Oncology, Bartshealth NHS Trust, Royal London Hospital, United Kingdom, [3]Department of Health Services Research and Policy, London School of Hygiene and Tropical Medicine, United Kingdom, [4]Centre for Cancer Genetic Epidemiology, University of Cambridge, United Kingdom, [5]Medical Genetics Institute, Shaare Zedek Hospital, Jerusalem, Israel, [6]Barts Cancer Institute, Queen Mary University of London, United Kingdom, [7]Centre for Genomic Medicine, Division of Evolution and Genomic Science, University of Manchester, United Kingdom, [8]Centre for Epidemiology & Biostatistics, Melbourne School of Population & Global Health, University of Melbourne, Australia, [9]Cancer Epidemiology & Intelligence Division, Cancer Council Victoria, Melbourne, Australia, [10]Gynaecological Cancer Research Centre, Department of Women's Cancer, Institute for Women's Health, University College London, United Kingdom, [11]University of New South Wales, Australia

Background
Population-based BRCA1/2 testing in Ashkenazi Jewish (AJ) women aged ≥30 years with four AJ grandparents, has found to be cost-effective in comparison to family history (FH) based testing. However, 25% UK and 44% USA Jewish marriages are to non-Jews. Hence, many women may have differing AJ ancestry consisting of one, two, three or four AJ grandparents. This study aims to model the cost-effectiveness of population-based BRCA1/BRCA2 testing compared to family-history based testing in women with differing AJ ancestry.

Method

A decision-analytical model developed to calculate cost-effectiveness for screening women with four AJ grandparents was adapted to model cost-effectiveness outcomes for women of differing AJ ancestry. The following model estimates were recalculated: population prevalence of BRCA1/2, the probability of having a positive family history and the BRCA1/2 prevalence in FH negative individuals. These probability parameters were adjusted for relative BRCA mutation frequency in AJ and general populations. BRCA prevalence with 3AJ grandparents= (0.75*AJprevalence) + (0.25*General-populationprevalence); for 2 AJ grandparents= (0.5*AJprevalence+0.5*General-populationprevalence) and for 1 AJ grandparent= (0.25*AJprevalence+0.75*General-populationprevalence). One-way and probabilistic sensitivity analysis (PSA) were conducted on all four scenarios to account for any uncertainty.

Results
Population-testing in women with two, three and four AJ grandparent ancestry was found to be cost-saving and cost-effective at -£235, -£569, -£767 per QALY (quality adjusted life year) respectively. A cost-effective ICER of £423/QALY was observed for women with one AJ grandparent. The PSA showed ≥95% of simulations for one, two, three and four AJ women were cost-effective at the £20,000/QALY threshold used by the National Institute for Health and Care Excellence.

Conclusion
This study demonstrates the cost-effectiveness of population-based BRCA1/2 testing in women with differing AJ ancestry. Our results support the move for changing the paradigm from FH to population-based testing across the entire AJ population. These results however cannot be extrapolated to the general non-Jewish population.

P-26

SURGICAL OUTCOMES IN THE OBESE ENDOMETRIAL CANCER PATIENT. ROBOTIC VERSUS LAPAROSCOPIC HYSTERECTOMY: A RETROSPECTIVE COHORT STUDY

Wood M[1], Moss E[1]

[1]*University Hospitals of Leicester, Leicester, United Kingdom*

Introduction
The risk of endometrial cancer increases by 80% for every 5 BMI points gained. The morbidly obese are therefore at high risk of developing endometrial cancer in additional to being at increased risk of intra- and post-operative complications. Identifying the optimum surgical modality for these patients is crucial to reduce their peri-operative morbidity.

Methods
A review was performed of robotic assisted total hysterectomies (RATH) performed for endometrial cancer or atypical hyperplasia in obese patients since the introduction of robotic surgery in Leicestershire in 2014. Cases treated with traditional laparoscopic hysterectomy (TLH) performed in the year prior to the introduction of robotic surgery were used as a comparison group. Intra-and post-operative events were compared with sub-analysis performed by obesity class.

Results
110 cases were identified, 76 in the RATH group, 34 in the TLH group. There was no significant difference in the median BMI between the groups, 39.5 kg/m^2 and 38.5kg/m^2 respectively, p=0.667. However median age in the TLH group is significantly older than in the RATH group, 66 versus 61 years, p=0.002. The overall operation time was significantly shorter in the RATH group compared to TLH, 120 minutes versus 150 minutes, p=0.004. There was also a lower blood loss in the RATH group, median 100ml, compared to TLH cases 200ml, p=0.001. The rate of conversion to laparotomy was 11.8% (4/34) in the TLH group compared to 5.3% in RATH (4/76), but this did not reach statistical significance, p=0.589 There was no difference in the length of hospital stay, median of 2 days in both groups.

Conclusion
In the obese endometrial cancer population this study demonstrates clinical benefits for RATH compared to TLH, with favourable peri-operative outcomes in operative time and blood loss. However other factors such as financial implications should be considered when choosing surgical modality.

P-27

AUDIT OF POST-OPERATIVE COMPLICATIONS IN A REGIONAL GYNAECOLOGICAL ONCOLOGY CENTRE

Cohen J[1], **Northam A**[1], Fish A[1], Larsen-Disney P[1], Kaushik S[1]

[1]*Brighton and Sussex University Hospitals NHS Trust, Brighton, United Kingdom*

There is limited data regarding the rate of post-operative complications following Gynae-Oncological surgery. One multi-centre study found the rate to be approximately 26% (n=1462, 95% CI 23.7 – 28.2)[1] of grade II-V complications according to the Clavien-Dindo classification[2]. An ongoing audit was performed at the Gynaecological Cancer Centre at Brighton & Sussex Universities NHS Hospital Trust, to identify the rate of post-operative complications and identify areas for possible improvement.

All Gynaecological Cancer patients operated on at BSUH 7/6/16-6/12/16 were included. The type of procedure, co-morbidities and post-operative complications were recorded in an encrypted database at an NHS hospital by two junior doctors, under the direction of three consultant gynaecological oncologists who performed all procedures. The severity of each complication was then quantified according to the Clavien-Dindo classification.

Overall, 235 procedures were performed on 232 patients ranging from 27 to 88 years old; 97 laparotomies, 82 laparoscopies, 23 vulval procedures, 28 hysteroscopies and 5 brachytherapy rod insertions. 33 complications were recorded in total; 26 graded as II-V (rate of 11.1%) and 8 graded as III-V (3.4%); lower than the previous audit cycle (4.6%). The most common complications were infection requiring antibiotics (4.3%) and post-operative transfusion (3.4%). Chi-squared analysis showed the rate of complications was significantly different to the benchmark rate ($p<0.01$).

The adjusted complication rate of this regional centre for Gynae-Oncology appeared in line with other published figures. Gynae-Oncology patients are often complex with multiple comorbidities which may contribute to post-operative complications rates. It is the intention of the clinical team at BSUH to include BMI, ASA and performance status in future audits to understand their relationship to post-operative complication rates. The Clavien-Dindo classification may not be suitable for patients with multiple pre-existing comorbidities and a modified version of this classification may need to be developed for this cohort of patients.

P-28

MANAGEMENT OF PREGNANCY POST TRACHELECTOMY: A SYSTEMATIC REVIEW OF THE LITERATURE

Willmott F[1], Tirlapur A[1], Lloyd P[1], Jeyarajah A[1], Rao K[1], Brockbank E[1]

[1]*Bart's Health, London, United Kingdom*

Introduction
More than fifty percent of the women diagnosed with cervical cancer in the UK are less than 45 years old; with a trend towards starting families later in life this raises fertility issues. Radical trachelectomy has equivalent 5-year survival to radical hysterectomy allowing the option of fertility preservation if desired. Pregnancies following trachelectomy are high risk due to the increased rate of mid-trimester miscarriage and preterm delivery; often as a consequence of preterm prelabour rupture of membranes.

Objectives
To assess the available literature on obstetric management and pregnancy outcomes post trachelectomy.

Methods
A search of EMBASE Medline, PSYCHINFO, AMED, CINAHL, SIGLE, and LILACS was performed: from inception to January 2016 with no language restrictions. Observational studies with more than five pregnant women were included for all routes of trachelectomy and results pooled for pregnancy outcomes.

Results
25 suitable studies were identified describing 752 pregnancies. Mean time from trachelectomy to conception was 31 months with 61% (151/248) of women requiring assisted reproductive techniques reported. Pooled live birth rate was 62.8% (404/643). The rate of first trimester miscarriage was 16%, second trimester miscarriage 7%, 54.8% of women delivered at term.

The only Grade A evidence available is to commence antibiotics and prophylactic steroids if premature rupture of membranes occurs with a view to deliver as soon as possible.

The majority of other recommendations for antenatal care, including consider vaginal progesterone pessaries from 12 until 36 weeks, serial fortnightly isthmic length scans and aim to deliver by elective caesarean section around 37 weeks presented are based on expert opinion.

Conclusion
Obstetricians need to be aware of the evidence base for the management of pregnancy post trachelectomy and communicate with oncologists to create individualised antenatal care plan, ensuring a holistic multidisciplinary team approach for these women.

P-29

SURGICAL CYTOREDUCTION OF THE UPPER ABDOMEN IN GYNAECOLOGICAL CANCER: AN EXPERIENCE OF ADDITIONAL SKILL ACQUISITION BY THE GYNAECOLOGY ONCOLOGY TEAM FROM COLLABORATION WITH HEPATOBILIARY SURGEONS IN A TERTIARY CANCER CENTRE

Phadnis S[1], Neuzillet C[2], Watt J[2], Vernerey D[3], Jeyarajah A[1], Kocher H[2], Brockbank E[1]

[1]Academic Department of Gynaecological Oncology, Bartshealth NHS Trust, London, United Kingdom, [2]Centre for Tumour Biology, Barts Cancer Institute, London, United Kingdom, [3]Methodology and Quality of Life unit in Oncology, University Hospital of Besancon, Besancon, France

Background
Complete surgical cytoreduction with no macroscopic residual disease (R0 resection) for ovarian cancer is the strongest independent prognostic factor for survival. A recent survey in UK reported clinical equipoise with regards to ultraradical cytoreductive surgery and nationwide inequalities in available resources and surgical training. Upper-abdominal debulking procedures often require skills of, or learnt from hepatobiliary (HBP) surgeons. We report our experience of increasing surgical skills in the Gynaecology Oncology (GO) surgeons for upper abdominal cytoreduction procedures by collaboration with HBP surgeons. We compare surgical outcomes in two cohorts: GO and HPB operating together (combined) and the GO team operating without the direct input of the HPB team (independent).

Methods
Consecutive patients who had upper abdominal procedure for cytoreduction for advanced stage ovarian cancer from 01/2010 till 11/2015 were retrospectively analysed; 47 patients were included in the combined cohort and 19 in the independent cohort. Primary endpoints were R0 resection rate and 30-day post-operative complications.

Results
Median age was 63 years (range: 22-81). Most patients (95%) had high grade serous ovarian carcinoma. Twenty four patients (36%) had primary debulking surgery. Median complexity procedure score was 7 (IQR: 6-8) and median of 3.5 organs (IQR: 3-5) were resected. R0 resection was achieved in 88%. Major complication rate was 18%, including one perioperative death. The median length of stay was 7 days (IQR: 6-11). The two cohorts displayed similar FIGO stage, Peritoneal Carcinomatosis Index, and complexity procedure score; liver resections were performed only in the combined surgery cohort. Comparative analysis of the two cohorts showed no significant differences in terms of R0 resection (85% v 95%; p=0.42) and complication rate (23% v 5.3%; p=0.15).

Conclusion
Following skill acquisition by collaboration with HBP surgeons, upper abdominal surgery can be performed safely by GO surgeons with acceptable perioperative morbidity and oncological outcome.

P-30

EARLY EXPERIENCE OF CERVICAL ICG INJECTION IN THE ROBOTIC SURGERY GYNAECOLOGICAL ONCOLOGY PROGRAMME AT JAMES COOK UNIVERSITY HOSPITAL

Fisher A[1], Twigg J[1]

[1]*James Cook University Hospital, Middlesbrough, United Kingdom*

Introduction
The results of sentinel lymph node (SLN) detection from our cancer centre are presented. SLN detection in endometrial cancer was first described in 1996.

Methods
Robotic surgery began in our centre in March 2015, using a da Vinci Si system, with currently just one consultant surgeon doing all cases. We are one of 2 centres in the UK using ICG detection of SLN's using a robotic platform. To detect SLN's we inject indocyanine green intra-cervically during preparation for procedure following anaesthetic induction.

Results
The outcome of 94 cases is presented; 68 cases were endometrial cancer, 25 cervical cancers and one borderline ovarian tumour case (thought pre-operatively to be endometrial cancer). Only 1 robotic procedure had to be converted to an open procedure and there were no allergic reactions. All 94 cases had ICG injected and SLN were detected in 79 cases (84%). Of the SLN detected, 33% were unilateral and 67% bilateral. Lymphatic metastases were detected in 10 cases (11%) and these findings altered all of these patients' post-operative treatment as a consequence. Twenty-eight of the cases had a full pelvic lymph node dissection following SLN detection and based on these cases the specificity of the SLN procedure was 91% with a negative predictive value of 95%.

Conclusion
This data indicates that patients with intermediate and high risk endometrial cancer should not be managed by simple hysterectomy alone and supports the use of SLN mapping algorithm as one methods of preventing the associated morbidity of a full pelvic lymph node dissection.

P-31

IDENTIFICATION OF INGUINO-FEMORAL SENTINEL LYMPHNODE IN VULVAL CANCER: SINGLE INSTITUTE EXPERIENCE

Ghosh B[1], Myriokefalitaki E[1], Robotin C[1], Datta M[1], Worsnopp B[1], Smith M[1], Slade R[1], Winter-roach B[1]

[1]*The Christie NHS Foundation Trust, Manchester, United Kingdom*

Background
The GROIN studies gradually established technical requirements, safety and feasibility of identification and excision of the sentinel lymph node instead of complete lymphadenectomy for vulval cancer.

Methods
Retrospective study of all patients with presumed stage 1 vulval cancer who underwent identification and excision of inguinal sentinel lymph node procedures by the gynaecological oncology team at The Christie, between 1/3/2015 and 31/1/2017. Data collection included patients demographics, tumour location and characteristics, lymphoscintigraphic and histopathological features, and surgical outcomes.

Results
We identified 30 cases of median age 63.1 years (range 34-92 y.o). Preoperative imaging excluded distance disease. Tumour has been previously excised in 46.7% of the cases. Identification of a both hot and blue lymph node was achieved in 93.3% cases. In 2 (6.7%) cases a sentinel lymph node could not be identified by lymphoscintigraphy and therefore a full lymphadenectomy was performed. Both cases were from the subgroup of patients with previously excised primary tumors, with a failure rate of 14.3% vs 0% of those with incisional biopsies, $p<0.05$. None of them had final positive lymph nodes. 3 out of 28 (10.7%) sentinel lymph nodes were positive.

There were no cases (0%) with groin wound healing problems, lymphocyst or lymphoedema. There were no grade 3-4 complications or deaths (0%). There is no groin recurrence in a median of 11 months follow up (range 1-22).

Conclusion
Identification and excision of inguino femoral sentinel lymphnode in vulval cancer is a safe and efficient procedure with minimal morbidity. As per ESGO guidelines, incisional biopsy is required rather than excisional. In our experience is important to counsel patients regarding the failure to surgically identify the sentinel lymph node, in this scenario and proceed with full lymphadenectomy.

P-32

APRONECTOMY FOR GYNAECOLOGICAL CANCER SURGERY: A CASE SERIES

Ghosh B[1], Myriokefalitaki E[1], Robotin C[1], Datta M[1], Worsnop B[1], Winter-roach B[1], Smith M[1], Slade R[1]

[1]*The Christie NHS Foundation Trust, Manchester, United Kingdom*

Background
According to WHO, 25% of adult women in UK are obese (BMI>30). The surgical management of these women with cancer is challenging. The aim of this study is to investigate surgical outcomes of apronectomy combined with laparotomy in gynaecological oncology, as a technique to gain access to the abdomen, especially for morbidly obese women with paniculi.

Methods
A retrospective case series of all patients who had apronectomy combined with laparotomy at The Christie, between 1/9/2007 and 31/8/2016, by the gynaecological oncology team. Data collection included patient demographics (age, BMI, body weight, performance status, co-morbidity and anaesthetic scoring) level and complexity of surgery, histopathological features (stage, type, grade) and surgical outcomes (peri and post-operative morbidity, mortality, length of hospital stay, readmission).

Results
We identified 77 consecutive cases. Median age was 58.7 years old (range 31-84 y.o) with a mean BMI of 45.5 and a mean body weight of 116.2 kg. 30% had a BMI>50.

34% were diabetic and 58% had cardiovascular disease. 82% had at least a moderate risk in the adult co-morbidity evaluation score (ACE) and 30% had an ECOG performance status of 2 or higher.

The mean hospital stay was 6.9 days (range 4-23 days). Post-operative complications included wound infection in 32% of patients, 7% of UTI and chest infections, and only 1.2% of Clavien-Dindo level 3a complication. There were no deaths within 30 days post op. There were 2.4% readmissions for wound healing problems. All patients had follow up in wound dressing clinic.

Conclusion
Apronectomy in this high risk cohort of patients is a safe procedure with acceptable morbidity although longer than average hospital stay.

P-33

DELAYS IN DISCHARGE FOR PATIENTS SURGICALLY FIT FOR DISCHARGE, POST GYNAECOLOGICAL ONCOLOGY OPERATIONS AND COST IMPLICATIONS.

Bradley L[1], Ghosh B[1], Robotin C[1], Datta M[1], Worsnopp B[1], Smith M[1], Slade R[1], Winter-Roach B[1], Myriokefalitaki E[1]

[1]*The Christie NHS Foundation Trust, Manchester, United Kingdom*

Background
Enhanced Recovery Programmes have been proven to successfully prepare patients undergoing major gynaecological surgery for an earlier and safe discharge, with links to pre and post-operative rehabilitation and social services.

Methods
Retrospective study of all 295 cases that underwent surgery by the gynaecological oncology team at The Christie, between 1/1/2016 and 31/7/2016, in order to identify reasons for delayed discharge and increased hospital stay for patients who are medically fit for discharge. We excluded minor, day cases and joint procedures for non gynaecological primary cancers. Data collection included patient demographics, level and complexity of surgery, surgical outcomes (peri and post- operative morbidity, mortality, length of hospital stay, readmissions), reasons for delays in discharge. Analytical reports of costs from finances were retrieved in order to calculate cost implications.

Results
We reviewed all cases with length of hospital stay above the 3rd interquartile per type of surgery and identified 9 cases (4.1%) who although deemed fit for discharge stayed as inpatient for a cumulative total of 62 days (mean 6.9 days/case). Reasons for delayed discharge were attributed 20% to Occupational Therapy and 80% to social services. The additional cost was calculated to £49133, an average cost of £792.5 / day.

Conclusion
Early identification of needs and timely referrals can potentially reduce delayed discharges and reap associated financial benefits as well as benefit patients. Enhanced Recovery Nurse can facilitate communication with the appropriate teams to ensure timely discharges. Since then we implemented pre-op assessment and initiation of referral processes.

P-34

INITIAL EXPERIENCE OF CYTOREDUCTIVE SURGERY AND HEATED INTRA PERITONEAL CHEMOTHERAPY IN OVARIAN CANCER (CSR AND HIPEC)

Winter-Roach B[1], Myriokefalitaki E[1], Smith M[1], Slade R[1], O'Dywer S[1]

[1]*The Christie Nhs Foundation Trust, Manchester, United Kingdom*

We present cases of epithelial ovarian cancer treated with CRS and HIPEC at the Christie Hospital in Manchester. In all cases, the decision to treat with HIPEC was based on the interpretation that the disease was colorectal or appendiceal in origin. The post-operative histology confirmed that the disease was rather epithelial ovarian cancer. The patients also had standard systemic platinum based chemotherapy.

Four patients were treated with CRS and HIPEC; 2 patients had high grade serous histology, one endometrioid and one mucinous carcinoma. 3 patients were in their mid-40s at the time of diagnosis and one was 75 years old. 3 patients had stage 3 disease and one (with mucinous histology) was stage 2c. Complete cytoreduction was achieved in all cases and the cytotoxic agent with HIPEC was mytomicin. Of the 4 patients, 2 are alive with 3 years disease free interval each, 1 is clinically free of disease 18 months after CRS and HIPEC and one patient (with mucinous carcinoma) has died 18 months after .

Our experience at the Christie is believed to be the first with CRS and HIPEC in EOC in the UK. A prospective phase 2 study of CSR and HIPEC in ovarian cancer is being planned at the Christie.

P-35

AN AUDIT OF GYNAE- ONCOLOGY PERI-OPERATIVE MANAGEMENT PRACTICES IN OVARIAN CANCER (OC) PATIENTS BASED ON ENHANCED RECOVERY AFTER SURGERY (ERAS) PROTOCOL IN UK AND PAKISTAN-BASED (P) GYNAE ONCOLOGY CENTRE.

Chishti U[1], Akhtar M[2], Ahmed [2], B. Aziz A[2], Barton D[1]

[1]*St Georges Healthcare NHS Trust, London, United Kingdom,* [2]*The Aga Khan University, Karachi, Pakistan*

Objective
To audit differences in ERAS compliance and impact on clinical outcomes.

Methods
Retrospective study of 68 consecutive patients (33 from UK; 35 from Pakistan) with OC undergoing cytoreductive surgery from January to June 2016.

Results
Demographic data were similar in the two groups, but in Pakistan diabetes was more prevalent. Mechanical bowel preparation was used in 97% of Pakistan patients compared to 3 % in UK. Fasting for solids was for 48 hrs. In 97% and for liquids 12 hrs. In 65.7% of Pakistani women, compared to 6hrs and 2 hrs in the UK respectively. No Pakistan patients and 100% of UK patients had preoperative carbohydrate loading. 54.5% of UK patients (up to 48hrs) and 100% of Pakistan patients received post-operative antibiotics (5 days minimum). Nasogastric tubes and peritoneal drains were used in 100% in Pakistan and 42% and 9% respectively in the UK. Epidural was used in 77% in Pakistan patients compared 12% in the UK, who most often had patient controlled Intravenous analgesia (PCIA.) Thromboprophylaxis was given for 28 days in the UK compared to 7 days in Pakistan.

97% of Pakistan patients were mobilized on postoperative day 2, compared to 60% in the UK. Oral fluid commencement was immediately after surgery in UK and on day 1 in Pakistan.

88.6% of Pakistan patients had electrolyte imbalance, but only 18% in UK. 14% of Pakistani patients had postoperative pyrexia, but none in the UK. Wound infection and readmission rate was more common in UK Patients (18% and 6%) as compare to (3% and 3%) in Pakistan.

Average length of hospital stay was 8 days in both groups.

Conclusion
These data suggest that carbohydrate loading, reduced pre-operative fasting times, lower usage of NGT and peritoneal drains could be safely introduced into practice in Pakistan.

P-36

CORRELATION OF PRE-OPERATIVE COMPUTED TOMOGRAPHY SCANS WITH INTRA-OPERATIVE FINDINGS IN OVARIAN CANCER

Drews F[1], Jones R[1], Rzyska E[1], Howells R[1], Lim K[1], **Sharma A**[1]

[1]*UHW Department of Gynaecological Oncology, Cardiff, United Kingdom*

Objective
The aim was to review pre-operative computed tomography scans (CT) in ovarian cancer patients. We prospectively assessed the correlation to clinical findings in the intra-operative sites as well as the impact on successful cytoreduction.

Methods
We carried out a prospective analysis of 31 consecutive patients (December 2016 to February 2017) in a tertiary cancer centre who underwent primary or interval debulking surgery for suspected ovarian cancer. Radiological CT reports from the regional multidisciplinary meeting (MDM) were compared to intraoperative findings.

Results
Of 31 consecutive patients with pelvic masses, 26 were diagnosed with ovarian cancer. Four patients with benign lesions and one patient with an appendicular adenocarcinoma were excluded from the analysis. Histologically, 22 (85%) had epithelial ovarian cancer, 2 (8%) borderline ovarian cancer, 1 (4%) germ cell tumour and 1 (4%) granulosa cell tumour. Most patients had advanced ovarian cancer stage III/IV (17, 65%) compared to stage I & II (9, 35%). Further management was decided in the MDM and was based on performance status, medical comorbidities and preoperative imaging. 16 patients (61.5%) underwent primary surgery, 9 (34.6%) had interval debulking surgery following neoadjuvant chemotherapy (NACT) and one patient (4%) underwent a second look laparotomy. CT scan reports did not correspond with intraoperative findings in 15 (58%) patients. Discrepancies occurred in 40% in the pelvis, 46.7% in the upper abdomen and in 13.3% in multiple sites. Patients in this cohort were mainly stage III/IV (12, 80%). All six (40%) patients with suboptimal debulking had discrepant CT scans. General surgical support was necessary in 5 cases (2 elective, 3 emergency) to achieve complete cytoreduction.

Conclusion
Disease distribution is often underestimated by pre-operative staging CT scans, leading to suboptimal debulking and the need for emergency surgical cover.

P-37

STRATIFIED FOLLOW UP FOR ENDOMETRIAL CANCER – ARE WE THERE YET?

Cass G[1], Bailey J[1], Patel A[1], Horton-Fawkes K[1], Nama V[1]

[1]*St Michaels Hospital Bristol, Bristol, United Kingdom*

Background
Stratified follow-up of cancer patients is advocated by the National Cancer Survivorship Initiative to improve post-treatment care. We postulated that women with early endometrial cancer would not come to harm from undertaking a self-directed stratified follow up, but instead benefits would be attained in terms of cost effectiveness for the health service, improved patient satisfaction and increased productivity of resources.

Methods
We analysed all women diagnosed with stage 1 or 2 endometrial cancers from 2005 to 2015 at St Michaels Hospital, Bristol (n=459). We estimated the fixed cost of regular follow-up as (unit cost for a routine visit: £104).

Results
411 cases were analysed. Overall survival at five years was 79%. 7.3 % (30) women had a recurrence. 3.6 % (15) had stage Ia disease, 0.7 % (3) of these were grade 1 cancers. 90 % of recurrences occurred within 3 years and 43% in the first year. The rate of recurrence in stage 1 endometrial cancer was 5.9%, comparable to other studies.

2545 appointments were carried out for women with stage 1 and 2 cancers during the study period. Only 5 (1.2%) asymptomatic recurrences were detected at these appointments. Routine follow up identified one woman with an asymptomatic recurrence for every 509 appointments with a cost of £52,936 for every recurrence detected.

Multivariate analyses showed the risk of death and recurrence was increased by two and four-fold respectively in high-grade cancers (HR 2.87 (1.48-5.53 p=0.002), HR 4.48 (1.76-11.44 p=0.002). There was a five-fold increase in death in women who had a recurrence and high-grade disease (HR 5.49 (0.62-48.56) p= 0.126).

Conclusion
A risk-stratified pathway of post-treatment follow-up for women with endometrial cancer reduces cost and may result in improvement of patient experience.

P-38

ARE WE OVER TREATING WOMEN WITH GRADE 1 ENDOMETRIAL CANCER? THE ROLE OF SENTINEL LYMPH NODE BIOPSY

Cass G[1], Platt S[1], Newton C[1], Patel A[1]

[1]*St Michaels Hospital Bristol, Bristol, United Kingdom*

Background
Recurrence rates in early endometrial cancer vary according to the literature from 2-26% and the majority occur within 3 years of diagnosis. Prognostic factors such as grade, stage, lymphovascular space invasion, and serosal clearance affect risk and are used to tailor adjuvant treatment.

Sentinel lymph node biopsy (SLNB) is another tool to enable targeted adjuvant therapy and reduce morbidity associated with full lymphadenectomy. There are differing approaches to managing these low risk cancers across the UK but there is no current evidence to support routine lymphadenectomy.

Despite low recurrence rates, women still receive adjuvant external beam radiotherapy (EBRT) with no evidence for improved survival. We postulate that the addition of SLNB in these women would reduce treatment-related morbidity whilst not impacting on recurrence risk.

Methods
Retrospective descriptive analysis of all women diagnosed with endometrial carcinoma from 2005 to 2015 at St Michaels Hospital Bristol (n=556).

Results
210 cases of grade 1 endometrial cancer were diagnosed during the study period. 166 of these were stage 1a. There were 3 (1.4%) recurrences: 2 were local solitary, 1 was distant. All recurrences were endometriod adenocarcinoma. 2 cases were stage 1a, the other was stage 1b with presence of LVSI. 2 women with recurrence had brachytherapy. 1 woman with pelvic recurrence died.

11 (5.2%) women with grade 1 disease had EBRT, 4 (1.9%) had chemotherapy and 33 (15.7%) had brachytherapy. 2 women who had EBRT had stage 1 disease whilst 9 had stage 2 or 3 disease. 11 women with stage 1a disease had brachytherapy.

Conclusion
Recurrence after grade 1 endometrial cancer is rare. SLNB may aid triage of patients for adjuvant therapy and it is now being offered to women at our centre. We will prospectively review these cases to monitor outcomes with SLNB.

P-39

ARE PREOPERATIVE ANAEMIA AND HYPOALBUMINAEMIA PREDICTORS OF POOR SURGICAL OUTCOME IN EPITHELIAL OVARIAN CANCER?

Gee M[1], Russell B[2], Edmondson R[2]

[1]Central Manchester Foundation Trust, Manchester, United Kingdom, [2]The University of Manchester, Manchester, United Kingdom

Introduction
Management of ovarian cancer comprises primary debulking surgery (PDS) or neoadjuvant chemotherapy with interval debulking surgery (NACT/IDS). The aim of surgery is to achieve complete cytoreduction. Poorer outcome follows PDS with suboptimal cytoreduction or IDS with optimal/suboptimal debulking (1). The ability to predict which patients who will not have a good surgical outcome could prevent unnecessary surgery. A number of studies have shown variable associations between anaemia, hypoalbuminaemia and cytoreductive success, predominantly in women undergoing primary surgery (2, 3). This retrospective analysis of over 190 women examined the relationship between low haemoglobin, low albumin and poor surgical outcome in women undergoing PDS or IDS.

Methodology
Preoperative haemoglobin and albumin values were evaluated for all women undergoing surgery for ovarian cancer at St Mary's Hospital from 2013-Jan 2016. 'Poor' surgical outcome was defined as PDS resulting in suboptimal cytoreduction and NACT/IDS achieving optimal/suboptimal cytoreduction. 199 and 194 women had complete data including pre-operative haemoglobin and albumin values, respectively. Anaemia was defined as haemoglobin <115g/L, hypoalbuminaemia defined as <34g/L. Data were analysed using Fisher's 2 tailed test.

Results
Both anaemia and hypoalbuminaemia were associated with a poor surgical outcome (P=0.0133 and 0.0018 respectively). As expected, a normal haemoglobin and albumin value was predictive of good surgical outcome (86.8% and 86.5% respectively). However data were analysed to identify if anaemia and hypoalbuminaemia can discriminate patients who will not achieve cytoreductive success at surgery by predicting poor surgical outcome, neither were strongly predictive (PPV anaemia 28.6%, hypoalbuminaemia 37.1%).

Conclusion
We aimed to identify if women can be advised against surgery based on pre-operative haemoglobin and albumin levels. We found that in this cohort, where women predominantly had a good surgical outcome, anaemia and hypoalbuminaemia as independent markers, are not helpful to identify those who will have a poor outcome.

P-40

DRAPED BUT NOT DOCKED

Bryan S[1], Nobbenhuis M[1], Ind T[1]

[1]*The Royal Marsden Hospital, Chelsea, United Kingdom*

Objective
Our aim was to determine factors which have prevented docking and completion of robotic surgery in our case series of women undergoing gynaecological surgery, which is yet to be reported in any other series.

Methods
We present our case series of 400 robotic cases between Jan 2011 – Feb 2017 at the Royal Marsden Hospital, shared between two consultant robotic surgeons. Data was collected retrospectively, from our comprehensive robotic database and included number, diagnosis, and reasons for abandoning the procedure.

Results
Of our 400 cases, we identified 15 which were abandoned prior to docking but after the robot was draped (3.8%). Three were completed by standard laparoscopy, 10 by laparotomy, and one procedure abandoned completely. Of the primary diagnoses, the majority were uterine cancer (40%) followed by ovarian cancer (27%). Some patients had two indicators for surgery, namely primary diagnosis and endometriosis.

The most common reason for not proceeding robotically was due to difficult access caused by intra-abdominal adhesions (53%). This was closely followed by the specimen being too large to retrieve (13%) and equipment failure (13%): one diathermy not working and one robotic failure. There was one case of patient anaphylaxis at the time of anaesthesia, therefore the whole case was abandoned.

Conclusion
Non-docking and subsequent abandoning of the robotic element of the procedure occurred in 3.8% of our patients undergoing gynaecological surgery. The most common reason in our case series was due to intra-abdominal adhesions, identified prior to docking. This information will enable us to counsel and consent our patients about the low risk of conversion from robotic procedure.

P-41

A BESPOKE CONSENT FORM FOR RADICAL TRACHELECTOMY INCLUDING ROBOTICS AND ICG

Bryan S[1], Laios A[1], Natsis S[1], Ind T[1], Nobbenhuis M[1]

[1]*The Royal Marsden Hospital, Chelsea, United Kingdom*

Introduction
Informed consent is an increasingly important aspect to our practice, especially in the setting of fertility preserving surgery in young women with cervical cancer. In addition, robotic surgery utilises relatively new technology, meaning that it is paramount that we disclose the relevant information regarding risks, benefits and outcomes, for patients to consider, prior to undertaking such surgery. To that end, we present The Royal Marsden's bespoke consent form for robotic assisted vaginal trachelectomy and ICG.

Methods
After discussion between the legal and clinical teams, a bespoke consent form was developed for trachelectomy including the use of robotics, ICG, video recording, research and photography. The consent form strategically outlines the procedure to be undertaken, including the benefits and risks, as well as future fertility implications. In addition it uses prose to aid further understanding by the patient. The consent form is subject to ongoing review and approval to ensure that the information is kept up-to-date

Results
The consent form will be displayed as a poster and can be made available to others electronically if they wish to use it for their own institution.

Conclusion
This procedure specific consent form details the proposed surgery and post operative care in a clear manner allowing for informed consent for robotic trachelectomy

P-42

CORRELATION OF MACROSCOPIC APPEARANCE OF POLYPS PERFORMED AT OUTPATIENT HYSTEROSCOPY WITH FINAL HISTOLOGY.

Makris V[1], Wuntakal R[1]

[1]*Queen's Hospital, Romford, United Kingdom*

Objective
The aim of this study is to correlate the macroscopical appearance of an endometrial polyp and the histological result, after biopsy or polypectomy. Also, we examined some risk factors and the correlation between the endometrial thickness and risk of cancer.

Methods
This is a Cross- sectional study of 738 patients of postmenopausal and premenopausal women who had an outpatient hysteroscopy (OPH) for abnormal uterine bleeding, for the period 2011-2015. The information was obtained via the outpatient hysteroscopy records and patient notes, via intranet system.

Results
Out of 738 patients we could get description of macroscopic appearance of polyps for only 492 patients. Four hundred and eleven (411) of these were described as benign and 81 as suspicious looking polyps (Refer to table).

Endometrial Thickness: The risk of cancer in patients with endometrial thickness > 4mm in postmenopausal woman with bleeding is approximately 10%.

Risk factors: The risk factors for endometrial cancer were examined in all the 738 women who presented with abnormal bleeding. It was found that there was an important association between Hypertension (HTN), Diabetes (DM), Hyperlipidemia and endometrial cancer. Hypertension alone was seen in 59% of patients with endometrial cancer.

Conclusions
According to this study, there is a strong correlation between characterization of polyps as benign at outpatient hysteroscopy and final histology but not when they were characterized as suspicious. This may help to reassure patients in clinic and allay patient anxiety. Also, it was found that in postmenopausal women with vaginal bleeding, the risk of endometrial cancer is approximately 10% if the endometrium is >4mm thick and this is consistent with literature. Finally, there seems to be an important association between hypertension and endometrial cancer especially if other comorbitities co-exist as DM, hyperlipidaimia and obesity.

P-43

A BESPOKE CONSENT FORM FOR HYSTERECTOMY FOR UTERINE CANCER INCLUDING ROBOTICS AND ICG

Laios A[1], Natsis S[1], Bryan S[1], Ind T[1], Nobbenhuis M[1]

[1]*Department of Gynaecologic Oncology, The Royal Marsden Hospital, London, United Kingdom*

Introduction
Robotic Assisted Surgery, being a relatively new technology has challenged traditional aspects of the medical ethics of surgery including informed consent. Compared with surgeons, patients place more importance on nearly every type of information, volumes and outcomes. As the standard of information disclosure is still evolving, we aimed to develop and obtain a bespoke consent form for robotics and hysterectomy for uterine cancer.

Materials and Methods
After a series of workshops between system developers and clinical users, a bespoke consent form for hysterectomy for uterine cancer including lymphadenectomy, the use of robotics, ICG, video recording, research and photography was created. The consent uses a combination of structured language with narrative notes describing the informed consent process and the goals of care and plain text options.

Results
The user friendly bespoke consent includes a minimal set of identifiable demographic data such as name, hospital number and date of birth. It is stored in the hospital intranet and can be made available to others electronically if they wish to use it for their own institution. It can be printed, scanned and uploaded in the patient electronic medical record system. Notably, the surgeon's experience, the volumes and outcome data as well as the conversion to laparotomy rates are documented and presented to the patient when obtaining consent.

Conclusion
The lay out of the consent is cancer-specific and clearly establishes the benefits and the risks of the proposed procedure.

P-44

A COMPARISON OF OPERATIVE OUTCOMES INCLUSIVE OF COST ANALYSIS BETWEEN STANDARD AND ROBOTIC LAPAROSCOPIC SURGERY FOR ENDOMETRIAL CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS.

Laios A[1], Ind T[1], Hacking M[1], Nobbenhuis M[1]

[1]*Department of Gynaecologic Oncology, The Royal Marsden Hospital, London, United Kingdom*

Introduction
Robotic assisted surgery (RAS) has been emerged as an advancement of traditional laparoscopy. Based on well recognised advantages, it has been widely adopted as the operative treatment of endometrial cancer (EC). We aimed to systematically assess the most current evidence comparing robotic with standard laparoscopy for the surgical treatment of EC.

Materials and Methods
A systematic search of Medline, Embase and the Cochrane database from 1st January 1991 until 30th October 2016 was performed. Only comparable studies within a discrete cohort were included. A meta-analysis of risk ratio for dichotomous or mean differences for continuous variables using the randoms effect model was carried out. Forest plots were created for each outcome using the Review Manager®.

Results
A total of 36 papers including 33 retrospective cohort studies, 2 matched case-control studies and one randomized controlled study (RCT) were included in the meta-analysis. No difference could be demonstrated in the duration of surgery but the mean number of days in hospital was significantly shorter in the robotic arm (0.46 days, 95%CI 0.26 to 0.66). Also favouring a robotic approach was on average less blood loss (57.74 ml, 95%CI 38.29 to 77.20), less conversions to laparotomy (RR = 0.42, 95%CI 0.30 to 0.59), and less overall complications (RR = 0.82, 95%CI 0.72 to 0.93). Favouring a standard approach was a lower overall cost ($1746.20, 95%CI $63.37 to $3429.03.

Conclusion
Compared to standard laparoscopy, RAS for EC is associated with a shorter hospital stay, less blood loss, fewer conversions to laparotomy and fewer complications at the expense of an increased cost and possibly a longer operating time. In the era of bundled care, the reduced length of stay may prove RAS cost effective until a larger RCT becomes available.

P-45

ROBOTIC ASSISTED SURGERY IN GYNAECOLOGIC ONCOLOGY; THE MARSDEN EXPERIENCE

Laios A[1], Bryan S[1], Natsis S[1], Nobbenhuis M[1], Ind T[1]

[1]*Department of Gynaecologic Oncology, The Royal Marsden Hospital, London, United Kingdom*

Introduction
Following the introduction and establishment of a robotic assisted surgery (RAS) program in our gynaecological oncology cancer centre, we aimed to report our experience of our first 400 cases.

Methods
Prospective data was collected between January 2010 and Dec 2016 for all women undergoing robotic assisted procedures within the gynaecological oncology department. Patient demographics, intra-, peri- and post-operative data were collected at the Royal Marsden Hospital and the London Clinic.

Results
In total, 381 robotically assisted cases were performed. Cancer diagnosis prevailed amongst patients (76.1%). Other diagnoses included benign ovarian cysts, BRCA mutations, cervical dysplasia and atypical hyperplasia. For cervical and uterine cancer, the procedures undertaken included simple and radical hysterectomy (76.9%), radical trachelectomy (9.9%), pelvic (51.2%) and para-aortic (6.3%) node dissection, parametrectomy (0.79%) and exenteration (0.52%). Other procedures included myomectomy (3.41%), ovarian cystectomy (1.57%), omentectomy (1.57%) and appendicectomy (0.52%). Introduction of robotics was associated with fewer lapparotomies and shorter hospital stay. Twenty seven complications were reported. The majority comprised UTIs, blood transfusion and wound infections. Complications such as vault haematomas, port site hernias or vesicovaginal fistulas were rare.

Conclusions
RAS is well suited to treating women with principally endometrial and cervical cancers, selected cases of ovarian cancer for surgical staging and complex benign cases with an acceptable rate of complications. Thorough preparation and appropriate case selection is essential to minimise the associated risks.

P-46

ENDOMETRIAL CANCER: A ONE YEAR REVIEW OF DISTRICT GENERAL HOSPITAL PRACTICE

Hamoodi I[1], Gurram S[1]

[1]*NHS Lanarkshire, Glasgow, United Kingdom*

Methods
Retrospective review of newly diagnosed endometrial cancer cases in NHS Lanarkshire between 01/01/2015 to 31/12/2015. The cases were extracted from the local database and data extracted from the electronic patient notes.

Results
There were 77 new cases of endometrial cancer in the review period. Around 80% were diagnosed through the post menopausal bleeding (PMB) clinic. On average patients waited 42 days from seeing their GP to being seen in the PMB clinic. 64% of the cases were endometrial adenocarcinoma. However, 26% of all cases only had a pre-operative diagnosis of complex hyperplasia of which 10% of these cases were with atypia. A high proportion (40%) of cases required a hysteroscopy under GA. However, 60% of cases only needed an outpatient endometrial sampling of which 35% (14/77) had an outpatient hysteroscopy.

In the endometrial adenocarcinoma group, 51% of the patients were found post-operatively to have a FIGO grading above grade 1 of which 96% (24/25) of these patients received a pre-operative MRI scan as per regional guidelines. Only 2 cases (9%) of grade 1 cases had an MRI pre-operatively (one case of an unfit patient and one due to suspected high grade disease on hysteroscopy.

75% (58/77) of the cases had a hysterectomy and 96% of this cohort had local surgery. Around 70% of the patients had TLH+BSO and 26% of the patients had a laparotomy. The average post-operative hospital stay was 2 days.

Conclusion
District general hospitals have a major role in diagnosis and treatment of early endometrial cancer. The team at Wishaw general hospital use their resources (imaging, PMB clinics and inpatient beds) appropriately and set a good standard of care reducing the burden on the central cancer team.

P-47

POST-OPERATIVE PAIN RELIEF FOR DELAYED PRIMARY SURGERY IN OVARIAN CANCER

Hamoodi I[1], MacNab W[1]

[1]*NHS GG&C, Glasgow, United Kingdom*

Methods
Retrospective review of post-operative pain scores in patients undergoing DPS and having an epidural vs non-epidural (PCA or Tap block) method for post-operative analgesia. Cases performed between 01/01/2015 and 31/12/2016 were extracted from the local database and data collected for the highest pain score in the immediate three post-operative days from the electronic patient notes.

Results
100 cases were identified of which 75% of the patients had an epidural for post-operative pain relief. Using the comparative pain scale, patients with epidurals had a median post-operative day 1 score of 3 compared to a median score of 4 for non-epidurals and the difference was statistically significant ($p=0.02$). Although a similar difference was found on day 2 (median pain scores 2 vs 3), the difference was not significant. All patients regardless of post-operative pain relief method had significantly reduced pain scores on day 3 compared to day 1 (Epidural day 1 median pain score vs day 3, $p= 0.01$, Non-epidural day 1 median pain score vs day 3 $p < 0.01$). We also found that on day one post-op. patients who were on no pre-op regular pain relief had significant less pain score than those on pre-op opiates ($p= 0.04$). We could not find such a difference when looking at post-op days 2 and 3. Patients who had an optimal cyto-reduction experienced higher pain scores on day 1 compared to those who had optimal/sub-optimal cyto-reduction. However this was significantly reversed by day 3 ($p= 0.001$)

Conclusion
Epidurals provide significantly better day 1 post-op pain relief but no extra benefit beyond this. Those patients who take pre-op opiates are likely to have higher pain scores and provisions should be made for this.

P-48

DOES NEO-ADJUVANT CHEMOTHERAPY (NACT) RELIABLY IMPROVE SERUM ALBUMIN PRIOR TO DELAYED PRIMARY SURGERY (DPS)

Macnab W[1], Hamoodi I[1]

[1]*Glasgow Royal Infirmary, Glasgow, United Kingdom*

Background
Previous studies have shown that serum albumin <25 g/l is a an independent predictor of mortality in ovarian cancer patients. As NACT can be used to allow time for patient optimization prior to debulking surgery we sought to quantify the improvement in serum albumin in this group of patients.

Methods
Retrospective review of women undergoing DPS between 1/1/2015 and 31/12/2016. Data was extracted from the local database and eHealthrecords for pre-first cycle of chemotherapy and pre-surgery albumin levels.

Results
97 cases were identified with both pre-chemotherapy and pre-operative albumin results. Results were stratified by initial albumin level: >35 g/l, 25-24 g/l and <25 g/l. 100% of women with a pre-chemo albumin of >35 maintained this. Overall 57% of women with a initial albumin of <35 improved this to normal and only 4% had a significant fall. No women with an initial albumin <25 g/l remained in this category prior to surgery.

Conclusion
The women with the lowest pre-chemotherapy albumin all benefit from NACT with an improvement in albumin level. Women with a normal pre-chemotherapy albumin are not adversely affected by NACT.

P-49

DOES INITIAL (PRE-NACT) ALBUMIN OR PRE-OPERATIVE ALBUMIN BETTER PREDICT OUTCOME FROM DPS?

Hamoodi I[1], **Macnab W**[1]

[1]*Glasgow Royal Infirmary, Glasgow, United Kingdom*

Background
Previous studies have shown that serum albumin <25 g/l is an independent predictor of mortality in ovarian cancer patients. As patients with a low albumin (as one marker of disease morbidity) are often treated with NACT (Neo Adjuvant Chemotherapy) prior to DPS (Delayed Primary Surgery) we sought to identify if initial (pre-chemotherapy) albumin level or a failure to improve albumin levels during NACT was more predictive of outcome at DPS.

Methods
Retrospective review of women undergoing DPS between 1/1/2015 and 31/12/2016. Data was extracted from the local database and eHealthrecords for pre-first cycle of chemotherapy and pre-surgery albumin levels as well as complications, resection status at the time of surgery and survival.

Results
97 cases were identified with both pre-chemotherapy and pre-operative albumin results. Results were stratified by albumin level: ≥35 g/l (normal), 25-34 g/l and <25 g/l. 100% of women with a pre-operative albumin of ≥35 who had maintained this during NACT survived. In comparison, women with a pre-operative albumin ≥35 who did not have a normal initial albumin had a worse prognosis (17% mortality). Normal pre-operative albumin did not predict resection status, but again normal initial albumin predicted the lowest rate of R2 resection. An initial albumin of <25 predicted the greatest risk of complication (63% vs. 33% if ≥35) and death (37%).

Conclusion
Maintaining a normal albumin during NACT predicts the best survival, this may be due to a lower rate of R2 resection. Improving albumin levels during NACT lowers the complication and mortality rate and this is likely to reflect improved performance status of the patient.

P-50

PREDICTING RISK OF OVARIAN MALIGNANCY IMPROVED SCREENING AND EARLY DETECTION FEASIBILITY STUDY (PROMISE-FS)

Manchanda R[1,8], **Gaba F[1,8]**, Bottla K[1], Caisip K[1], Mousa K[1], Burnell M[3], Kalsi T[3], Gentry-Maharaj A[3], Rosenthal A[3], Antoniou A[4], Muir K[5], Lophatananon A[5], Blyuss O[3], Zaikin A[3], Lee A[4], Lanceley A[3], Sanderson S[3], Gessler S[3], Waller J[3], Side L[3], Wardle J[3], Gayther S[9], Ramus S[2], Wallis Y[7], Timms J[3], Sahdev A[8], Graham R[5], Skates S[6], Menon U[3], Jacobs I[2]

[1]Barts Cancer Institute, London, United Kingdom, [2]University of New South Wales, Sydney, Australia, [3]University College London, London, United Kingdom, [4]University of Cambridge, Cambridge, United Kingdom, [5]University of Manchester, Manchester, United Kingdom, [6]Harvard University, Massachusetts, United States of America, [7]West Midlands Regional Genetics Laboratory, Birmingham, United Kingdom, [8]Barts NHS Trust, London, United Kingdom, [9]Cedars-Sinai, Los Angeles, United States of America

Background
Algorithms for predicting ovarian cancer (OC) risk, and biomarker based screening for ovarian cancer have been developed and validated in the 'Predicting Risk of Ovarian Malignancy Improved Screening and Early detection' (PROMISE) programme. This provides the potential for population stratification for OC risk prediction, screening and prevention. We present the design of a pilot study using this approach.

Aim
To evaluate the feasibility of undertaking a study to stratify a general population on the basis of their predicted OC-risk as well as offer risk management options of screening and prevention.

Design: Multi-centre, prospective, pilot, cohort study.

Inclusion criteria: Women ≥18 years.

Exclusion criteria: History of ovarian/tubal/primary peritoneal cancer or previous genetic testing for OC genes.

Primary outcome: Acceptability and uptake of the study.

Secondary outcomes: Use of helpline; satisfaction/regret; follow-up completion rate; risk perception; cancer worry; psychological health; quality-of-life; usefulness of decision aid; stratification of ovarian cancer risk category; uptake of risk management options.

Recruitment: Through GP surgeries/ primary care. Interested women will be directed to an online 'Decision Aid' and a telephone help line. Consent will be obtained via telephone. Consenting individuals will provide a blood sample and complete questionnaires at baseline, post recruitment, 7 days, 3 months and 6 months post results.

Interventions: Genetic testing for BRCA1/BRCA2, RAD51C/RAD51D, BRIP1 and OC SNPs. Genetic and epidemiological data will be used in a risk-algorithm to predict an individual's lifetime OC-risk. Validated questionnaires for data on psychological health, quality-of-life, satisfaction/regret; decision aid & helpline use. Intermediate-risk (≥5 %-< 10% lifetime OC-risk) and high-risk (≥10% lifetime OC-risk) women will be offered options of OC screening (biomarker+USS) and prevention. Mutation carriers identified will be referred to a clinical genetics service.

Conclusion
PROMISE-FS will help guide future research and planning of a larger study on population-based testing and risk stratification for OC prevention.

P-51

IMPACT OF OBESITY ON SURGICAL AND CLINICAL OUTCOMES AFTER ROBOTIC HYSTERECTOMY FOR ENDOMETRIAL CANCER.

Bharathan R[1], Al-Dujaily A[1], Madhuri K[1], Chatterjee J[1], Ellis P[1], Tailor A[1], Butler-Manuel S[1]

[1]*Royal Surrey County Hospital, Guildford, United Kingdom*

Objective
The incidence of obesity and hence incidence of endometrial cancer is increasing. Obese patients pose both operative and anaesthetic challenges. Laparoscopic surgery is proven to be superior to open surgery in endometrial cancer surgery; however, obesity still impacts on the outcomes after laparoscopic surgery. It is believed that robot assisted surgery may be able to overcome these challenges further improve the outcomes for the obese patients.

Method
We analysed the data from our bespoke clinical database and histopathology database to ascertain whether obesity significantly influences the outcome after robot assisted hysterectomy.

Results
431 patients were included in this study. Patients were groups into 5 categories (normal, over-weight, Class I, II and III obesity. The over-weight cohort was older than the other 4 groups. No significant difference in ASA or pneumoperitoneal pressure between the groups. There was significant difference in the uterine weight between the groups. Higher class of obesity is associated with greater EBL. There is no correlation between uterine weight and EBL. No difference in LOS. Morbidly obese patients had fewer LN harvested. The P-POSSUM risk of morbidity and mortality was not different between groups. No significant difference in wound infection rates

Conclusions
There are no clinically significant differences in the post-operative morbidity arising from obesity in women undergoing robot assisted hysterectomy for endometrial cancer.

P-52

A SYSTEMATIC REVIEW OF COST EFFECTIVENESS OF GYNAECOLOGIC ROBOTIC SURGERY.

Bharathan R[1], Moss E[2]

[1]*Royal Surrey County Hospital, Guildford, United Kingdom,* [2]*Leicester General Hospital, Leicester, United Kingdom*

Objective
The increasing strain on health resources for a multitude of reasons means that more than ever before, we must be able to demonstrate not only safety and effectiveness of interventions but also value. This review provides an overview of the current evidence base regarding the cost effectiveness

Method
A search strategy was designed and 8 databases were searched. In addition, the bibliography was hand searched for any additional publications.

Results
22 suitable studies were identified which compared open surgery (LPT) standard laparoscopic surgery (LPS) and robotic surgery (RBT). The majority of the studies were published in the last 5 years and most were retrospective in design. Most evaluated malignant conditions.

Conclusions
Generally, cost analyses are more common than cost effectiveness studies. Most studies address the analysis from the hospital perspective. However, no two studies are identical in their methodology. Therefore, a meta-analysis of objective data is impossible. The evidence base to differentiate robotic and standard laparoscopic surgery in terms of economics advantages lacks consistency in terms of methodology. The impression is that current evidence base supports minimally invasive surgery compared to open procedures. Robotic surgery certainly appears to cost more than laparoscopic surgery. As the industrial landscape in surgical robotics is expected to change very rapidly over the coming years, the financial viability and business modelling will also change. It is likely that within a few years of publication of this chapter, the economic arguments in relation to robotic surgery will have experienced a paradigm shift. This should enable a wider application of robotics technology in surgery.

P-53

EARLY CERVICAL CANCER: CORRELATION OF MRI STAGING WITH POST RADICAL SURGERY PATHOLOGY

Allan E[1], Hinksman L[2], Sircar S[2], Gherghe M[2], Seebaran C[2]

[1]NHS Greater Glasgow and Clyde, Glasgow, United Kingdom, [2]NHS Lanarkshire, Wishaw, United Kingdom

Aim

To audit and compare the local early cervical carcinoma MRI staging accuracy in patients who underwent radical surgery over two years in NHS Lanarkshire retrospectively with reference to the standards set by literature, and to demonstrate the local MRI over-call and under-call rates.

Materials and Methods

All patients diagnosed with Stage 1 and Stage 2 cervical carcinoma in Lanarkshire in 2014 and 2015 were analysed looking at patient demographics, lesion characteristics, treatments received, MRI staging and histopathology reports. MRI staging of patients who underwent radical surgery were compared to the final histopathology report in view of lesion characteristics including histopathological subtype and grading, size, location, and presence of lymphovascular space invasion. The results were compared to the recent literature.

Results

77 patients were diagnosed with stage 1 and stage 2 cervical carcinoma in 2014 and 2015. 19 of these underwent radical surgery and had pre-operative MRI. 74% (14/19) concordance between MRI staging and final post-operative pathology, 16% (3/19) MRI under-call and 10% (2/19) MRI over-call rates were found. All under-called MRI scans were performed following LLETZ with reports mentioning no residual tumour. However, these patients had residual tumours without parametrial invasion in post-operative pathology specimens. One over-called MRI was reported as vaginal fornix extension and correlation with direct clinical examination was recommended. The other over-called MRI was reported as left parametrial invasion which was down-staged to stage 1b1 after MDT review and the lesion was poorly differentiated on pathology.

Conclusion

The concordance rate between MRI staging and final pathology (74%) was very good in our population. After correlating with clinical examination and discussing at the MDT meeting, none of our over-called or under-called MRI reports changed the eventual surgical management.

P-54

RISK FACTOR ANALYSIS OF RECURRENCE IN LOW RISK EARLY STAGE ENDOMETRIAL CARCINOMA: THE POTENTIAL PREDICTIVE ROLE OF THE HYPERTENSIVE COMPONENT OF THE METABOLIC SYNDROME

Romano F[1], Laios A[1], Limura E[1], Attygalle A[3], Taylor A[2], Lalondrelle S[2], Butler J[1], Nobbenhuis M[1], Barton D[1], Ind T[1]

[1]Department of Gynaecological Oncology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom, [2]Department of Medical Oncology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom, [3]Department of Pathology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom

Background
The risk of endometrial carcinoma (EC) recurrence ranges up to 13%. Patients at early stage low risk (stage IA G1/G2 EC) carry a 1-4% risk of recurrence but their prognosis may not be always favourable. In this group, predictors of recurrence have not been comprehensively studied. We aimed to evaluate the impact of clinical-morphological factors associated with recurrence to potentially establish a risk-adjusted treatment approach.

Material and Methods
This was a retrospective cohort of all patients treated at our institution from Jan 2010 to Dec 2016 at stage IA G1-G2 EC. The primary outcomes were recurrence rates and predictors of recurrence. Twenty-six clinic-morphological variables were included in a logistic regression model and were summarized as odds ratio (OR) with 95% confidence intervals (CI). A p-value < 0.05 was considered statistically significant.

Results
97 patients were investigated with a median follow-up time of 39 months ([IQR] 21-56 months). Ten out of 97 (10.3%) recurrences occurred with a median time to recurrence of 36 months ([IQR] 23-43 months). Central vault recurrence was identified in 80% of these patients. Involvement of myometrium was the single morphological factor associated with recurrence in the univariate analysis (OR 15.2, 95%CI 1.83-126.3, p= 0.012). Hypertension (HTN) was the predictor in the univariate and multivariate analysis (p < 0.001, chi2 test). For every additional mm in tumour size, the risk for central recurrence increased by 4% (OR 1.04, 95%CI 1.01-1.08, p 0.046). 3-year OS (overall survival) and 3-year RFS (recurrence-free survival) were 100% and 89.7, respectively.

Conclusion
In both univariate and multivariate analysis, HTN of metabolic syndrome (MS) was the single independent predictor of recurrence. Thorough diagnosis and comprehensive treatment of MS and HTN should be considered when counselling such patients about recurrence risks. The role of morphological features needs to be further elucidated in larger cohorts.

P-55

CLINICAL AND SURVIVAL OUTCOMES OF ENDOMETRIAL CARCINOMA: A 5-YEAR TERTIARY CANCER CENTRE EXPERIENCE

Romano F[1], Laios A[1], Attygalle A[3], Taylor A[2], Lalondrelle S[2], Butler J[1], Barton D[1], Nobbenhuis M[1], Ind T[1]

[1]Department of Gynaecological Oncology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom, [2]Department of Medical Oncology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom, [3]Department of Pathology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom

Background
Patients affected by endometrial carcinoma at different stages are treated by surgery, radiotherapy and/or chemotherapy based on risk stratification after staging, with low risk of recurrence, moderate disease-free survival (DFS) and long overall survival (OS). We aimed to evaluate the impact of treatment on patients' clinical outcome in our hospital cohort.

Material and Methods
This was a retrospective analysis of patients affected by endometrial carcinoma referred to our institution from 2010 to 2016. Information about demographic, surgical, histopathological details and therapy was collected. Our primary outcome was recurrence rate. Secondary outcomes included DFS and OS. Descriptive statistics were performed using t Student Test and Chi square test for continuous and categorical variables, Kaplan Meier curves to evaluate DFS and OS.

Results
389 patients with a median age of 60 years ([IQR] 35-85 years) were included. 222 patients were diagnosed as at stage I, 42 at stage II, 97 at stage III and 24 at stage IV; 4 underwent an incomplete surgical staging. With a median follow-up of 41 months ([IQR] 21-56 months), 99/358 patients (27,6%) treated at our centre experienced recurrence: 23/150 at stage Ia, 15/56 at stage Ib, 10/42 at stage II, 38/83 at stage III and 13/21 at stage IV. 19/99 patients (19.1%) had vaginal recurrence, 48/99 (48.4%) had pelvic recurrence, 33/99 had distant recurrence, with a median time to recurrence of 16 months ([IQR] 5- 60 months). The overall 5-year DFS and OS rates were 70.9% and 83.1%, slightly lower than reported in literature.

Conclusion
The clinical outcome of endometrial carcinoma within our population confirms its favourable behaviour, even though slightly worse than reported in literature. Being our hospital a selective tertiary referral centre, a possible bias in our advanced-stage cohort could have had a significant impact on patients' outcome and must be taken into account.

P-56

CLINICAL AND SURVIVAL OUTCOMES OF UTERINE CARCINOSARCOMA: A 5-YEAR TERTIARY CENTRE EXPERIENCE

Romano F[1], Laios A[1], Attygalle A[3], Taylor A[2], Lalondrelle S[2], Butler J[1], Barton D[1], Nobbenhuis M[1], Ind T[1]

[1]Department of Gynaecological Oncology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom, [2]Department of Medical Oncology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom, [3]Department of Pathology, The Royal Marsden Hospital, Fulham Road, SW36JJ, London, UK, London, United Kingdom

Background
Uterine carcinosarcoma (UCS) is a rare and aggressive cancer with high risk of recurrence, poor disease-free survival (DFS) and overall survival (OS). Care patterns include surgery, radiotherapy and/or chemotherapy based on surgical staging, residual tumour size and performance status. We aimed to report the clinical and survival outcomes in our institution to evaluate the impact of our treatment approach and compare the results to literature.

Material and Methods
This was a retrospective analysis of 36 patients affected by UCS referred to our institution from 2010 to 2016. All the details including demographic profile, surgical and histopathological details, stage and adjuvant therapy were compiled. Our primary outcome was recurrence rate. Secondary outcomes included DFS and OS. Descriptive statistics were performed using t Student Test for continuous variables and Chi square test for categorical variables. Kaplan Meier analysis was employed to evaluate DFS and OS.

Results
All patients underwent complete surgical staging with a median age of 65 years ([IQR] 48 -79 years). There were 24 stage I patients, 5 stage II, 6 stage III and one stage IV, respectively. The median follow-up was 44 months ([IQR] 22 - 60 months). Fourteen out of 36 (38.8%) patients had recurrences (5 stage Ia, 3 stage Ib, 2 stage II, 2 stage III and one stage IV). One out of 14 patients had central recurrence, 10 (71.4%) had pelvic recurrence and 3 (21%) had distant recurrence. The median time to recurrence was 12 months ([IQR] 6-24 months). The overall 5-year DFS and OS rates were 61.2 % and 69%, respectively, akin to those reported in literature. Both DFS and OS rates at 5 years progressively increased in relation to staging.

Conclusion
UCS is associated with increased risk of distant relapse and poor OS. Patient stratification can better clarify the effect of systemic treatment

P-57

SAFETY OF LAPAROSCOPIC HYSTERECTOMY IN SEPTUAGENARIANS WITH ENDOMETRIAL CANCER

Nellore V[1], Wei W[1], McMullen W[1], Kalpana R[1]

[1]*Ninewells Hospital, Dundee, United Kingdom*

Introduction
Improvement in preoperative care for the ageing population have resulted in an increasing number of elderly patients being considered for surgery. With an increased incidence of endometrial cancer, it is inevitable that significant number of elderly patients are referred for surgery despite of concerns over co- morbid conditions and diminished cardiopulmonary reserves

Aim
To evaluate the clinical outcomes of laparoscopic hysterectomy for endometrial cancer in elderly and compare with younger patients

Methods
We performed a retrospective review of 100 women who underwent total laparoscopic hysterectomy for endometrial cancer at Ninewells hospital between Jan 2015-Jan 2017. The women were identified from the gynaecology oncology multi disciplinary team e-case data base. Of these 79 patients were ≤ 75 years (Group A) and 21 patients were >75 years of age (Group-B). Demographics, clinical and operative data were analysed for each group and appropriate statistical comparisons were made

Results
The mean age was 62.9 (range 37-75) and 80.6 (range 76-90) in Group A and Group B respectively. The mean BMI in group A was 33.8 and 28.8 in group B. With the increase in patient's age reduced METS score was observed however it was not shown to be statically significant. One patient in group A required conversion to open surgery due to difficult access and large uterine fibroid

No significant difference was observed between the groups in terms of estimated blood loss and duration of hospital stay. There were no major complications noted in both groups. However two patients in Group B developed port site haematoma. One patient in Group A has had pelvic haematoma

Conclusion
Total laparoscopic hysterectomy appears to be feasible and safe in elderly women and it extends benefits of minimally invasive surgery regardless of their age

P-58

DEVELOPMENT OF A COMPLEX PELVIC SURGICAL MDT

Lavelle C[2], Macdonald R[1], Smith F[2]

[1]Liverpool Womens NHS Foundation Trust, Liverpool, United Kingdom, [2]Royal Liverpool University NHS Trust, Liverpool, United Kingdom

The Liverpool Womens Hospital is the Gynaecology Cancer Centre for the Mersey and Cheshire region. As a stand alone O+G hospital it has significant advantages of a specialist hospital, with specialist Gynae Oncology only nurses, protection of elective services and a lack of disruption from emergency and winter concerns. However, the lack of on site surgical colleagues has become a developing concern, with increasing patient morbidity and the rising complexity of Gynae Oncology surgery.

In conjunction with Colorectal and Urological surgical colleagues, and Gynae Oncology Radiology colleagues from the Royal Liverpool University Hospital, a surgical Complex Pelvic MDT was started in September 2016, with the intention of developing the surgical dialogue for primary or recurrent pelvic cancers requiring a multidisciplinary surgical approach.

Total cases discussed Sept 2016 - Feb 2017- 38

Gynae Oncology - 20

12 ovarian cancer, 4 endometrial, 2 cervical, 1 pelvic abscess and 1 pelvic angiolipsarcoma

Colorectal - 14

Urology - 4

Decision for surgery - 26 of 38 cases discussed (68%)

Joint procedures planned in 19 (73%) of surgical cases

Completed surgery in Gynae Oncology - Debulking of Stage 3 ovarian cancer to <1cm in 3 of the 4 of cases so far completed; extenterative surgery in 50%. No significant post operative morbidity reported.

Conclusion
The development of the service in conjunction with Colorectal, Urological and Radiological colleagues has allowed greater preoperative planning of complex surgical cases, both for the surgical approach but also for pre-operative patient counselling and post operative patient care. For a stand-alone Cancer Centre, this has been invaluable in improving patient care and developing improvements in our Gynae Oncology service

P-59

USE OF CPEX IN DECISION MAKING FOR MAJOR GYNAECOLOGICAL ONCOLOGY SURGERY

Janoowala K[1], Jones R, Drews F, Rzyska E, Sharma A, Howells R, Lim K

[1]*University Hospital of Wales, Cardiff, United Kingdom*

Background
Cardiopulmonary exercise testing (CPEX) provides a non-invasive assessment of combined pulmonary, cardiac, and circulatory function. It calculates a patient-specific risk by quantifying the functional ability to respond to the increased metabolic demands of surgery. Anaerobic threshold (AT) determined by CPEX has been proposed as a reliable, objective measure of cardio-respiratory fitness with an AT ≥11mg/ml/min indicating cardio-respiratory fitness for major surgery.

In our centre, CPEX is used in high risk patients with multiple co-morbidities to assess the individual's risk of surgery to facilitate clinical decision making. The aim of our study was to look at the role of CPEX and its influence on decision for surgery.

Method

We conducted a retrospective case notes review of patients referred to CPEX prior to gynae-oncology surgery from 01/01/2015-31/12/2016.

Results
A total of 24 women were referred for CPEX testing during the review period (age range 36-84 years, median - 73 years). The median BMI was 29 (range 18-66).

Of the 24 women referred, 16 underwent CPEX. In these 16 women, 2 reached an AT of >11, both underwent surgery. A further 9 women reached their AT <11mg/ml/min (5 underwent surgery, 1 declined surgery, 3 were deemed not fit for surgery). 5 patients did not reach an AT (1 underwent surgery, 3 declined surgery and 1 was deemed not fit for surgery).

3 patients had ≤ grade 3 complications following surgery. There were 4 patient deaths in the follow-up period, all in the no surgery group, 1 of which was confirmed as disease related.

Conclusions
This study suggests CPEX is useful to clinicians and patients for pre-operative planning and quantifying risk. In this small sample the previously accepted AT of ≥11mg/ml/min appears to be an appropriate threshold to prompt discussion of the increased risk with the patient.

P-60

DIAGNOSTIC VALUE OF CA19 9 IN WOMEN WITH PELVIC MASSES: A TOOL TO STRATIFY ADJUVANT HIPEC THERAPY?

Korompelis P[1], Watkins J[2], Ang C[1], Fisher A[1], Kucukmetin A[1], Naik R[1], Ratnavelu N[1], O'Donnell R[1]

[1]Northern Gynaecological Oncology Centre, Gateshead, Gateshead, United Kingdom, [2]Newcastle University , Newcastle, United Kingdom

Background
A tumour marker panel is used to guide pre-operative investigation in patients with suspected gynaecological malignancy. The diagnostic value of elevated tumour markers and need for additional pre-operative investigation remains unclear. With a move towards specialised adjuvant therapies, including HIPEC, for patients with particular histological subtypes, pre-operative stratification is paramount.

Aim
To assess the diagnostic value of CA19-9 in mucinous ovarian cancers, and non-gynaecological cancers.

Methods
All patients referred with suspicion of gynaecological malignancy over a 12-month period were identified from the MDT records. Patients were excluded if CA19-9 values or histology were not available. Patient demographics, surgicopathological data and CA125, CA19-9, CEA and CA15-3 values were collated. T-tests were undertaken to compare groups.

Results
Malignancy was diagnosed in 144/243 (59%) patients; of which 121 (84%) were ovarian and 9 (6%) non-gynaecological in origin. 73 (30%) and 26 (11%) had benign and borderline disease respectively. Median CA125 levels were higher in malignancy in comparison to benign/borderline disease (324 vs 46, p= 0.045). Median CA19-9 levels in isolation were not significantly different between subgroupings (p=0.126) but a higher trend was seen in mucinous cancers in comparison to non-mucinous types (198 vs15.5, p=0.205). Sensitivity of elevated CA19-9 for detection of mucinous ovarian malignancy for was 72% and specificity 69%. The CA125:CA19-9 ratio appeared helpful in differentiating malignant/borderline tumours vs benign (p=0.0127) and particularly helpful in differentiating mucinous from non-mucinous subtypes in the malignant cohort (p= 0.004). CEA and CA 15-3 were unhelpful in this cohort in identifying non-gynaecological malignancy.

Conclusions
CA19-9 should be routinely checked in all patients and elevation should prompt repeat review of imaging to exclude an identifiable non-gynaecological primary. CA19-9 level in isolation and the CA125:CA19-9 ratio, although not diagnostic, are helpful tools in the stratification of patients for consideration of HIPEC or referral to specialised centres.

P-61

AN UPDATE OF EXPERIENCE USING ICG-NIR FOR SENTINEL LYMPH NODE BIOPSY IN EARLY ENDOMETRIAL CANCER: SHOULD WE REVISIT NON-CERVICAL ICG INJECTION?

Rundle S[1], Ratnavelu N[1], Bizzarri N[1], Fisher A[1], Naik R[1], Ang C[1], Kucukmetin A[1]

[1]*Northern Gynaecological Oncology Centre, Gateshead, United Kingdom*

Introduction
The role of pelvic lymphadenectomy in endometrial cancer is uncertain and sentinel lymph node (SLN) techniques have the potential to reduce surgical morbidity without compromising oncological outcome. Early studies assessing SLN biopsy in endometrial cancer used combined radiolabelled nano-colloid and blue dye for the detection of the SLN. Several large case series have reported equally good results using indocyanine green-near infrared (ICG-NIR) endoscopy for the detection of SLN in women with early stage disease. We have previously reported our initial experiences using ICG-NIR for SLN biopsy in endometrial cancer. Here we present updated results and discuss the role of ICG injection at sites other than the cervix.

Methods
Women with early stage disease undergoing retoperitoneal lymph node assessment as part of their surgical management were consented for SLN mapping and excision biopsy. Where indicated, patients underwent systematic lymphadenectomy following excision of the SLNs. SLNs and lymphadenectomy specimens were submitted for examination separately.

Results
The overall SLN detection rate was over 80%. The bilateral SLN detection rate was 59%. One patient had positive para-aortic lymph nodes but negative pelvic sentinel lymph node specimens.

Conclusions
Sentinel lymph node biopsy using ICG-NIR has a detection rate comparable to current standard techniques. Advantages over the BD-Tc99m include total intra-operative administration of the dye and rapid detection. Given the complex lymphatic pathways associated with the uterine corpus and the relative ease of use of ICG-NIR compared to BD/Tc99m, it may be time to re-evaluate the role of non-cervical tracer injection in further increasing the accuracy of diagnosis of SLN biopsy for early endometrial cancer.

P-62

ICG-NIR FOR THE DETECTION OF SENTINEL LYMPH NODES IN EARLY CERVICAL CANCER

Rundle S[1], Ratnavelu N[1], Bizzarri N[1], Fisher A[1], Naik R[1], Ang C[1], Kucukmetin A[1]

[1]*Northern Gynaecological Oncology Centre, Gateshead, United Kingdom*

Introduction
Determination of the regional lymph node status by SLN biopsy for cervical cancer has the potential to reduce morbidity arising from radical surgical techniques. Established techniques for SLN mapping and biopsy use a combination of blue dye (BD) and 99-Technitium radiolabelled nanocolloid (Tc-99m) as lymphatic tracers. More recently, reports of SLN mapping by indocyanine green-near infrared endoscopy (ICG-NIR) have demonstrated sensitivities for SLN mapping in the pelvis at least as high as those for the combined BD/Tc-99m technique. Cervical cancer patients are under-represented compared to endometrial cancer patients in the literature that often reports combined results for SLN detection using ICG-NIR. Here we present updated results from a UK regional centre using ICG-NIR for the detection of SLN in patients with early stage cervical cancer.

Methods
25 Women with early stage disease undergoing retroperitoneal lymphadenectomy as part of their surgical management were consented for SLN mapping and excision biopsy. All patients underwent systematic lymphadenectomy following excision of the SLNs. SLNs and lymphadenectomy specimens were submitted for examination separately.

Results
The SLN detection rate was 92%. The bilateral SLN detection rate was 84%. There were no false negatives.

Conclusions
Sentinel lymph node biopsy using ICG-NIR has a detection rate at least as good as standard techniques and is a valid technique for the confident identification of SLNs in cervical cancer. Future randomised studies, aimed at comparing long term outcomes of patients who have undergone either SLN biopsy or lymphadenectomy to assess the nodal status of their cervical cancer should include ICG-NIR.

P-63

ICG-NIR FOR DETECTING THE SENTINEL LYMPH NODE IN EARLY STAGE VULVA CANCER: A REPORT OF EXPERIENCE FROM A UK CENTRE

Rundle S[1], Ratnavelu N[1], Fisher A[1], Natsis S[1], Bizzarri N[1], O'Donnell R[1], Kucukmetin A[1], Ang C[1], Naik R[1]

[1]*Northern Gynaecological Oncology Centre, Gateshead, United Kingdom*

Standard techniques for SLN biopsy in vulva cancer use a combination of blue dye (BD) and radio-labelled nanocolloid (Tc-99m) as the lymphatic tracers to enable pre and intra-operative localisation of SLNs. Indocyanine green-near infrared (ICG-NIR) fluorescence for SLN biopsy has been widely reported in cancers of the endometrium and cervix. To date, limited data on the use of ICG-NIR for SLN biopsy in early stage vulva cancer is available. Here we present the first case series from a UK centre using ICG-NIR for SLN biopsy in patients with vulva cancer.

Methods
Patients presenting with unifocal squamous cell cancers of the vulva of less than 4cm diameter were included. Exclusion criteria included bulky lymphadenopathy on CT or clinical examination. ICG-NIR fluorescence imaging was performed in addition to the standard combined technique for SLN detection. If sentinel lymph node detection failed, side specific lymphadenectomy was performed in accordance with the patients pre-operative counselling and consent.

Results
16 patients underwent the SLN procedure using BD/TC-99m and ICG-NIR. Of the SLN successfully detected, 86% were positive for ICG fluorescence compared to 59% for BD.

Conclusions
ICG-NIR is a valid and safe technique for the detection of SLN in patients with early stage vulva cancer. ICG-NIR appears superior to BD for the intra-operative visualisation of the SLN.

P-64

AN ECONOMIC EVALUATION OF PATIENT-INITIATED VERSUS HOSPITAL AND NURSE-LED TELEPHONE FOLLOW-UP FOR LOW-RISK ENDOMETRIAL CANCER

Luqman I[1], Cooper N[2], Boulter L[1], Patel N[1], Moss E[1,2]

[1]University Hospitals of Leicester, Leicester, United Kingdom, [2]University of Leicester, Leicester, United Kingdom

Background
A risk stratification and focus on survivorship in low-risk endometrial cancer (LREC) has led to the replacement of hospital follow-up (HFU) with alternative schemes. Patient-initiated follow-up (PIFU) and Nurse-led telephone follow-up (NTFU) are well received by patients and have not been shown to have detrimental physical/psychological effects compared to HFU. The economic impact of such as schemes, for the patient and health care economy, has not been fully explored.

Methods
All women diagnosed with LREC (Stage 1A G1/2) were enrolled on PIFU from September 2014 and followed prospectively. All contact with the Oncology team/Nurse Specialists (CNS) was recorded. The number and cost of outpatient appointments that would have been scheduled under the previous HFU model was calculated for each patient (£80/appointment: 4xYear1/3xYear2/2xYear3& 4/1xYear5). The cost of HFU appointments and CNS time for NTFU/PIFU telephone calls were calculated (20mins/Band 7), as was the number of patient miles from home/hospital to attend an appointment.

Results

There were 125 women in the PIFU cohort with a median follow-up time of 13 months (range 1-28 months). If the cohort had continued on HFU they would have been scheduled to attend 799 appointments, whereas on PIFU there were 31 telephone calls and 12 clinic appointments in total. The cost of follow up for the cohort would have been £63,920 for HFU, £34,357 for NTFU compared to £2,773 for PIFU. This equates to a 46.3% and 95.7% cost saving for NTFU and PIFU compared to HFU. The number of miles patients needed to travel to appointments for HFU was reduced by 98.9% from 10,751 to 119 miles for PIFU.

Conclusions
PIFU for LREC is associated with financial savings to both the patient and the health care economy and should be considered in order to manage the year-on- year rising in the incidence of LREC.

P-65

GROIN LYMPHADENECTOMY IN VULVAL CANCER STAGING – COMPLICATIONS

Davies-Oliveira J[1], Jones R[1], Drews F[1], Rzyska E[1], Howells R[1], Lim K[1], Sharma A[1]

[1]*University Hospital Wales, CARDIFF, United Kingdom*

Background & Objectives
Inguinal Lymphadenectomy is a routine part of full surgical staging in cases of vulval carcinoma. Wound complications following this procedure have been quoted as high as 60 % (1).

In this study we aim to compare the modified triple incision approach (2) versus a modified oblique incision for inguinal lymphadenectomy, looking specifically at the wound complications associated with these procedures.

Methods
A retrospective cohort study looking at vulval cancer patients who underwent unilateral or bilateral inguinal lymphadenectomy between 01/01/2014-31/12/2016 at University Hospital Wales, Cardiff, Wales.

Results
A total of 23 patients were identified. One or more complications occurred in 22 (95.6%). The complication rate was 17 (100%) in the modified triple incision group (seroma 9 (53%), infection 9 (53%), wound breakdown 10 (59%), lymphoedema 7 (41%), paraesthesia 4 (24%), lymphocyst 6 (35%), return to theatre 3 (18%)) versus 5 (83%) in the modified oblique incision (seroma 3 (50%), infection 2 (25%), wound breakdown 1 (17%), lymphoedema 2 (25%), paraesthesia 0 (0%), lymphocyst 3 (50%), return to theatre 0 (0%). Median modified triple incision hospital stay length 11 days versus the median modified oblique incision hospital stay 4.5 days.

Conclusions
Wound complication rates after inguinal lymphadenectomy in vulval cancer patients are high. This study suggests that an oblique incision may reduce hospital stay and overall wound complication rates. Larger numbers are required to confirm this finding.

References
1. Rajaram S, Gupta B. Management of Vulvar Cancer. Reviews on recent clinical trials. 2015 Dec 1; 10 (4):282-8.

2. Li J, Zhou H, Wang LJ, Lu XM, Rao QX, Lu HW, Lin ZQ. A modified triple incision technique for women with locally advanced vulvar cancer: a description of the technique and outcomes. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2012 Oct 31; 164 (2): 185-90.

P-66

OUTCOMES IN FERTILITY-SPARING CERVICAL CANCER SURGERY IN A TERTIARY CANCER CENTRE

Davies-Oliveira J[1], Drews F[1], Jones R[1], Sharma S[1], Rzyska E[1], Howells R[1], Lim K[1], Sharma A[1]

[1]*University Hospital Wales, Cardiff, United Kingdom*

Background & Objectives
Standard treatment for early stage cervical cancer is radical hysterectomy and pelvic lymphadenectomy. An alternative treatment in women wishing to retain their fertility is a radical trachelectomy (RT). The aim of this study is to review the fertility outcomes of women who underwent RT.

Methods
A retrospective case note review was undertaken of all women who underwent RT, between January 2012-December 2016, at University Hospital Wales, Cardiff. Data on pregnancy rates including any infertility problems post surgery/ recurrence was analysed.

Results
Seventeen women (age range 21-52, median 28) underwent RT for cervical cancer (1a1=1, 1a2=1, 1b1=15). Of these, 2 (12%) were lost to follow up, 2 (12%) are less than 1 year post procedure (advised not to conceive within 1 year post procedure/disease free), 13 (76%) did not achieve pregnancy. Of the 13 women who would be eligible to consider pregnancy, 4 (31%) developed a recurrence, 1 (7%) patient had completion surgery for pelvic infection, 4 (31%) were disease free but had not attempted pregnancy and 4 (31%) tried to achieve pregnancy and were all referred to IVF services. Of these 4 patients who were referred to IVF Wales, 2 abandoned attempt with the IVF service, 1 attempted two embryo transfers (unsuccessful), 1 patient had utero-vaginal stenosis with an unsuccessful recanalization and therefore opted for surrogacy.

Conclusion
In conclusion, none of the patients who underwent fertility sparing surgery had a successful pregnancy. Interestingly only 4 (31%) were noted to actively try to conceive but needed support of the IVF service. Therefore, it is important that patients are appropriately counseled regarding fertility sparing options and are aware of risk of recurrence but also the likelihood of not being able to conceive spontaneously. In view of these results, we are re-evaluating our criteria for offering RT.

P-67

A PATIENT TRACKING SYSTEM ERADICATES ADMINISTRATIVE DELAYS FOR PATIENTS UNDERGOING SURGERY AFTER NEOADJUVANT CHEMOTHERAPY

Morgan J[1] , Clayton RD[1], Clamp A[2], Edmondson RJ[1]

[1]Central Manchester Foundation Trust, Manchester, United Kingdom, [2]Christie Hospital, Manchester, United Kingdom

Background
Current guidance, based on the outcome of two randomised trials, recommends that patients who are undergoing neoadjuvant chemotherapy for advanced ovarian cancer receive surgery after three cycles of treatment. Avoiding delays is important for patients, particularly those who are recruited into clinical trials such as ICON8b which mandate surgery after three cycles.

Intervention
In 2011 we therefore introduced a patient tracking system, generating a timeline of events for each patient undergoing neoadjuvant chemotherapy. Timing of each chemotherapy cycle is tracked and scheduling for discussion at the MDT, surgical clinic appointments, and surgery dates commences ahead of cycle 3 aiming for a surgery date of D22 and D43 or D22 and D32 for patients on ICON8b.

Results
226 women have completed management using this pathway. 133/226 (59%) went on to have surgery after having 3 (103/133 (77%)) or 4 cycles (30/133 (23%)) of chemotherapy.

Reasons for not undergoing surgery included patient choice (19), death before cycle 3 (11), unfit for surgery (22), progression on chemotherapy (41), and other (1).

For patients undergoing surgery after 3 or 4 cycles, time to surgery from chemo was a median of 37 days (range 14-82). All patients having surgery after day 43 had clinical rather than administrative reasons for their delay.

Conclusions
The introduction of a patient tracking system has minimised delays to surgery for patients having neoadjuvant chemotherapy and ensures that the only delays are secondary to clinical need.

P-69

CASE REPORT OF THE CERVICAL ADENOCARCINOMA DIAGNOSED IN THIRD TRIMESTER OF PREGNANCY IN THE PATIENT OF PRE CERVICAL SCREENING AGE.

Povolotskaya N[1], Golds K[1], Lindley C[1], Rahimi S[1], Ihezue C[1], Brinkmann D[1]

[1]*Portsmouth Hospital NHS Trust, Portsmouth, United Kingdom*

Introduction
Cervical cancer during pregnancy is relatively uncommon and its management is a challenge.

Case report
24 years old, G1, previously healthy, non smoker presented with the history of early pregnancy bleeding followed by recurrent significant episodes of antepartum haemorrhage. Postcoital bleeding was significant in amount throughout the pregnancy. Despite multiple presentation for medical review the diagnosis was not made until the patient was referred by GP on 2 weeks pathway and was seen by Gynaecological Oncologist at 29 weeks gestation. The suspicious polipoid lesion was biopsied. The histology showed the presence of adenocarcinoma of the cervix. At the time of diagnosis the patient did not reach the age of entering the National Cervical Screening Programme therefore did not have her first smear. MRI scan of abdomen and pelvis together with CXR identified organ confined disease. The treatment options and delivery were discussed with the patient and Multidisciplinary Team. The delivery by caesarean section took place at almost 34 weeks gestation after adequate optimisation of fetal maturation and careful consideration of the risks. The delivery was followed by EUA and radical hysterectomy with ovarian preservation and pelvic lymphadenectomy. The tumour was resected with clear margins and negative lymph nodes with final stage 1b1 adenocarcinoma of the cervix. The patient made a good recovery.

Discussion
Diagnosis of cervical cancer is difficult to establish during the pregnancy. Delay in diagnosis can be explained by pregnancy-associated complaints masking cancer-related symptoms. It potentially can result in presentation with higher stage. Careful examination of the cervix should be undertaken in all patients presenting with abnormal bleeding.

Summary
The treatment and diagnosis of the cervical cancer during pregnancy presents significant challenges to the multidisciplinary team.

P-70

DIFFICULTY IN HISTOLOGICAL DIAGNOSIS AND MANAGEMENT OF CERVICAL CANCER IN PREGNANCY. CASE REPORT.

Golds K[1], Povolotskaya N[1], Ihezue C[1], Rahimi S[1], Brinkmann D[1]

[1]*Portsmouth Hospital NHS Trust, Portsmouth, United Kingdom*

Introduction
Cervical cancer during pregnancy is rare, but it is the most commonly diagnosed gynaecological malignancy during pregnancy with incidence rates 0.1 - 12 per 10,000 pregnancies.

Case report
An asymptomatic 34 years old parous heavy smoker was referred to colposcopy clinic with the result of overdue smear of severe dyskaryosis.

A fact of pregnancy of unknown gestation was identified on arrival to the colposcopy clinic. The histological results of multiple directed biopsies were suggestive but not conclusive of invasive malignancy. USS confirmed twin pregnancy at 15 weeks gestation. The patient decided to continue with the pregnancy. The histological uncertainty remained until LLETZ biopsy, obtained as part of EUA staging procedure at 20 weeks gestation, was send for second opinion, which confirmed presence of poorly differentiated squamous cell carcinoma of the cervix. Clinically the patient had cervical cancer Stage Ib1. Cross sectional imaging showed organ confined disease.

The extensive consultation within multidisciplinary team and with the patient and her family took place. The intention was to achieve a compromise between fetal maturation and adequate cancer treatment. The classical Cesarean section was performed at 30 weeks gestation followed by radical hysterectomy with pelvic lymphadenectomy with ovarian conservation.

The final histological diagnosis was consistent with Stage 1b1 poorly differentiated squamous cell carcinoma, 1/32 pelvic lymph nodes was positive. The MDT decision was not to proceed with adjuvant treatment.

Discussion
The cervical cancer histological diagnosis can be challenging in pregnancy due to existing pregnancy related cervical changes. When preservation of the pregnancy is desired, the treatment needs to be individualised and depends on gestational age, disease stage, and histology. Extensive counselling regarding the maternal and fetal risks is important.

Summary
In case of cervical cancer in pregnancy the decision about treatment and delivery is complex and requires MDT involvement.

P-71

PELVIC LYMPHADENECTOMY IN ENDOMETRIAL CANCER: A SERVICE REVIEW OF WALES' LARGEST TERTIARY CENTRE.

Awad M[1], **Jones R**, **Drews F**, Rzyska E, Howells R, Lim K, **Sharma A**

[1]*University Hospital Wales, Cardiff, United Kingdom*

Introduction
Pelvic lymphadenectomy (PLA) for endometrial cancer (EC) remains controversial. A 2015 Cochrane review concluded that the role of PLA in intermediate & high risk early stage disease is unclear. However, standard practice includes external beam radiotherapy (EBRT) +/- brachytherapy (BT) in these cases. The South East Wales Gynaecological Oncology (SEWGO) guidelines include PLA for high risk EC whereby avoiding EBRT if nodes negative.

Aim
Our aim was to undertake a service evaluation of PLA in high risk EC patients and whether adjuvant treatment was avoided in node negative patients.

Methodology
We conducted a retrospective review of patients referred to the SEWGO Centre who had surgery as part of their treatment from 01/04/2013-31/03/ 2015 with network guidelines on patient selection for PLA as the standard.

Results
292 patients had surgery for 123 had PLA indicated, 113 underwent PLA. Median node count was 11. Disease free survival at 2 years was 76.1% with 2 year mortality 15%

Post-operatively 77 patients had ≤ stage2 disease and 36 ≥ stage 3 disease. Following PLA, 16 patients were upstaged & 9 were downstaged altering their management accordingly.

After PLA, 68 patients were intermediate to high risk of recurrence; 7 received EBRT & BT, 59 BT alone & 2 were not fit for adjuvant therapy. In the follow-up period there were no recurrences in the EBRT & BT group, 6 in the BT group & 1 in the patients who were unfit for adjuvant treatment group.

Conclusion
Adherence to the local SEWGO network guidelines is high and 90% of our patients avoided EBRT as result of having PLA.

1. Frost, J et al (2015). Lymphadenectomy for the management of endometrial cancer. Cochrane Database of Systematic Reviews.

P-72

METASTATIC CERVICAL SQUAMOUS CELL CARCINOMA OF THE OVARY

Awad M[1], **Drews F**, **Jones R**, Rzyska E, Lim K, Howels R, **Sharma A**

[1]*University Hospital Wales, Cardiff, United Kingdom*

Introduction
Cervical cancer is the 13th most common cancer among females in the UK (2014), accounting for 2% of all new cases of cancer in females. Metastatic disease develops in 15–61% of women, usually within the first two years of completing primary treatment. Ovarian metastasis is more commonly associated with adenocarcinoma of the cervix than with squamous cell carcinoma. In addition, primary ovarian squamous cell carcinoma is mostly associated with germ cell tumours as well as endometriosis.

We report a patient with a late recurrence in form of a multi-cystic ovarian mass, who was diagnosed with occult stage I squamous cell carcinoma of the cervix 20 years ago following a simple hysterectomy for CIN3.

Case details
A 43 years old patient underwent a cervical cone biopsy for CIN3. Follow-up smear revealed mild dyskaryosis. Subsequently, she was offered an ovary sparing simple hysterectomy with resection of a vaginal cuff in 1996. The histopathological report showed occult stage I squamous cell carcinoma with clear margins. It was decided against adjuvant therapy after multi-disciplinary team discussion.

In 2015, radiological investigations for vague bowel symptoms revealed right sided multi-cystic ovarian mass as and an ileocaecal mass. Therefore, a right hemicolectomy, bilateral salpingo-oophorectomy and omentectomy were performed in the University Hospital of Wales, Cardiff.

The post-operative histopathology diagnosed metastatic squamous cell carcinoma of the right ovary and caecum secondary to occult cervical carcinoma. No evidence of teratoma or endometriosis were found. The patient chose to defer her palliative chemotherapy and subsequently became unwell with sepsis and passed away 12 months following the recurrence of her cervical cancer.

Conclusion
Metastatic cervical squamous cell carcinoma to the ovary is infrequent compared to adenocarcinoma of the cervix or from other extraovarian primaries. Unilateral multicystic ovarian tumours should prompt the clinician to exclude recurrence of the primary tumour.

P-73

SURGICAL MANAGEMENT OF OVARIAN CANCER AT THE UNIVERSITY HOSPITAL OF WALES: UTILISATION OF SURGICAL SERVICES IN ADVANCED OVARIAN CANCER.

Wong A[1], Jones R[1], Rzyska E[1], **Sharma A[1]**, Howells R[1], Lim K[1], Drews F[1]

[1]*University Hospital Of Wales, Cardiff, United Kingdom*

Background
Surgery in ovarian cancer is complex, often requiring a multidisciplinary approach involving other surgical specialties. This support can be arranged electively prior to surgery but may be provided by the on-call surgical team if not predicted in advance.

Aims
This project aimed to review how often colorectal procedures were performed by gynaecological oncologists and identify the frequency and extent other surgical specialties were involved in the management of advanced ovarian cancer (FIGO II-IV).

Methods
A retrospective analysis was carried out reviewing all operations on stage II-IV ovarian cancers documented at University Hospital of Wales, Cardiff. All stage 1 disease and ovarian metastasis of other primaries were excluded.

Results
A total of 106 cases were identified from September 2014 to September 2016. 33 cases (31%) required surgical assistance from other specialties. Mainly from colorectal (49%), hepatobiliary (24%), urology (12%), vascular (9%) and general surgeons (6%).

The primary procedures included total abdominal hysterectomy and bilateral salpingo-oopherectomy (73%), unilateral/bilateral salpingo-oopherectomy (17%). While 9% had either explorative laparotomy, adhesiolysis or hernia repair.

16 cases required a colorectal procedure, the most common being Hartmann's procedures and resections of transverse colon with primary anastomosis. The data showed a 67% primary anastomosis rate with 33% requiring a stoma. 73% of cases requiring colorectal intervention didn't have residual disease.

28 cases had additional non-gynaecological surgical procedures by gynaecological oncologists. Including repair of serosal bowel injuries (22%), plasma jet to the diaphragm (17%), appendectomy (9%), Hartmann's procedure (9%), ureteric stenting (12%) and loop colostomy (9%). 57% of these cases didn't have residual disease.

Conclusion
Our data demonstrates approximately a third of our patients required surgical support primarily from the colorectal team. A system to identify patients preoperatively who are likely to need support from other surgical specialities would be useful and help improve patient outcomes in the future.

P-74

IS IT TIME TO TREAT HIGH GRADE SEROUS ENDOMETRIAL CANCER MORE LIKE OVARIAN CANCER? REVIEW OF MANAGEMENT AND OUTCOMES.

Platt S[1], Cass G[1], Newton C[1], Patel A[1]

[1]*St Michael's Hospital, UHBristol, Bristol, United Kingdom*

Background
High grade (HG) serous endometrial cancer is a rare histological subtype (10% cases) which acts aggressively, resulting in a disproportionate number of endometrial cancer deaths.

Methods used to predict recurrence risk in endometrioid endometrial cancer appear to be less reliable in this group, as extra-pelvic disease is often evident in the absence of LVSI or significant myometrial invasion. Higher rates of metastatic spread at diagnosis have led to more extensive staging surgery to guide adjuvant therapy, with omental biopsy, peritoneal cytology and both pelvic and para-aortic lymphadenectomy. The move towards neoadjuvant chemotherapy and optimal cytoreduction seems more aligned with high-grade serous ovarian cancer.

Methods
Retrospective descriptive analysis of all women diagnosed with endometrial carcinoma from 2005-2015 at St Michael's Hospital, Bristol (n=556).

Results
40 out of 556 (7.2%) women with endometrial cancer had HG Serous morphology.

4 patients had neoadjuvant chemotherapy, one also with EBRT. 39 patients in total had surgical intervention as 1 was unfit: all had Hysterectomy and BSO, 10/39 (26%) omental biopsy, 2/39 (5%) had pelvic and para-aortic lymphadenectomy. 19/39 (49%) cases had LVSI and 16/39 (41%) had myometrial invasion >50%.

Adjuvant treatments were 25% brachytherapy, 30% EBRT and brachytherapy, 10% chemotherapy, 2.5% brachytherapy and chemotherapy, 2.5% EBRT and 20% all options. 10% had no intervention.

The recurrence rate was 25%: 2/40 solitary pelvic and 8/40 distant recurrence. 80% recurrences were within 2 years. Differing adjuvant treatment combinations had been given previously. 4 recurrences were originally stage 1, 3 were stage 3 and 3 were stage 4.

15/40 (37.5%) of patients died from recurrent or progressive disease.

Conclusion
A move towards more extensive surgical staging, possibly with sentinel lymph node excision, could provide more accurate clinical staging for HG serous endometrial cancer and streamline adjuvant treatment. EBRT is still an important adjuvant treatment, with fewer recurrences.

P-75

APPENDICECTOMY IN MUCINOUS BORDERLINE OVARIAN TUMOURS - A SYSTEMATIC REVIEW

Muglu J[1], Phadnis S, Lawrence A

[1]Royal London Hospital, London, United Kingdom, [2]Royal London Hospital, London, United Kingdom, [3]Royal London Hospital, London, United Kingdom

Background
The current surgical approach for mucinous borderline ovarian tumours includes appendicectomy as part of the routine staging investigations. The rationale for this is difficulty in identifying the primary site of the tumour and concern that a mucinous ovarian neoplasm may represent an occult metastatic tumour from the appendix.

Method
We conducted a literature search of current practice between the years 2000 to 2017 of studies concerning appendicectomy in borderline mucinous ovarian tumours. We identified 26 relevant studies: 14 investigating the incidence of appendiceal pathology, 8 studies on the macroscopic and microscopic appearance of appendices, and 4 studies regarding follow-up.

Results
The incidence of appendiceal involvement in mucinous borderline ovarian tumours is rare with an incidence of 1.9 % (13/683). The positive predictive value of an abnormal intra-operative macroscopic appearance of the appendix is 82%. A normal appearance of the appendix conferred a specificity of more than 99% (254/256). There were no cases of recurrence or secondary appendiceal involvement noted in the non-appendicectomy group during follow up in the literature.

Conclusion
Appendicectomy should not be performed as a routine part of surgical staging in women with mucinous borderline ovarian tumours. Appendicectomy should only be performed when the gross appearance is abnormal or signs of pseudomyxoma peritonei are observed intraoperatively.

P-76

A SURVEY OF BRITISH GYNAECOLOGICAL CANCER SOCIETY (BGCS) MEMBERS ON THEIR USE OF RADIOLOGICAL IMAGING IN THE MANAGEMENT AND SURGICAL WORKFLOW OF WOMEN WITH GYNECOLOGICAL CANCER.

Dilley J[1], Pratt P[1], Flott K[1], Kyrgiou M[1], Darzi A[1], Mayer E[1]

[1]*Imperial College, London, United Kingdom*

Introduction
With increasing use of tomographic imaging and ease of clinician access, it is important to understand how clinicians use these in preoperative decision-making. Awareness could help shape integration of image guidance to support this.

Methods
An online-survey was circulated by the BGCS to all 393 members. The survey was open for a two-month period. As no existing survey explored this area, questions were developed based on literature and piloted with clinicians prior to circulation.

Results
In total 74 (19%) members completed the survey. Respondents rated their confidence in their interpretation of CT/MRI images as just over 50%. Preoperative imaging is commonly used to plan operations, predict complications and R0 resection and teaching and is occasionally used to explain disease to patients. It is rarely used to brief the theatre team. Outside of the MDT, the majority (76.4%) spent between 0-10 minutes looking at each patient's radiological images, most commonly just before the operation. Images were reviewed for primary (95%) and interval (89%) ovarian debulking and exenteration (92%) but less so for vulvectomy/IGLN (16%) and TLH/BSO (59%). When planning operations the scan, (84%) and MDT (70%) reports were used more than the scan itself (50%). Just over half of the surgeons performed preoperative warm up. Many of those who did not do this were unaware other centres preformed this. Intraoperative findings and experience were most commonly used to predict operative complications; only 9.2% used a specific preoperative scoring system. The amount of disease seen on scans and pattern of disease spread were most important in predicting operating time.

Conclusions
This survey has confirmed the vital role preoperative imaging has influencing the surgeon in planning operations and predicting complications. However surgeons lack confidence in their ability to interpret. Reasons for this need to be explored and solutions such as image guidance trialed.

P-77

NOVEL USE OF LAPAROSCOPIC TAP BLOCK – PIVOTAL COMPONENT OF ENHANCED RECOVERY PROGRAM

Yap J[2], Bhat M[1], McMullen W[1], **Ragupathy K[1]**

[1]Nhs Tayside, Dundee, United Kingdom, [2]University of Dundee, Dundee, United Kingdom

Background
Transverse abdominis plane (TAP) block is a peripheral nerve block designed to anesthetize nerves supplying anterior abdominal wall (T6 to L1). Its benefit is known in open gynaecological procedures, caesarean sections; but its success has not been replicated in laparoscopic surgeries with Ultrasound aided TAP block. We present a study on novel technique of TAP block given laparoscopically in our cancer unit.

Aim
Assess efficacy of Laparoscopic TAP block as postoperative analgesia in women undergoing Total Laparoscopic Hysterectomy (TLH).

Method

Retrospective study over 24 months comparing women undergoing TLH in our unit with TAP block (Group1) and without TAP block (Group 2) in our unit. Patients were identified from theatre database and data collected from clinical portal as well as notes. Outcomes were analysed using means, odds ratio, paired t test and chi square tests.

Results
Group 1 (n=45) had older women (mean age 64) compared to Group 2 (n=31) with mean age 49. Average BMI (30.3 and 30.02) and METS score was comparable (6.7 vs 7.7). Pain scores and Opiates requirement was assessed in recovery, 4-12 hours, 12-24 hours and 24-48 hrs post-op. Women in Group 1 needed significantly lesser amounts of opiates, when compared to Group 2 (t-test) at all time periods. This was statistically significant in 12-24 hr [Odds ratio-0.29 (95%- 0.11-0.79); p=0.01] period. Need for PCA was also lower in Group 1 [Odds ratio-0.02 (95%-0.0014-0.46); p=0.01]. Average amount of opiates used was only 27mg (range=0 to 102) in Group 1 compared to 59mg (range=0 to 240) in Group2. Average post-op stay in the hospital was 1.3 and 1.8 in Group1 and 2 respectively.

Conclusion
Laparoscopic TAP block is an effective form of postoperative analgesia and reduces the need for postoperative opiates and this translates into quicker mobilisation and early discharge following laparoscopic hysterectomy.

P-78

EVOLUTION OF TREATMENT FOR ENDOMETRIAL CANCER WITH DEVELOPMENT OF ADVANCED LAPAROSCOPIC SURGERY IN A CANCER UNIT

Cuthbertson J[2], Nellore V[1], McMullen W[1], **Ragupathy K[1]**

[1]NHS Tayside, Dundee, United Kingdom, [2]University of Dundee, Dundee, United Kingdom

Aim
Study outcomes of women with Endometrial cancers (EC) over a 5-year-period with change in practice from open to laparoscopic hysterectomy.

Methods
Retrospective study of women with EC divided into 3 groups–Group1 (April 2011–March 2013, 44 women), Group2 (April 2013–March 2015, 53 women) and Group3 (April 2015–March 2016, 36 women).

Results
Laparoscopic hysterectomy rates increased from 43% through 64% to100% whilst complication rates decreased from 37%, through 26% to 0%. Average length of stay was 6, 5 and 3 days respectively. This was despite increasing rates of obesity/morbid obesity (50%/7% in group 1, 70%/6% in group 2 and 70%/11% in group 3) and more women with poor functional status in the more recent cohort.

Conclusion
Within our cancer unit, there is irrefutable evidence that advanced laparoscopic work leads to improved outcomes for women with EC in spite of medical co-morbidities. Complications are greatly reduced along with effective reduction in cost of medical care due to shortened hospital stay.

P-79

A CANCER UNIT'S EXPERIENCE & OUTCOMES OF ADVANCE OVARIAN CANCER

Lee J[1], **Gan C**, Keightley A, Watmore S, Roche M, Van Tonder A, Thangavelu A, Abu J

[1]*Nottingham University Hospitals NHS Trust, Nottingham, United Kingdom*

Background and Aims

Ovarian cancers are usually diagnosed at the advanced stages with poor prognosis. Optimal debulking surgery and platinum-based chemotherapy are vital for treatment and improving prognosis. This audit was performed to review how these patients were managed in our unit and their outcomes.

Methods

Patients with stage 3 and 4 ovarian cancer between January 2010 and December 2015 were identified from the chemotherapy database. Further data collection on histology, type of treatment given and recurrence were obtained from electronic notes on NOTIS.

Results

There were 335 patients with advanced ovarian cancer. The following is the interim analysis of 189 patients during this period. 120 (63%) patients had stage 3 ovarian cancer whilst 69 (37%) patients had stage 4 ovarian cancer. Majority of patients (41%) had primary chemotherapy only, 25% had neoadjuvant chemotherapy, 19% had primary debulking surgery followed by chemotherapy, 13% had 6 cycles of chemotherapy followed by delayed debulking surgery and 2% could not tolerate any treatment. Of those who had surgery, 45% achieved complete cytoreduction, 23% had optimal and 18% suboptimal debulking and 14% the data was not available. Patient who had primary debulking surgery followed by adjuvant chemotherapy had the longest median progression free interval of 20.5 months and a median overall survival time of 40 months.

Conclusions

Majority of patients had primary chemotherapy only. This could be because they are of an older age group and were not fit for surgery. Apart from the patients in the primary chemotherapy group, Majority of patients achieved complete end of treatment response. Patients who had primary surgery and adjuvant chemotherapy tend to be younger and have a longer progressive free interval and overall survival.

P-80

FIFTEEN YEARS OF OVARIAN GRANULOSA CELL TUMOURS (GCT): WHAT IS THE SURVIVAL BENEFIT FROM AN AGGRESSIVE SURGICAL APPROACH?

Trendall L[1], Agarwal M[1], Corner B[1], Taylor I[1,3], Kotsopoulos I[2], Ang C[2], Fisher A[2], Kucukmetin A[2], Naik R[2], Ratnavelu N[2], May F[3], **O'Donnell R[2,3]**

[1]Newcastle University Medical School, Newcastle, United Kingdom, [2]Northern Gynaecological Oncology Centre, Newcastle, United Kingdom, [3]Northern Institute for Cancer Research , Newcastle University, United Kingdom

Background
GCT are poorly understood representing <5% of ovarian cancers. They are biologically distinct from epithelial ovarian cancer and are relatively chemo-resistant. Surgery is subsequently the primary treatment modality and patients frequently require multiple laparotomies. When surgery becomes infeasible, effective adjuvant therapies are limited.

Aim
Determine the clinical presentation, treatment, outcome, and prognostic factors for patients with GCT.

Method
All cases of ovarian GCT were identified from the departmental MDT records over a 15 year period (2002-2017). Patient demographics alongside surgicopathological data were collected from a retrospective review of case notes and electronic records.

Results
The median age at diagnosis was 58.3 years (15 - 86, n=73). Patients predominantly presented with pelvic masses or abnormal vaginal bleeding reflecting aberrant oestrogen production. Synchronous endometrial hyperplasia or carcinoma was observed in 12 (16%) cases.

The majority presented at early stage (n=69, Stage I/II). 74 patients underwent initial surgical treatment with complete cytoreduction achieved in 72 (97%). 21 patients experienced recurrence, with a total of 50 episodes of recurrence to date. Median PFS following initial surgery was 61 months (6-317) and 17 patients went on to have further surgery of which all underwent radical/ultraradical procedures over a range of 2-10 laparotomies, to date.

Chemotherapy, typically with carboplatin +/- paclitaxel/etoposide was given to 11(15%) patients at varying stages of their management, most commonly when surgery was deemed unsuitable for disease extent or patient fitness. Four patients were offered radiotherapy and 6 patients hormonal therapy (tamoxifen or aromatase inhibitors).

Conclusions
GCT is a distinct subgroup of ovarian cancer. Survival is dependent upon an aggressive surgical approach but therapies when surgery is no longer feasible are urgently needed. Hormone receptor status may serve as a useful a biomarker for response to hormonal therapies and should be routinely undertaken in all tumours at diagnosis and relapse.

P-81

UTERINE LEIOMYOSARCOMA: 10 YEARS OF EXPERIENCE IN A TERTIARY CENTRE

Agarwal M[1], Trendall L[1], Corner B[1], Kotsopoulos I[2,3], Ang C[2], Fisher A[2], Kucukmetin A[2], Naik R[2], Ratnavelu N[2], May F[3], **O'Donnell R[2,3]**

[1]Newcastle University Medical School , Newcastle, United Kingdom, [2]Northern Gynaecological Oncology Centre, Gateshead, United Kingdom, [3]Northern Institute for Cancer Research , Newcastle University, United Kingdom

Background
Uterine Leiyomyosarcoma (uLMS) is a rare tumour. Despite its low incidence, uLMS contributes to a disproportionate number of deaths. This is thought to be due to the difficulty in establishing a pre-operative diagnosis alongside its aggressive nature. Even after complete surgical resection, recurrence is common and adjuvant treatments are frequently ineffective. There is an urgent need for additional therapeutics.

Aims
To understand the incidence of uLMS, its presentation and current management practices.

Methods
All patients with uLMS were identified from the Northern Gynaecological Oncology Centre departmental database, 2007 - 2017. A retrospective case note and electronic note review was performed. Patient demographics and surgiocopathological data was collected. Progression free survival (PFS) and overall survival (OS) were analysed by disease stage and treatment.

Results
uLMS represents just 1% (n=61) of all corpus malignancies in this population. Median age of diagnosis of was 59 years (43 – 87), with the majority presenting with unscheduled vaginal bleeding. 39(64%) patients had a diagnosis of uLMS prior to MDT referral, of which 23(38%) were diagnosed following surgical excision undertaken by non-oncologists. Surgical spillage or incomplete resection occurred in 18(78%) of these cases. Of the 14 patients who underwent cytoreductive surgery at the tertiary centre 13(93%) achieved optimal/complete peritoneal cytoreduction. 25(41%) patients received systemic therapy, predominantly doxorubicin or docetaxol and 20(33%) received palliative radiotherapy. Despite high rates of complete resection, mortality remained high with a median survival of only 7 months (0.3-66) in the entire cohort. The most prevalent site of recurrence was the lung indicating early haematogenous spread.

Conclusion
Uterine LMS is an aggressive disease with evidence of frequent and early haematogenous spread. Despite surgical management, with or without adjuvant treatment, outcome remains poor and additional therapeutics are needed. Pre-surgical diagnostic markers are paramount if patients are to be selected for oncological management.

P-82

OVARIAN CANCER CARE AND SYMPTOMS: 2016 COMPARED WITH 2006 - OVACOME SURVEY

Gilbert A[1], Bayne L[1], **Kehoe S**[2]

[1]OVACOME, London, United Kingdom, [2]University of Birmingham, Birmingham, UK

Introduction
Ovacome conducted a survey in 2006 measuring the pathways of care and symptomatology experienced by the Ovarian Cancer (OC) patient in the UK. In 2016 Ovacome repeated the survey to assess changes.

Method
Members on the Ovacome database were sent a covering email with link to an electronic survey. 418 surveys were analysed with 324 participants diagnosed after 2006 compared with the 370 surveys from 2006.

Results
Both cohorts had similar age (average 56 years), and stage distribution (35% Stage I/II, 65% III/IV). The salient findings were as follows: During 2006, there was an average of 3.24 visits prior to GP referral to tertiary care as compared to 2.82 in 2016. However, the time frame from first visit to investigations remained over 11 weeks. Regarding presenting symptoms, abdominal bloating/swelling/pain were the commonest recorded. In the 2016 cohort the presence of abdominal pain prompted the woman to seek medical advice, though bloating was more common. In 2006 women had symptoms for an average of 29 weeks before seeking medical advice, as compared to <10 weeks in 2016. Regarding referral patterns, over 20% of women are referred to GIT specialist during both periods. There was a decreased referral rate in 2016 to general surgery (14%, 2006 vs 1% in 2016) but a rise in A&E referrals (4% to 15%). Patient involvement of CNS increased (59-80% respectively). In 2016, 28% of women were offered a clinical trial, and of those 75% were recruited.

Conclusions
This survey reveals little changes in the speed of referrals to tertiary care. Women recognised symptoms of bloating but advice was sought mainly due to pain. Possibly peri/postmenopausal women perceive bloating as a natural body alteration thus ignoring symptoms of bloating. Women seem more proactive now in seeking medical care, though whether this influences outcomes is unknown.

P-83

PIK3CB IS A PROGNOSTIC MARKER AND SURVIVAL KINASE GENE IN OVARIAN CANCER

Singh V[1], Sheng Z[1]

[1]*Virginia Tech Carilion School of Medicine and Research Institute, Roanoke, United States*

Background
Phosphatidylinositol 3-kinases (PI3Ks) are a family of lipid kinases that control many cellular processes including growth, proliferation, and survival. Activating alterations in various PI3K isoforms are found in a variety of cancers, making this PI3K/Akt pathway a prime drug target. Targeting the entire PI3K pathway has proven unsuccessful in clinical trials. However, isoforms are divergent - targeting one may achieve greater therapeutic efficacy [1]. The Cancer Genome Atlas (TCGA) has created a gene database of several cancers with accompanying clinical and patient data. Previous analyses from our own lab indicate that the PI3K isoform, PIK3CB, plays a critical role in recurrence and disease progression of glioblastoma multiforme [2]. These findings encouraged us to explore other cancers. Ovarian cancer is the most lethal gynecological malignancy in the United States and Europe. Previous studies have shown that the PI3K pathway is the most frequently altered signaling cascade in this cancer [3].

Methods
Kaplan Meier survival analyses were performed using genetic information retrieved from the TCGA database. This included 508 patients with high-grade serous cystadenocarcinoma (HGSC), 108 of whom are deceased. Patients were divided into high and low expression groups based on the overall average. Kaplan Meier survival analyses were performed using the JMP software.

Results
Analyses showed that high expression of PIK3CB resulted in a median survival time of 916 days, compared to the low expression group with a median survival of 1203 days. This finding was associated with a Long-Rank P value of 0.0116 (Figure 1). Other major PI3K subunits had no statistically significant correlation with survival.

Conclusions
Our data demonstrates that HGSC patients with high expression levels of PIK3CB have a significantly decreased survival while other isoforms showed no correlation. This evidence supports the claim that PIK3CB should be a prognostic indicator, and possible a therapeutic target, in HGSC

P-84

HUMAN PAPILLOMAVIRUS DNA METHYLATION PREDICTS RESPONSE TO TREATMENT USING CIDOFOVIR AND IMIQUIMOD IN VULVAL INTRAEPITHELIAL NEOPLASIA 3

Jones S[1], Hibbitts S[1], Hurt C[1], Bryant D[2], Fiander A[1], Powell N[1], Tristram A[1]

[1]Cardiff University, Cardiff, United Kingdom, [2]University of Southampton, Southampton, United Kingdom

Purpose
Response rates to treatment of vulval intraepithelial neoplasia (VIN) with imiquimod and cidofovir are approximately 57% and 61% respectively. Treatment is associated with significant side effects and, if ineffective, risk of malignant progression. Treatment response is not predicted by clinical factors. Identification of a biomarker that could predict response is an attractive prospect. This work investigated HPV DNA methylation as a potential predictive biomarker in this setting.

Experimental design

DNA from 167 cases of VIN 3 from the RT3 VIN clinical trial was assessed. HPV positive cases were identified using: Greiner PapilloCheck and HPV 16 type-specific PCR. HPV DNA methylation status was assessed in three viral regions: E2, L1/L2, and the promoter, using pyrosequencing.

Results
Methylation of the HPV E2 region was associated with response to treatment. For cidofovir (n=30), median E2 methylation was significantly higher in patients who responded ($p = <0.0001$); E2 methylation >4% predicted response with 88.2% sensitivity and 84.6% specificity. For imiquimod (n=33), median E2 methylation was lower in patients who responded to treatment ($p = 0.03$ (not significant after Bonferroni correction)); E2 methylation <4% predicted response with 70.6% sensitivity and 62.5% specificity.

Conclusions
These data indicate that cidofovir and imiquimod may be effective in two biologically defined groups. HPV E2 DNA methylation demonstrated potential as a predictive biomarker for the treatment of VIN with cidofovir and may warrant investigation in a biomarker-guided clinical trial. An alternative approach may be to investigate a treatment that combines these medications, obviating the need for a biomarker.

P-85

RAMAN SPECTROSCOPY FOR THE IDENTIFICATION OF VULVAL SQUAMOUS CELL CARCINOMA AND VULVAL INTRAEPITHELIAL NEOPLASIA

Frost J[1,2], Ludeman L[1], Hillaby K[1], Kendall C[2], Lloyd G[2], Gornall R[2], Shore A[3], Stone N[4]

[1]Cheltenham General Hospital, Gloucestershire Hospitals NHS Foundation Trust, Bristol, United Kingdom, [2]Biophotonics Research Unit, Gloucestershire Hospitals NHS Foundation Trust, Gloucester, United Kingdom, [3]Medical School, University of Exeter, Exeter, United Kingdom, [4]Biomedical Physics, School of Physics and Astronomy, University of Exeter, Exeter, United Kingdom

Introduction
In the treatment of vulval squamous cell carcinoma (SCC) and vulval intraepithelial neoplasia (VIN) there has been an impetus to adopt more conservative surgical approaches. This is due to the recognised psychosexual sequelae and morbidity of surgical resection. The requirement for broad tumour-free pathological margins is increasingly being challenged with new evidence, and the link between size of pathological margin and local recurrence of disease is increasingly uncertain.

Raman spectroscopy uses inelastic scattering of light to probe the biomolecular composition of tissue. The technique offers a real time, non-invasive, objective tool for identifying neoplastic vulval disease and may prove useful in guiding surgery to ensure complete excision whilst minimising the extent of the surgery.

Objective
To evaluate the ability of Raman spectroscopy to differentiate between vulval SCC, VIN and non-neoplastic perilesional tissue.

Methods
Tissue samples were collected from women undergoing excisional vulval surgery. Raman spectra were measured from the tissue samples and sections taken for staining and histopathological analysis. The results of the spectroscopy were compared to that of the histopathology using multivariate analysis to determine the classification accuracy of Raman spectroscopy for identifying SCC. Spectral variance was first explored using principal component analysis and a multivariate linear discriminant classification model was developed and validated with 'leave one sample out' cross validation.

Results
In total, tissue from 64 women underwent analysis. This included 31 samples of SCC, 30 samples of VIN and 30 samples of normal vulval tissue. The discriminant model demonstrated Raman spectroscopy was able to correctly identify VIN or SCC from normal tissue with a sensitivity of 98% and specificity of 72%, with an area under the receiver operator curve of 0.94.

Conclusion
Raman spectroscopy offers a potential tool for guiding surgical excision of VIN and vulval SCC. Further study is needed evaluate the technique in vivo.

P-86

Ca125 REQUESTING IN PRIMARY CARE: THE IMPACT OF THE NICE GUIDELINES

Walker P[1], Miles T[1], Taylor A[1]

[1]*Royal United Hospital, Combe Park, Bath, United Kingdom*

Background
CA125 has a role in the diagnosis and management of non-mucinous epithelial ovarian cancer.

National Institute for Health and Care Excellence (NICE) recommended that all women with serum CA125 level of ≥35 IU/ml should have abdomen/pelvis ultrasound. [1]

Aim
To retrospectively audit CA125 requesting in Primary Care to identify compliance with NICE guidelines and determine whether introduction was associated with an increase in new ovarian cancer diagnoses.

Method
Data mining software was used to retrospectively identify all CA125 blood tests received from Primary Care between 1st April 2010 and 31st March 2012 and any subsequent ultrasounds. These patients were then referenced against the National Cancer Register for a new diagnosis of ovarian cancer.

Results
CA125 requests increased from 526 tests (2010) to 1340(2011) and 1352(2012).

Those patients with an elevated CA125, 34% (2010) went on to have a subsequent US compared to 55% (2011) and 44% (2012).

3 new ovarian cancers were identified pre-guidelines compared to 9 cases (2011) and 8 cases (2012). This equated to 175 CA125 tests per new ovarian cancer diagnosis in 2010, 149 (2011) and 169(2012) in the years following guideline introduction.

Conclusion
Although requests increased following introduction of NICE guidelines, only around 50% of those who had a raised CA125 went on to have an abdominal/pelvic ultrasound in the subsequent two years to. The number of new diagnoses of ovarian cancer was shown to increase following the introduction of guidelines, possibly as a result of increased test requesting.

References
1. National Institute for Health and Clinical Excellence. Recognition and initial management of ovarian cancer. CG122. 2011. www.nice.org.uk/CG122

P-87

OBESITY AND OVARIAN CANCER RISK: A SYSTEMATIC REVIEW

Foong K[2], **Bolton H**[1]

[1]Addenbrooke's Hospital, Cambridge, Hills Road, Cambridge, United Kingdom, [2]Clinical School of Medicine, University of Cambridge, Cambridge, United Kingdom

Background
The association between obesity and ovarian cancer has been investigated for many years, but studies have yielded inconsistent findings. This review aims to summarise and discuss the evidence generated to date.

Methods
Observational case-control and cohort studies investigating the association between obesity and ovarian cancer risk were identified through an electronic search of the PubMed database. Eligible studies compared two or more groups of women, with at least one group in the overweight or obese category and one comprising normal weight controls. Summary data in the form of hazard ratio (HR), relative risk (RR) or odds ratio (OR) for each comparison group from individual studies were collated.

Results
1,239 articles retrieved by electronic searching and manual scanning of reference lists were screened and 43 studies were included in the final analysis. This consisted of 24 case-control studies and 19 cohort studies carried out between 1957 and 2016. All studies included body mass index (BMI) as an exposure measure, and a majority relied on self-reported measures from participants. 14 studies found a statistically significant positive association between ovarian cancer risk and higher BMI. 26 studies found no significant association between ovarian cancer risk and BMI. Three studies found a negative association between ovarian cancer risk and higher BMI. Cohort studies were less likely to report an association as compared to case-control studies.

Conclusion
There is limited and inconsistent evidence of a positive association between ovarian cancer risk and obesity. However, there is evidence to show that obese women with ovarian outcome have poorer outcomes than patients who are not obese. A greater understanding of the link between obesity and ovarian cancer is needed to improve outcomes for such women.

P-88

PRIMARY RETROPERITONEAL MUCINOUS TUMOURS DIAGNOSED IN PREGNANCY – A CASE REPORT AND LITERATURE REVIEW

Tahmasebi f[1], Jamall H[1], Deo N[1]

[1]*Whipps Cross Hospital, London, United Kingdom*

Primary retroperitoneal mucinous tumours (PRMTs) are extremely rare neoplasm's occurring almost only in women, with just three cases reported in men. Although PRMTs have been reported in patients of a wide range of ages, they mainly occur in women of reproductive age. They have been categorised into three types consisting of: mucinous cystadenomas (MCs), mucinous borderline tumours or tumours of low malignant potential (MLMP) and mucinous carcinomas (MCas). In many of the cases reported, preoperative diagnosis of these masses is extremely difficult as CT or MRI is unable to differentiate the exact origin of these tumours. As a result of this and due to rare nature of the condition, treatment and prognosis remains controversial and diagnosis is usually made post operatively after histology. We describe the case of a young female who presented to us with what was found to be a PRMT in pregnancy.

P-89

HOW THICK IS TOO THICK? THE ROLE OF ENDOMETRIAL THICKNESS IN THE DIAGNOSIS OF ENDOMETRIAL CANCER

Clarke H[1], Thompson R[1]

[1]*Leighton Hospital, Crewe, United Kingdom*

Postmenopausal bleeding is the most common referral to gynaecology rapid access clinic. With a single presentation there is a 10-15% chance of cancer. Cases of endometrial cancer are predicted to rise due to our ageing population and the obesity epidemic. At present, there is no UK guidance on postmenopausal bleeding. We aimed to elicit which endometrial thickness measurement can be employed to safely rule out the likelihood of endometrial cancer and what is the most appropriate sampling technique.

Leighton Hospital is a district general hospital serving a population of 300,000. From June 2013 to June 2015 all proven endometrial cancer cases were retrospectively reviewed for endometrial thickness (ET) on transvaginal ultrasound (TVS) from the Somerset Cancer Register (n=59). From January 2016 to June 2016 all patients presenting to the rapid access clinic were reviewed retrospectively for ET on TVS and the subsequent histological diagnosis (n = 317). Statistical analysis was performed in Excel.

The mean ET on TVS of the 59 patients reviewed with proven endometrial cancer was 19.8mm. One case of malignancy was diagnosed with an ET <3mm; this was a case of recurrent post-menopausal bleeding and managed appropriately with further investigation (hysteroscopy). Two cases had fluid within the endometrial cavity; one case had an associated ET of 6mm and in the other the ET was not identified. Patients attending the rapid access clinic had a mean ET of 6.8mm, and all endometrial carcinomas had an ET ≥5.2mm (n=13). Out of the patients with fluid in the endometrial cavity, one had cancer, with an associated ET of 8.7mm.

In summary, further endometrial cavity evaluation, initially by pipelle sampling, should be undertaken when the endometrial thickness is greater than or equal to four millimetres. Fluid in the endometrial cavity should only prompt further investigation if the endometrium is also thickened.

P-90

THE VAGINAL MICROBIOME AFTER EXCISIONAL TREATMENT FOR CERVICAL INTRAEPITHELIAL NEOPLASIA

Mitra A[1,2], MacIntyre D[1], Lee Y[1], Smith A[3], Marchesi J[1,3], Lyons D[2], Bennett P[1,2], Kyrgiou M[1,2]

[1]Imperial College London, London, United Kingdom, [2]Imperial College Healthcare NHS Trust, London, United Kingdom, [3]Cardiff University, Cardiff, United Kingdom

Background
The vaginal microbiota (VMB) is usually Lactobacillus spp. dominant appears to protect the female reproductive tract against infections including HPV. CST (community state type) III and the high-diversity VMB deplete of Lactobacillus spp. CST IV have both been associated with higher rates of HPV acquisition, persistence and increased severity of cervical intraepithelial neoplasia (CIN). These CST's have also been associated with pre-term birth (PTB); a known complication of excisional treatment.

Objectives
To investigate the impact of excisional treatment for CIN on VMB composition.

Material and Methods
Population: Non-pregnant, premenopausal women attending the colposcopy clinic for excisional treatment of histologically-proven CIN in London, UK.

Interventions: Vaginal swabs collected immediately prior to treatment, and at 6 month follow-up. Bacterial DNA was extracted and sequened using the Illumina MiSeq platform.

Analysis
Heirarchical clustering of sequence data was used to examine bacterial species classification data, and linear discriminant analysis effect size (LEfSe) to identify biomarkers.

Results
One hundred and three women provided both pre- and post-treatment samples. Excisional treatment did not significantly alter the distribution of CSTs within the cohort, and diversity remained significantly greater compared to normal, healthy untreated controls. There was no association with post-treatment CST and HPV status. LEfSe identified Streptococcus agalactiae (Group B streptococcus) to be significantly overrepresented in post-treatment samples.

Conclusions
Excisional treatment does not appear to have a significant impact on VMB composition. CST III and IV remained at a higher prevalence than in a normal control population. These results suggest that the increased prevalence CST III and IV in women with CIN may be due to intrinsic host factors rather than as a result of disease, and these intrinsic factors may also predispose them to PTB. Furthermore, Streptococcus agalactiae which has been associated with PTB risk, may add to the risk in this patient cohort.

P-91

A META-ANALYSIS OF ULTRASOUND USE IN THE DIAGNOSIS OF BORDERLINE OVARIAN TUMOURS

Otify M[1], Alsharaydeh I[1], May J[1], Martin C[1], Congiu M[1], Fegan S[1]

[1]*Royal Infirmary of Edinburgh, Edinburgh, United Kingdom*

Objectives
A systematic review of the literature was performed to identify publications that evaluated the use of ultrasound pattern recognition to identify borderline ovarian tumours (BOTs) and that reported sensitivity and specificity data or their equivalent. A meta-analysis of the sensitivity and specificity of these studies was performed.

Methods
1,077 publications were identified from literature and reference searches. 156 publications were screened and 7 were suitable for meta-analysis. Data was extracted and transformed for meta-analysis using the bivariate approach of Reitsma in the mada package in R.

Results
360 women with BOTs and 2,985 women with benign or malignant tumours were included in the meta-analysis. Meta-analysis showed an overall sensitivity of 0.607 [95% CI: 0.50 - 0.71] and specificity of 0.939 [95% CI: 0.86 - 0.97].

Conclusions
The accuracy of pattern recognition with ultrasound to identify BOTs has great variability in its sensitivity. Ultrasound pattern recognition for BOTs is not fully evolved.

P-92

CHALLENGE IN PATHOLOGICAL DIAGNOSIS OF A TUMOUR INVOLVING THE ENDOCERVIX AND URINARY BLADDER.

Tay S[1], Khor L[1], Lee L[1], Tay K[1], Pang M[1]

[1]*Singapore General Hospital, Singapore, Singapore*

A 31 year old para-3 woman presented with a 6-month history of post-coital bleeding, lower abdominal pain, backache and tenesmus. She had completed 3-dose quadrivalent HPV vaccination 5 years previously and a recent cervical cytology screening was negative for intraepithelial neoplasia and malignancy. The cervix appeared normal but was bulky on palpation, with a submucosal mass in the anterior fornix and upper vagina. The left parametrium was thickened. This mass was hypermetabolic on a PET-CT scan. Cystoscopy further revealed an extensive tumour involvement in the trigon region of the bladder and the left ureteric orifice. Histopathology of bladder biopsies showed high-grade tumour cells with mitoses in the uroepithelium and the subepithelial connective tissues. The cervical biopsies showed tumour cells of moderate size arranged in islands. Both the bladder and cervical biopsies showed positive immunohistochemical staining for GATA-3. The pathological and immunohistochemical features were in favour of a diagnosis of primary carcinoma of the bladder with invasion to the cervix. The patient underwent neoadjuvant chemotherapy and an anterior exenterative surgery.

The surgico-pathological specimen showed a 3cm x 3cm tumour in the endocervix and bladder wall. Histology showed a poorly differentiated non-keratinizing squamous cell carcinoma. The tumour cells showed diffuse and strong p16 positivity favouring a diagnosis of primary endocervical carcinoma.

Retrospective immunohistochemical staining of the primary bladder and cervical biopsies were carried out. The bladder biopsies showed positivity for GATA-3 and patchy p16 positivity within the surface epithelium and strong diffuse staining within deeper rounded tumour nests. The cervix biopsies showed variable, patchy positive GATA-3 and strong diffuse p16 staining within the lesional cells.

Despite a history of HPV vaccination, negative cytology and normal appearing ectocervix, evidence from surgical, histological and immunohistochemical studies concluded that this tumour was a primary squamous cell carcinoma of the endocervix.

P-93

CLINICO PATHOLOGICAL REVIEW OF ADNEXAL MASSES IN PAKISTANI CHILDREN AND ADOLESCENTS

Yasmeen T[1], Begum A[1], Chisti U[1], Idrees R[1], Mateen A[1], Sheikh I[1]

[1]*Aga Khan University Hospital, Karachi, Pakistan*

Objective
The objective of this study was to review the clinico-pathological characteristics of adnexal masses in children and adolescent population in our institution.

Methods
This Retrospective analysis was performed on 178 patients with age 20 years or younger including neonates, who were managed at our institution with adnexal masses between January 2000 and December 2012.

Results
Total of 178 patients were analyzed. The patient's age ranged from 2Dto 19 Years, mean age being 14years. The most common presenting symptom was abdominal pain noted in 146(82%) patients (p value-0.0005) followed by nausea and vomiting in 28(15.7%) patients and incidental finding in 19(10.7%). Majority of the ovarian masses were benign. Most common histopathological type was follicular cyst found in 66 patients (37.1%), followed by hemorrhagic cyst found in 40 patients (22.5%), benign teratoma found in 21 patients (11.8%),benign serous cystadenoma found in 20 patients (11.2%), endometrioma and mucinous cystadenoma found in 13 patients (7.3%). Only one case of malignancy (immature teratoma) was seen in this study group in a 12 year old girl. Average tumor size observed in the present study was 7.84cms.However, the size varied in different age groups such as 4.27+1.67cm size in neonates, and 7.16+5.24cm in 1-14 years age group, and 8.61+5.86cm in 15-19 years age group. (P value 0.009). Out of total 178 patients 46(25.8%) were managed conservatively without surgical intervention. However 90 (50.6%) patients underwent ovarian cystectomy while 26(14.6%) were managed by unilateral salpingo-ophrectomy. unilateral oophorectomy was performed in 10(5.6%) patients. Aspiration was done in 6(3.4%) patients.

Conclusion
Incidence of adnexal masses increases with age with maximum cases in patients older than 14 years. Adolescent girls with adnexal masses can have variable presentation however abdominal pain is the most common symptom. Mostly these are benign masses therefore conservative approach for treatment should be adopted.

P-94

SMOOTH MUSCLE TUMOUR OF THE VULVA MIMICKING A BARTHOLIN GLAND CYST.

Heron S[1], Milling-Smith O

[1]*Forth Valley Royal Hospital, Larbert, United Kingdom,* [2]*Forth Valley Royal Hospital, Larbert, United Kingdom*

Smooth muscle tumours of the vulva are rare and can be misdiagnosed as bartholin cysts. They present histologically with spindle -shaped tumour cells although some cases may present atypical features.

We report a case of a 53 year old woman with a past history of cervical cancer treated with a radical hysterectomy and radiotherapy who consulted with a vulval mass on the right labia majora.

A punch biopsy of the mass was performed with microscopy results of a smooth muscle tumour with atypical features and complete excision was recommended.

Magnetic Resonance Imaging with contrast followed describing a 2.5 x 3x 2.7cm soft tissue mass reported as possible malignancy and suspicious for leiomyosarcoma.

Complete excision followed and final pathology reported a benign leiomyoma with bizarre nuclei and potential for local recurrence.

P-95

MUTATION ANALYSIS IN ENDOMETRIAL CANCER - DOES ETHNICITY HAVE AN IMPACT?

Polymeros K[1], Guttery D[1], Macip S[1], Moreman C[2], Moss E[1]

[1]University of Leicester, Leicester, United Kingdom, [2]University Hospitals of Leicester, Leicester, UK

Background
Endometrial cancer (EC) is the most common gynaecological malignancy in the UK and the incidence in Leicester is particularly high (29.2/100,000). Previous work in our population has shown that British South Asian (BSA) women are diagnosed with EC at a significantly younger age compared to White British (WB) women.

Aims
To determine whether BSA and WB women diagnosed with EC harbour different mutational profiles.

Methods
DNA was extracted from formalin-fixed, paraffin embedded (FFPE) tissue from 24 EC patients. Ion Torrent targeted next generation sequencing (tNGS) was performed using a bespoke tNGS panel interrogating 10 commonly mutated genes in EC.

Results
A total of 82 mutations were found in this cohort (3.4/patient). The most commonly mutated genes were PIK3CA and PTEN with 58% and 54% of patients, respectively, carrying mutations in these genes. PTEN, ARID1A and CTNNB1 mutations were more common in low risk compared to intermediate and high risk patients, while the opposite was the case for p53 mutations. Patients with diabetes had a greater number of PTEN mutations, fewer ARID1A and PIK3CA mutations compared to non-diabetics. There was a (non-significant) positive correlation between ARID1A and POLE mutations (p=0.059). Interestingly, none of the BSA patients had ARID1A or POLE mutations compared to 39% and 22%, respectively of the WB patients. Although this trend didn't reach statistical significance, it raises interesting clinical questions since it is known that POLE mutations are associated with good prognosis.

Conclusion
ARID1A mutations were seen more frequently in WB as compared to BSA EC cases. It has been suggested that ARID1A mutations are associated with mutations in the PI3K pathway. Since many targeted therapies are focused on this frequently mutated pathway, the possible implication is that BSA patients may not respond as well to these newer agents. Analysis in a larger cohort is ongoing.

P-96

COMPARISON OF OUTCOME OF SEROUS OVARIAN AND PRIMARY PERITONEAL CANCERS

Mehmood T[1]

[1]*Shaukat Khanum Memorial Cancer Hospital and Research Centre, Lahore, Pakistan*

Background
Primary peritoneal cancer is rare and usually considered as a variant of advanced ovarian cancer, but questions remain concerning its underlying biology, prognosis and optimal management. Gene expression profiling in epithelia ovarian cancer has identified molecular subtypes with different survival.

Methods
Clinicopathological and treatment data on stage III/IV serous primary peritoneal (N = 72) and ovarian (N = 169) cancers were retrospectively analyzed. Survival curves were plotted with the Kaplan-Meier method and the log rank test was used to compare survival. Cox proportional hazards models were fitted to obtain hazard ratios and 95% confidence intervals. Molecular subtype was determined by gene expression profiling on the Affymetrix U133 plus2 arrays (GSE9891).

Results
Compared with advanced serous ovarian cancer, primary peritoneal cancer patients were older (mean age 65.5 vs. 60.2 years, p< 0.001), more often treated with neoadjuvant chemotherapy (38.4% vs. 11.4%, p< 0.001) and fewer patients were completed resected upfront (14.5% vs 23.2%, p = 0.109). They had significantly shorter progression-free (11.6 vs. 13.6 months, p = 0.007) and overall survival (31.7 vs. 39.8 months, p = 0.012). Multivariate analysis indicated residual disease and neoadjuvant chemotherapy were the main contributing factors to inferior survival. A higher proportion of advanced primary peritoneal tumors were classified as C1 (high stromal response) subtype (70.6% vs. 30.5%, p= 0.026). Patients with a C1 tumor subtype, regardless of their classification as primary peritoneal or ovarian cancer, had a much lower complete surgical debulking rate compared to the cohort of advanced stage serous cancer patients (5.4% and 23.1%).

Conclusions
The inferior survival of primary peritoneal cancer patients may be attributable to the less favorable complete surgical resection rates and more frequent treatment with neoadjuvant chemotherapy. Different biology characterized by stroma fibrosis may cause these differences in treatment and clinical outcome.

P-97

RISK FACTORS FOR ENDOMETRIAL CANCER: AN UMBRELLA REVIEW

Raglan O[1,2], Kalliala I[1,2], Markozannes G[3], Gunter M[4], Nautiyal J[1], Gabra H[1,2], Paraskevaidis E[5], Martin-Hirsch P[6,7], Tsilidis K[3,8], Kyrgiou M[1,2]

[1]Department of Surgery and Cancer, Imperial College London, London, United Kingdom, [2]Queen Charlotte's and Chelsea Hospital, Imperial College Healthcare NHS Trust, London, United Kingdom, [3]Department of Hygiene and Epidemiology, University of Ioannina School of Medicine, Ioannina, Greece, [4]Section of Nutrition and Metabolism, International Agency for Research on Cancer (IARC), Lyon, France, [5]Department of Obstetrics and Gynaecology, University of Ioannina, Ioannina, Greece, [6]Department of Gynaecologic Oncology, Lancashire Teaching Hospitals., Lancaster, United Kingdom, [7]Department of Biophysics, University of Lancaster, Lancaster, United Kingdom, [8]Department of Epidemiology and Biostatistics, School of Public Health, Imperial College London, London, United Kingdom

Background
Endometrial cancer is the fourth most common cancer among UK women. Many modifiable risk factors have been associated with endometrial cancer, although the associations may be affected by inherent bias. We evaluated the strength and validity of the available evidence on modifiable risk factors for endometrial cancer (EC).

Methods
We conducted an umbrella review of meta-analyses investigating modifiable risk factors for endometrial cancer. The primary analysis focused on cohort studies, with evidence graded as strong, highly suggestive, suggestive or weak based on random effects summary estimate, largest study per meta-analysis, number of cases, between-study heterogeneity, 95% prediction intervals, small study effects, excess significance bias and sensitivity analysis with credibility ceilings.

Results
We identified altogether 141 meta-analyses investigating associations between 33 categories of risk factors for endometrial cancer, of which 93 included cohort studies. Only three (7%) risk factors demonstrated strong evidence without hints of bias for association with endometrial cancer: rise in body mass index in premenopausal women and increase in waist-to-hip ratio were associated with increased risk, whereas multiparous women had a reduced risk of developing EC compared with nulliparous women. Highly suggestive evidence existed for diabetes mellitus and increased height being associated with an increased risk of endometrial cancer.

Conclusions
Of the many identified risk factors for endometrial cancer, only three were found to have strong association without hint of bias. Other claimed associations may also be valid, but further evidence is required. Our findings re-emphasise the importance of targeting the increasing number of obese and overweight women at high risk of endometrial cancer with weight-loss strategies. Future research efforts should explore the effect of obesity on metabolic dysregulation and metabolic pathways which, when altered, may promote endometrial cancer

P-98

ENDOMETRIAL CANCER TISSUE HAS A UNIQUE PHOSPHOLIPID SIGNATURE IDENTIFIABLE USING DESORPTION ELECTROSPRAY IONISATION (DESI) IMAGING

Raglan O[1,2], Doria L[3], Filipe-Soares R[3], Farrokh-Eslamlou T[1], McKenzie J[3], Takats Z[1,3], Kyrgiou M[1,2]

[1]Institute of Reproductive and Developmental Biology, Department of Surgery and Cancer, Imperial College London, London, United Kingdom, [2]Queen Charlotte's and Chelsea Hospital, Imperial College Healthcare NHS Trust, London, United Kingdom, [3]Computational and Systems Medicine, Department of Surgery and Cancer, Imperial College London, ,

Introduction
Endometrial cancer (EC) is the most common gynaecological tumour in developed countries. Strongly associated with obesity, incidence of endometrial cancer is rising. DESI-MSI (Desorption Electrospray Ionisation-Mass Spectrometry Imaging) is one mass spectrometry imaging technique that allows direct correlation between biochemical changes within a tissue and histological features, providing topographically localised biochemical information.

Methods
Fresh frozen endometrial samples (benign, cancer) were analysed using DESI-MSI. Peaks of interest were identified from mass spectra, matched with histopathological tissue annotations and clinical data, which was combined to generate a reference database from which principal component analyses (PCA) and maximum margin criterion (MMC) were performed highlighting the biochemical differences between the sample groups analysed.

Results
59 fresh frozen sections were analysed using DESI-MSI, of which 47 (79.7%) were endometrial tumour tissues and 12 (20.3%) were benign. Clear distinction of the different tissue types (tumour-associated stroma versus tumour) was identified within each sample. Benign endometrial samples and endometrial cancer samples produced unique spectra which enabled clear separation in PCA-cross validated MMC analyses. Cross-validation resulted in 91.5% sensitivity and 98.0% specificity for the correct classification of EC. Phosphatidylinositol, PI (34-0), was more abundant in tumour tissue, and phosphatidylglycerol, PG (44:1), more abundant in benign tissue.

Interpretation
DESI-MSI can discriminate benign endometrial versus tumour tissue by identifying unique lipodomic profiles. Our analysis contributes to knowledge of lipid metabolism in cancer and can identify potential lipid markers. These markers can be useful in identifying patients at risk in whom signalling pathways involved in carcinogenesis are overexpressed.

P-99

AN UNUSUAL CASE OF DUAL SITE LATE RECURRENCE FOLLOWING SURGERY FOR LOW-RISK ENDOMETROID CARCINOMA: A REPORT OF A CASE.

Phadnis S[1], Powell M[4], Hameeduddin A[3], Singh N[2], Brockbank E[1]

[1] Department of Gynaecological Oncology, Bartshealth NHS Trust, London, United Kingdom, [2]Department of Pathology, Bartshealth NHS Trust, London, United Kingdom, [3] Department of Radiology, Bartshealth NHS Trust, London, United Kingdom, [4]Department of Clinical Oncology, Bartshealth NHS Trust, London, United Kingdom

Case report
A 55-year old postmenopausal woman had total laparoscopic hysterectomy and bilateral salpingoopherectomy for stage 1A grade 1 endometroid endometrial carcinoma. No adjuvant treatment was offered. Five years from her initial diagnosis of endometrial cancer, she presented to her general practitioner with upper abdominal pain. She had a laparoscopic cholecystectomy for gallstones in the previous year. Abnormal liver function test prompted US of liver and referral to a Hepatologist. A triple-phase liver computed tomography (CT) scan suggested a lesion in the right liver dome. Additionally there was evidence of concentric wall thickening at the rectosigmoid junction and suspicion of malignancy at this site was raised. Positron Emission Tomography (PET) scan and colonoscopy was organised. PET scan revealed metabolically active lesion along the right dome of the liver and extrinsic to rectosigmoid junction. Biopsy of the liver lesion under ultrasound guidance was performed which confirmed metastatic adenocarcinoma consistent with recurrence of endometrial carcinoma. Colonscopic biopsy did not identify malignancy, but in view of the PET scan it was presumed to be most likely dual site recurrence of the previous endometrial cancer. She underwent a laparotomy with rectosigmoid resection with division of large bowel 10 cm above and below the visible tumour, primary colorectal anastomosis with defunctioning ileostomy and non-anatomical liver resection from the right dome of the liver, after complete liver mobilisation. Pathology confirmed presence of grade 2 metastatic endometroid carcinoma in both the rectosigmoid and liver resection specimens. She was reviewed by the clinical oncology team and is receiving 6 cycles of adjuvant chemotherapy.

Conclusion
We report an unusual case of late recurrence of low risk endometrial cancer at two sites, which was managed with complete surgical resection successfully.

P-100

ENDOMETRIAL POLYPECTOMY ACCOMPANIED BY A HYSTEROSCOPY-GUIDED ENDOMETRIAL BIOPSY: STANDARDISATION AND EVALUATION OF THE TECHNIQUE TO IMPROVE THE CURRENT DIAGNOSIS OF ENDOMETRIAL PRE-CANCEROUS DISEASES.

Akaev I[1,2], Rahimi S[1,2], Krol A[2], Chopra M[1], Yeoh C[3], Gardner F[4]

[1]School of Pharmacy and Biomedical Sciences, University of Portsmouth, Portsmouth, United Kingdom, [2]Department of Cellular Pathology, Queen Alexandra Hospital, Portsmouth, United Kingdom, [3]Department of Oncology, Queen Alexandra Hospital, Portsmouth, United Kingdom, [4]Department of Gynaecology and Obstetrics, Queen Alexandra Hospital, Portsmouth, United Kingdom

Introduction
Investigation of unremarkable areas of endometrium in women with polyps could reveal the presence of a pre-cancerous disease. Therefore, the technique of sampling the surrounding normal-looking areas, far from the base of the polyp(s), can detect the pre-cancerous changes in the endometrium at an early stage.

The aim of this project was to evaluate the technique of directed sampling of endometrium after polypectomy, to assess its potential to improve the current diagnostic services.

Methods
At Post-Menopausal Bleeding Clinic a new polypectomy procedures protocol, developed with using the MyoSure Tissue Removal System, was tested. Ultrasound imaging was utilised to identify thickened endometrial echo. Patients found to have thickened endometrial echo were examined and underwent a hysteroscopy. The whole endometrial cavity was systematically assessed. Biopsy was carried out using a hysteroscopy-guided method. Following a polypectomy, a biopsy using MyoSure, was taken from areas of a normal-looking endometrium and all abnormal areas. All histological results were related to the hysteroscopy findings to evaluate the rate of prevalence of endometrial hyperplasia (EH) without atypia, or atypical endometrial hyperplasia (AEH).

Results
100 patients underwent polypectomy and endometrial biopsy (EB). 81 patients (81%) found to have benign endometrial polyp(s) and a normal endometrium in EB. In ten patients (10%) hysteroscopically normal endometrium showed non-atypical EH. Six patients (6%) presented AEH and three patients (3%) showed FIGO stage IA endometrial adenocarcinoma in EB samples.

Conclusion. The proposed method may contribute to the reduction of the rate of endometrial cancer incidence by more accurate detection of EH and/or AEH. Benefits of this method with the respect to the present method, which currently consists of polypectomy without endometrial biopsy, could potentially detect approximately 16% of the pre-cancerous endometrial disease in nonpolypoid endometrium.

P-101

ENDOCRINE SECRETING SERTOLI-LEYDIG TUMOUR – ASSOCIATION WITH DICER1 GENE MUTATION: CASE REPORT

Wormald B[1], Elorbany S[1], Hanson H[1], Williams J[1], Heenan S[1], Barton D[1]

[1]*St George's Hospital, Tooting, United Kingdom*

A 15 year old girl presented with erratic menses following menarche aged 12. She had 6 months amenorrhoea followed by daily bleeding for 3 months. She had noticed hair loss, a receding hairline, coarse dark hair on her abdomen, thighs and buttocks but no change in voice. She was pain free.

Examination revealed a normally developed female without virilisation of the external genitalia.

Hormone profile revealed a raised serum testosterone (10.1nmol/l), suppressed SHBG (21nmol/l) and FSH (<0.1IU/L) and elevated AFP (137kU/L), with all other serum tumour markers normal. Urine steroid profile was normal.

Ultrasound revealed a complex left ovarian lesion, normal pelvic organs and adrenal glands. MRI confirmed an abnormal adnexal lesion with intermediate low signal interspersed with high signal areas separated by low signal septa.

A laparoscopic left oophorectomy was performed with conservation of the fallopian tube. A small nodule on the right ovary was excised. There were no other abnormal findings.

Histology showed a Stage IA, poorly differentiated Sertoli-Leydig cell tumour, retiform pattern, with heterologous mucinous elements and characteristic staining. The right ovarian nodule was benign. Following surgery all serum tumour markers and endocrine profile returned to normal.

A DICER1 mutation was found in the patient, inherited from her father.

Following MDT discussion 4 cycles of bleomycin, etoposide and cisplatin were administered with a GNRH analogue for ovarian protection. The patient made an excellent recovery and is currently well. Her younger sister is undergoing genetic testing.

Mutation of the micro-ribonucleic acid processing gene, DICER1, causes a predisposition to developing benign and malignant tumours, including multilocular cystic nephroma, pleuropulmonary blastoma, nontoxic multinodular goitre and 60% of Sertoli-Leydig tumours. Inheritance is through an autosomal dominant fashion. Those with a Sertoli-Leydig tumour should be recommended to have genetic testing to exclude mutation in the DICER1 gene.

P-102

CASE REPORT OF GENITAL TUBERCULOSIS IN A POSTMENOPAUSAL WOMAN.

Chishti U[1], Barton D[1], Williams J[1], Heenan S[1], Elorbany S[1]

[1]*St Georges Healthcare NHS Trust, London, United Kingdom*

Introduction
Tuberculosis (TB) is considered to be a disease of developing regions due to poor nutritional status and unhygienic conditions. Female genital tuberculosis usually presents with pelvic inflammatory disease or infertility in reproductive age women and is rare to present in menopausal women as pyometra. We are presenting a case of postmenopausal woman with genital tuberculosis.

Case report
A77 year old Caucasian woman was referred to the medicine clinic with a 2 month history of increased frailty, weight loss, general malaise and dizziness. Despite numerous investigations no cause was found but she then developed yellowish, offensive vaginal discharge. Trans vaginal scan showed a mass/fluid within the endometrial cavity. Attempt to take Pipelle endometrial biopsy was limited due to cervical stenosis and the small tissue sample was reported as inadequate but with ?granulomatous cells. MRI of the pelvis showed a fluid filled uterine cavity with no evidence of disease in the abdomen or pelvis. Hemato¬logical and biochemical investigations were normal. Chest CT showed randomly distributed tiny pulmonary nodules. After discussion in the multidisciplinary team meeting she underwent a laparoscopic hysterectomy and bilateral salpingo-ophorectomy. On opening the uterine cavity it was filled with necrotic tissue which was sent for AFB testing and culture and histology which confirmed granulomatous inflammation involving vagina, cervix, endometrium, myometrium, fallopian tubes and paraovarian tissue and no evidence of cancer. Polymerase chain reaction performed on formalin fixed paraffin embedded tissue confirmed Mycobacterium tuberculosis. Anti-tuberculous treatment was started by the infectious disease team and the patient is responding to treatment. In retrospect, the clinical presentation is in keeping with TB.

Conclusion
Although the incidence of genital TB is extremely low in developed countries, this should be considered in differential diagnosis. Increased migration of people from the developing countries may cause an increase in the incidence of genital tract tuberculosis.

P-103

ADENOCARCINOMA OF OVARY: A CASE REPORT AND REVIEW OF LITERATURE

Vanapalli M[1], SIMMONS L, STRATTON J, MAC SWEENY F

[1]*University Hospital Waterford, Waterford City, Ireland*

Adenosarcoma arising from extrauterine sites are rare. The authors report a case of 77year old lady who presented with abdominal bloating and increased urinary frequency for a few months.

Sonography and later Laprotomy showed the cystic lesion of the ovary.

Pathology confirmed Ovarian Adenosarcoma with sex cord elements in the stroma of low malignant potential.

Adenosarcoma of the ovary is rare, and about 3 cases have been described as a cystic mass. They have poorer prognosis compared to Adenosarcoma of the uterus. There is lack of evidence as to the management of such neoplasms, as they are low grade lesions. Potential for recurrence even after years have been described in similar pathologies.

In our case, reliance on CA125 was not beneficial for tumour recurrence as the levels were normal at diagnosis. She underwent TAH and BSO with complete excision of the cystic mass. She is under surveillance for recurrence, and no chemotherapy was given as this was a low grade neoplasm as evidenced by low degree of mitotic activity and no evidence of stromal overgrowth of the mesenchyme.

We believe this is the first case of Ovarian Adenosarcoma with sex cord like differentiation.

P-104

HISTOLOGICAL CORRELATION BETWEEN ENDOMETRIAL SAMPLING AND HYSTERECTOMY SPECIMENS IN ENDOMETRIAL CANCER

Ragi S[1], Lang J[1], Konamme S[1]

[1]*NHS Ayrshire and Arran, Kilmarnock, United Kingdom*

Aim

To correlate the initial working diagnosis on endometrial sampling and final histological diagnosis on hysterectomy specimens in patients with endometrial cancer.

Materials and Methods

Patients who underwent hysterectomy for suspected endometrial cancer based on endometrial sampling between 2008 and 2013 were included in this retrospective observational study. The final histological diagnosis on hysterectomy specimen was then correlated with the initial diagnosis on endometrial sampling. The sensitivity and specificity of endometrial sampling for each histological diagnosis was calculated. Endometrial sampling was performed with either pipelle biopsy or endometrial curettage. Patients were grouped into endometroid, uterine papillary serous carcinoma, clear cell, Malignant mixed mullerian tumour (MMMT) and "mixed" groups. The "mixed" included carcinosarcoma, adenosarcoma and leiomyosarcoma.

Results

Three hundred and twelve patients were included in the study. Endometroid type of carcinoma was the predominant type (n = 239, 76.6%) followed by serous (n= 26, 8.3%), mixed (n= 23, 7.4%), MMMT (n= 16, 5.1%) and clear cell (n=8, 2.6%) on final histology. Of the 14 patients with atypical hyperplasia on pipelle biopsy, 13 had endometroid cancer and one, Leiomyosarcoma. The sensitivity and specificity of endometrial sampling for the most common carcinoma, the Endometroid type was 92% and 83.6%. In the Non-endometroid cancers, the sensitivity (100%) and specificity (98.4%) was highest for clear cell carcinoma type. The sensitivity and specificity for uterine papillary serous carcinoma, MMMT and "mixed" group was 80.8%, 50% and 56.5% and 98.9%, 99% and 97.6% respectively.

Conclusion

Our study showed a good correlation between initial endometrial sampling and definitive histology in Endometroid cancers of the endometrium. The clinician however needs to be aware of the low sensitivity of the endometrial sampling in counselling a patient with non-endometroid type of cancer.

P-105

MRI ACCURACY IN STAGING OF ENDOMETRIAL CANCER

Bil A[1], Abu J[2], Gajjar K[3]

[1]City Hospital , Nottingham, United Kingdom, [2]City Hospital , Nottingham, United Kingdom, [3]City Hospital , Nottingham, United Kingdom

Introduction

By current evidence, endometrial cancer is diagnosed in approximately 9000 new patients per year in the UK. Over the last decade incidence rates have risen by 25%. Ten year survival rates are at about 78%. Women are initially diagnosed by a combination of blood tests, endometrial biopsy and ultrasound imaging. Those that are identified as likely to have cancer are offered staging which involves a CXR, MRI pelvis, further blood tests and possibly CT imaging. Depending on stage, the condition is usually treated with surgery and can involve removal of lymph nodes which are used to confirm original staging.

Aims

To audit the accuracy of MRI imaging in the staging of endometrial cancer and to reduce any subsequent surgical over-treatment of early stage cancer.

Evidence & targets

There exist no nationally formulated guidelines on the accuracy of MRI in staging endometrial cancer. We are therefore reliant on recommendations from the American College of Radiology who in turn base their guidelines on meta-analysis of primary research.

P-106

ENDOMETRIAL HYPERPLASIA: DIAGNOSTIC REPRODUCIBILITY AND USE OF IMMUNOHISTOCHEMICAL BIOMARKERS

Sanderson P[1], Esnal-Zufiaurre A[1], Critchley H[2], Arends M[3,4], Herrington C[3], Williams A[3], Saunders P[1]

[1]MRC Centre for Inflammation Research, The University of Edinburgh, Edinburgh, United Kingdom, [2]MRC Centre for Reproductive Health, The University of Edinburgh, Edinburgh, United Kingdom, [3]Division of Pathology, The University of Edinburgh, Edinburgh, United Kingdom, [4]Centre for Comparative Pathology, The University of Edinburgh, Edinburgh, United Kingdom

Background
Endometrial hyperplasia (EH) represents a heterogeneous spectrum of abnormal endometrial lesions. Clinical significance lies with a finding of cytological atypia, which confers a substantial risk of progression to endometrioid endometrial carcinoma, prompting surgical treatment. Traditional histopathological diagnostic classifications struggle to reproducibly segregate 'benign' EHs, driven by an unopposed oestrogen stimulus, from EH lesions which also harbour an underlying neoplastic mechanism.

Aim
To examine the diagnostic reproducibility of two prominent EH classification systems and investigate the potential role for an immunohistochemical biomarker panel.

Methods
Pathology reports coded as EH using WHO1994 diagnostic criteria within NHS Lothian were retrospectively evaluated from 2004-2009. The index diagnostic sections (n=124) underwent a dual, blinded, expert gynae-path review to: 1) verify original WHO1994 diagnosis and 2) reclassify using WHO2014/Endometrial intraepithelial neoplasia (EIN) criteria. FFPE sections were obtained from the cohort (LREC: 15/ES/0094) and immunohistochemistry performed to evaluate the expression patterns of key proteins of significance in endometrial carcinogenesis.

Results
Interobserver variability existed between expert gynae-pathologists when asked to verify the original WHO1994 diagnosis, amounting to 'fair' statistical agreement for both (Pathologist 1: Kappa 0.399, 95% CI 0.284-0.515, Pathologist 2: Kappa = 0.340, 95% CI 0.248-0.432). The WHO2014/EIN system improved statistical reproducibility, with 'moderate' agreement between the two experts (Kappa = 0.423, 95% CI 0.307-0.538). Of note, PTEN and PAX2 protein expression was altered in 51.1% (23/45) and 26.6% (12/45) of EIN/atypical hyperplasia lesions respectively. Deficient DNA mismatch repair (MLH1/PMS2 loss) was noted in a single patient, whilst all patients demonstrated a normal 'wild-type' p53 expression.

Conclusion
We demonstrate problematic interobserver differences encountered using WHO1994 EH classification, which remains a well-known system in current gynaecological practice. This creates the potential for under/overtreatment of EH. The newer WHO2014/EIN classification offers some improvement upon its predecessor and pending further validation may be enhanced by an immunohistochemical panel.

P-107

PRIMARY CARE GYNAECOLOGICAL CANCER REFERRAL QUALITY IMPROVEMENT PROJECT: CAN WE IMPROVE OUR PRACTICE?

Emanuwa E[1]

[1]*Royal London Hospital, London, United Kingdom*

Aim
To identify current gynaecological cancer referrals practice in a single primary care (GP Practice) site.

Methods
A completed audit cycle assessing whether: 1. Suspected gynaecological cancer referrals meet NICE, Scottish Cancer Referral Guidelines criteria for referral. 2. Whether suspected gynaecological cancer patients referred under the 2 week wait pathway are seen within 2 weeks.

Results
Prior to intervention (education and red flag poster) 87.5% of referrals were appropriate, but only 62.5% were seen within 2 weeks. Following intervention there was an improvement in the percentage of appropriate referrals (100%) but no change in the percentage of referrals seen within 2weeks (62.5%).

Discussion
Improving education and making available quick reference red flag guides can improve practice. There are multifactorial causes both inside and outside of the primary care setting that can contribute to delays in patients being seen timeously.

P-108

RE-EVALUATION OF A NURSE-LED GYNAECOLOGY ADVICE CLINIC FOR ONCOLOGY PATIENTS.

Savage H[1], Gallagher S[1], Datta M[1], Bradley L[1], Johnson K[1]

[1]*Christie NHS Foundation Trust, Manchester, United Kingdom*

Recent studies suggest that patients would like to receive more information about how cancer treatments can affect their sexual functioning. The Gynaecological Advice Clinic was established in 2006 at the Christie Hospital and offers support to all female cancer patients who have had treatment in the form of surgery and/or radiotherapy. More recently we have been seeing patients who have had either surgery or radiotherapy for other cancers such as colo-rectal, urological or breast cancer. The clinic was established to increase the support given to patients during their pelvic radiotherapy, to prepare them for possible consequences of treatment. It is run by the Nurse Clinician (Gynae) and MacMillan Gynae CNS. All women and their partners are invited to attend the clinic, for a 30 minute consultation.

Patients present with various concerns including sexuality issues and other holistic needs are identified.

The service has steadily increased in size since 2006. In 2015 we saw more than 250 patients. The aims of this study are to evaluate the service by collecting data relating to levels of attendance, type and amount of clinical activity as well as exploring patient's experiences and management.

Method
This is a retrospective study which was carried out in 2015. A history taking integrated therapy model, as well as questionnaires completed by patients, were used to gain an insight in to their problems.

Conclusion
The clinic was positively evaluated by patients, they had a high level of trust in the nurses running the service and found it beneficial. We have been able to address their psycho-sexual concerns along with other issues pertaining to quality of life.

P-109

WEIGHT GAIN IN PATIENTS RECEIVING ADJUVANT FIRST LINE TREATMENT FOR OVARIAN CANCER

Hale J[1], Lord R[1]

[1]*Clatterbridge Cancer Centre, Wirral, United Kingdom*

Background
Ovarian cancer remains one of the most common cancers in the UK. In addition to adverse cardiovascular effects, obesity has been linked to the development of certain cancers as well as a detrimental effect upon quality of life.

Weight gain during and after chemotherapy is common. The reasons for this are multifactorial. This study aimed to assess the amount of weight gained during chemotherapy for ovarian cancer and the recording of weight post treatment.

Methods
All patients who commenced first line treatment for ovarian cancer during 2015 at Clatterbridge Cancer Centre (CCC) were identified using electronic medical records.

Data was collected retrospectively from electronic and paper notes and included patient characteristics, tumour details, chemotherapy regime, treatment intent and all available weights recorded, both electronically and within medical notes.

Results
110 patients received first line chemotherapy for ovarian cancer during a 12 month period at our centre. 54.5% (n=60) received adjuvant treatment, 24.5% (n=27) received neoadjuvant treatment and 21% (n= 23) received treatment with palliative intent. 81.7% (n=49) of adjuvant therapy patients had sequential weights recorded.

Patients receiving adjuvant treatment gained an average 5.18% (range -9.84% to + 22.53%) weight during chemotherapy treatment. 13 patients gained 10% or more of their baseline weight during treatment. Frequency of weight recording in all groups was less frequent after chemotherapy had been completed.

Conclusions
Patients receiving adjuvant treatment gained weight during first line treatment for ovarian cancer. Documentation of weight was inconsistent once chemotherapy had ended. Increased awareness amongst clinicians is required to monitor weight post treatment and provide education during follow up appointments. This is of paramount importance in the adjuvant setting, where weight gain can predispose to future comorbidities and increased risk of malignancy. Targeted interventions at time of chemotherapy initiation may benefit patients, improving long term outcomes and quality of life.

P-110

ATTITUDES TO RISK REDUCING SURGERY FOR OVARIAN CANCER IN LOW RISK WOMEN

Fegan S[1], Piya S[2], Vianello M[2], Chauhan V[2], Browne H[2], Cambridge W[2], Lim E[2], Qureshi A[2], Thom F[2], Wenner J[2]

[1]NHS Lothian, Edinburgh, United Kingdom, [2]University of Edinburgh, Edinburgh, United Kingdom

Ovarian cancer is the fifth most common cancer affecting women in the UK. Initially asymptomatic, diagnosis is often at a late stage resulting in poor prognosis. High risk individuals may consider risk reducing bilateral salpingo-oophorectomy (RRSO) to reduce their chances of developing both breast and ovarian cancer. However genetic mutations in patients with ovarian cancer have been discovered at a higher incidence than predicted from family histories. Although surgical prophylaxis is highly effective, life-altering side-effects and exposure to surgical risk may diminish women's desire for RRSO. This study investigated the attitudes towards prophylactic surgery in the general female population. If RRSO was to be offered to a wider population, we wanted to identify the main factors and determinants that influence women's decisions to undergo prophylactic surgery. We surveyed 416 women in Edinburgh from a variety of demographics. An online version of the questionnaire was distributed via email and physical copies accessed by survey-takers in GP practices and in public spaces. Sixty-four per cent of respondents replied 'Yes' when asked the question 'Would you consider, at any point in your life, having risk-reducing surgery for ovarian cancer?' Women in the oldest age bracket (76-85 years) replied more positively than younger women. We found that women's likelihood of desiring surgery was most influenced by the following factors; family history, the risk of surgery, and doctor's recommendations

P-111

HORIZONS - EXPLORING THE SHORT, MEDIUM AND LONG TERM CONSEQUENCES OF A GYNAECOLOGICAL CANCER DIAGNOSIS

Foster C[1], Calman L[1], Turner J[1], Foster R[1], Corner J[2], May C[1], Richardson A[1], Rogers A[1], Smith P[1], **Glasspool R[3]**

[1]University Of Southampton, Southampton, United Kingdom, [2]University Of Nottingham, Nottingham, United Kingdom, [3]The Beatson West of Scotland Cancer Centre, Glasgow, United Kingdom

Cervical, uterine and ovarian cancers are among the ten most common cancers in women worldwide. However, there is little existing research examining the challenges experienced following primary gynaecological cancer treatment, or the process of recovery of health and well-being among survivors. Improved understanding of the consequences of gynaecological cancer and its treatment will enable health professionals to better prepare future patients for the likely impact of a cancer diagnosis and to tailor care to patients' needs during recovery.

The HORIZONS programme is a new study, funded by Macmillan Cancer Support, which aims to recruit 3000 people about to start primary cancer treatment and follow them over time to examine a range of clinical and psychosocial outcomes and experiences. HORIZONS is a multi-site, prospective cohort study focussing on three cancer types. It builds on an on-going cohort study of recovery of health and wellbeing following a diagnosis of colorectal cancer, CREW. One HORIZONS cohort will comprise around 1000 participants with ovarian, uterine, cervical or vulval cancer. Recruitment is currently taking place in NHS sites across the UK (vulval patients to be included from late 2017) and will continue until 2019. Participants complete questionnaires before primary cancer treatment, then at three, nine, 15, 24 months and annually post recruitment. Questionnaires cover various assessments including quality of life (QoL), health status, recovery, wellbeing, self-efficacy, social support, social networks and lifestyle factors. Measures include the EQ-5D measure of health status and the EORTC and QLACS QoL measures. Clinical outcomes will be collected prospectively through Case Report Forms completed by site staff. The study was piloted in late 2016 in six sites.

Study results will add to the body of knowledge about gynaecological cancer survivors' outcomes and experiences. The data gathered has the potential to transform care for people living with and beyond gynaecological cancer.

P-112

PATIENT REPORTED OUTCOME MEASURES (PROMs) FOLLOWING ROBOTIC SURGERY FOR ENDOMETRIAL AND CERVICAL CANCER.

Bharathan R[1], Tailor A[1], Ellis P[1], Butler-Manuel S[1], Madhuri K[1]

[1]*Royal Surrey County Hospital, Guildford, United Kingdom*

Introduction
Cancer is a leading cause of mortality and indeed the second common cause of death in the UK. Surgery for gynaecological cancer while treating the disease is known to have a major impact on the Quality of Life (QoL). While it has been reported that minimal access surgery does improve QoL due to reduced pain, decreased length of stay (LOS), there is very little data on the impact of robotic surgery and QoL.

Materials and Methods
Data collection was undertaken using a research assistant not directly involved in the patient care. Validated EORTC QoL questionnaires were used. Following collection of baseline data prior to surgery, follow-up QoL data was collected in the post-operative period.

Results
Data has been collected in 111 women undergoing surgery for endometrial pathology and 23 women undergoing surgery for a cervical pathology.

Immediately after surgery, the QOL scores deteriorate, but improve rapidly within two weeks.

Conclusions
Following robot assisted surgery, a temporary impact on QOL was noted. Age of patients does not appear to influence post-operative QOL scores.

P-113

ADJUVANT THERAPY IN STAGE 1 ENDOMETRIAL CANCER

Vanapalli M[1], SIMMONS L, STRATTON J, GUL S

[1]*University Hospital Waterford, Waterford City, Ireland*

Aim
Although 5 year survival for stage 1 endometrial cancer is over 90% a small proportion develop recurrence. We looked at our stage 1 endometrial cancer patients with a view to determining risk factors for recurrence.

Methods
We conducted a retrospective review of 211 patients treated for endometrial cancer over a 14 year period at our institution, 121 were stage 1. 41 women received adjuvant treatment. 19 women developed recurrent disease, 13 vault, 2 pelvic and 4 distant metastases.

Results
Risk factors for recurrence were equally represented within the group of women who remained disease free and those who developed recurrence. Adjuvant treatment reduced the risk of developing recurrent disease, both local and distant.

Conclusions
Although the role of adjuvant treatment remains controversial in early stage endometrial cancer, our study suggests that it has a beneficial effect in reducing the risk of recurrent disease.

P-114

SYSTEMATIC GENETIC TESTING FOR PERSONALISED OVARIAN CANCER THERAPY (SIGNPOsT) - STUDY DESIGN

Chandrasekaran D[1], Gaba F[1], Patel S[1], Faruqi A[2], Lam Shang Leen S[2], Trevisan G[2], Quigley M[3], Miller R[4], Light M[3], Powell M[5], Brockbank E[6], Lawrence A[6], Jeyarajah A[6], Oram D[6], Kumar A[7], Side L[7], Jenkins L[8], Wallace A[9], Lockley M[1], Singh N[2], Legood R[10], Manchanda R[1]

[1]Barts Cancer Institute, Queen Mary University of London , London, UK, [2]Department of Histopathology, Royal London Hospital, Barts Health NHS Trust, London, UK, [3]Department of Clinical Oncology, Queens Hospital, Barking Havering & Redbridge NHS Trust, , UK, [4]Department of Medical Oncology, St. Bartholomew's Hospital, Barts Health NHS Trust, London, UK, [5]Department of Clinical Oncology, St. Bartholomew's Hospital, Barts Health NHS Trust, London, UK, [6]Department of Gynaecological Oncology, Royal London Hospital, Barts Health NHS Trust, London, UK, [7]Department of Clinical Genetics, Great Ormond Street Hospital NHS Trust , London, UK, [8]Department of Molecular Genetics, Great Ormond Street Hospital NHS Trust , London, UK, [9]Centre for Genomic Medicine, Central Manchester University Hospitals NHS Trust, Manchester, UK, [10]Department of Health Economics, London School of Hygiene & Tropical Medicine, London, UK

Introduction

Prevalence of germline BRCA1/BRCA2 mutations in unselected women with epithelial ovarian cancer (EOC) ranges from 8-22%, with a further 6-9% somatic BRCA1/BRCA2 mutations. EOC tumours with BRCA-mutations could benefit from PARP (Poly-ADP-ribose polymerase) inhibitors in relapsed EOC. Recent literature show that RRSO (risk reducing salpingo-oophorectomy) is cost-effective and saves life years/QALYs (Quality Adjusted Life Years) at ≥5% ovarian cancer risk threshold. This provides clinical utility for genetic testing for intermediate-risk genes RAD51C, RAD51D, and BRIP1 which have average cumulative ovarian cancer risks of 6-12% until age 80. Data on impact of systematic genetic panel testing on psychological health, quality-of-life (QoL) and cost-effectiveness are lacking. We present a study designed to address this issue.

Methods

Design: Prospective cohort

Recruitment: High-grade non-mucinous EOC will be offered concomitant germline testing for BRCA1, BRCA2, RAD51C, RAD51D and BRIP1, and somatic testing for BRCA1/BRCA2 mutations, using a Cancer MDT co-ordinated Precision medicine (CMP) approach. Participants will complete validated questionnaires on health status, QoL and psychological health, with follow-up of 12 months.

Primary Outcome: Psychological health, using Multidimensional Impact of Cancer Risk Assessment (MICRA)

Secondary Outcomes: QoL, satisfaction, decision regret, mutation detection rate, PARP inhibitor uptake, and cost-effectiveness.

Sample size: The sample size needed to detect a mean difference of 12 in MICRA Uncertainty-score between mutation-carriers and non-carriers=224, for 90% power and α=0.05. As allocation is non-randomised, and assuming inclusion of confounders, the adjusted sample size to maintain power= 1.25*224=280.

Analysis: Chi-square tests (categorical variables), Mann-Whitney and t-tests (continuous variables) for comparison between groups. Random-effects-models adjusted for covariates/ confounders for comparison between different groups over time. Cost-utility analysis will be undertaken and compared to the £30000/ QALY NICE threshold.

Discussion

This study will provide currently unavailable data on impact of germline panel and concomitant somatic BRCA1/BRCA2 testing in unselected EOC on psychological health, QoL and cost-effectiveness.

P-115

'CERVICA': Social Marketing to increase uptake of cervical screening in hard to reach women

Ragupathy K[1], Coupar E[1], Trotter N[2], McMullen W[1]

[1]Nhs Tayside, Dundee, United Kingdom, [2]University of Dundee, Dundee, United Kingdom

Our Health Board has the highest rates of Cervical Cancer in the UK and local audit shows this is predominantly due to reluctance to engage with cervical screening with 81% stage 1 cancers and 100% of more advanced cancers occurring in inadequately screened women.

CERVICA:We used the recent cervical cancer awareness week (23rd – 27th January 2017) to disseminate information to screening providers and engage with the public using social media and social marketing , together with information stalls in local health facilities and public places (supermarkets, shopping centres etc) Cartoon strip posters were designed to highlight common questions and answers about screening, addressing some myths about cervical screening as well as answering concerns surrounding the examination/test. Many patients worked with us throughout the week and some of their stories were picked up by local media

Outcomes
50 opportunistic smears were taken from smear defaulters and we shall use the feedback from these women and the general public to understand reasons for not engaging with the program; these included busy lifestyles/lack of time (27%) embarrassment (15%) difficult or uncomfortable examination (13%) fear of result (9%) issues with staff (9%) disbelief in screening (4%) and mixed/miscellaneous reasons (20%). Many women volunteered to write individual patient stories which have been powerful tools for change. Women favoured dissemination of information on facebook and drop in /pop up clinics especially before and after work, to increase screening uptake.

Conclusions
CERVICA was an intense journey but a rewarding experience for all of us. CERVICA definitely increased cervical cancer awareness, and provided some support for defaulters. But the need of the hour is more focused and elaborate methods of support not only for defaulters, but also the vulnerable women and this can be achieved only by a joint effort between primary, secondary care and public health.

P-116

POSTCODE PROTECTION – DOES THIS APPLY TO CERVICAL CANCERS IN TAYSIDE?

Trotter N[2], Ragupathy K[1], McMullen W[1]

[1]Nhs Tayside, Dundee, United Kingdom, [2]University of Dundee, Dundee, United Kingdom

Cervical cancer affects approximately 385 women in Scotland per year. Tayside has the highest rate in Scotland. Uptake of screening (70.7%) is one of the lowest in Scotland

Aim

To identify women affected by Cervical Cancer in Dundee & Angus between 2006-2016 and to calculate incidence by postcode area, as well as correlation with deprivation levels, smoking and uptake of screening by postcode

Methodology

All women aged 20 -64 diagnosed with Cervical Cancer between 2006-2016 were identified from pathology records and recorded by age and postcode. Incidence was calculated (for DD postcode areas only) using population data from the Scottish Census 2011. Crude incidence rates were expressed as annual incidence per 100,000 women aged 20-64.

SIMD was obtained for each postcode sector and smoking rates by postcode were obtained from The Scottish Public Health Observatory. Screening uptake rates by postcode had previously been obtained from NHS National Services Scotland (2013 – 2014 figures.) Correlation analysis was utilised to identify significance.

Results

223 women aged 20-65 were diagnosed with cervical cancer between 2006 & 2016 in Dundee & Angus. 5 postcode sectors were discovered as having a high incidence; DD3, DD4, DD5, DD8, DD11. (crude incidence 28.7 per 100,000 women compared to 15 per 100.000 women living outside these postcodes) There was no correlation between crude incidence rates and socio economic deprivation or smoking rates by postcode but significant correlation between crude incidence and uptake of cervical screening by postcode (correlation value 0.6)

Conclusion

This work will allow us to concentrate screening efforts in high-risk postcode areas. We need to focus on why women from these areas avoid screening and whether there may be additional factors contributing to geographical risk (e.g. incidence of high risk hpv types, other lifestyle factors.)

P-117

RADIOTHERAPY IN THE TREATMENT OF LOCALLY ADVANCED VULVAL CANCER (LAVC) - A RETROSPECTIVE ANALYSIS.

Saleem A[1], **Uttley E**[1], Viggars A[2], Zeniou A[2], Spencer K[2], Cooper R[2]

[1]University of Leeds, Leeds, United Kingdom, [2]Leeds Cancer Centre, St James University Hospital, Leeds, United Kingdom

Background
Approximately 1,300 women are diagnosed with vulval cancer in the UK each year. Locally advanced squamous cell carcinoma (LAVC) is challenging to treat; extensive surgery (with exenteration) provides good local disease control at the cost of loss of urinary, bowel and sexual function; unfortunately there is concern that retaining function, through radical radiotherapy, may be detrimental to disease control. Optimal management is not known.

Aims
To assess the outcomes of women receiving radical or adjuvant radiotherapy as part of their treatment for LAVC at a single large UK radiotherapy Centre.

Methods
Retrospective case-note review of all patients treated with radical or adjuvant radiotherapy for LAVC in Leeds Cancer Centre between 2005 and 2013 was carried out. Demographic, diagnostic, treatment and outcome information was extracted from the electronic health record (including site of recurrence if relevant). Overall (OS) and progression-free survival (PFS) at two and five years was assessed.

Results
59 patients were identified (34 treated radically and 25 adjuvantly). Radically treated patients had 2 and 5 year OS of 62.1% (CI 43.8-75.9%) and 37.7% (CI 19.7-56.1%) respectively and PFS of 50.6% (CI 33.0-65.7%) and 37.3% (CI 19.4-56.1%). The OS for adjuvant patients was 84.0% (CI 62.8-93.7%) and 79.46% (CI 57.4-90.9%) with PFS 76.0% (CI 54.2-88.4%) and 71.4% (CI 49.1-85.3%) respectively.

Recurrence post-radiotherapy was detected in 20/59 patients (34%), of these 85% of recurrences were within the radiotherapy field.

Conclusion
These results are in keeping with published outcomes and suggest that for 37% of women radical radiotherapy may allow retention of function through avoidance of extensive surgery. Recurrences are predominantly local and may be amenable to salvage surgery. Further prospective studies investigating disease control and patient reported outcomes are necessary to better inform the shared decision making process.

P-118

URINARY TOXICITY AFTER PELVIC RADIOTHERAPY FOR CERVICAL CANCER

Cooper A[1], Hanna L[2], Jadon R[2], Hudson E[2], Burton S[2], Churcher C[2]

[1]Cardiff University, Cardiff, United Kingdom, [2]Velindre Cancer Centre, Cardiff, United Kingdom

Objectives
To investigate the incidence of late urinary toxicity experienced by patients following radical pelvic radiotherapy for cervical cancer at Velindre Cancer Centre.

A second objective was to identify the services available for patients experiencing urinary toxicity after radiotherapy and any improvements that could be made to these.

Methods
Late toxicity data were collected from patients treated with radical radiotherapy for cervical cancer, using LENT-SOMA scores, between 2012 and 2015. Data were collected at at least one timepoint 3-48 months after treatment, as well as pre-treatment baseline data for some of the patients. Analysis was focussed on urinary frequency, dysuria and incontinence in particular.

Separate questionnaires were sent to healthcare professionals within the Wales Cancer Networks to determine service availability for patients experiencing urinary toxicity across Wales, and to identify potential barriers for patient-reporting of late toxicity.

Results
Eighty-three patient questionnaires were analysed. All three symptoms markedly increased 12-48 months after treatment, with urinary incontinence increasing from 8% to 56% and dysuria increasing from 17% to 50%. For urinary frequency, the ability to pass water less than once every four hours decreased from 25% pre-treatment 25% to 0% at 48 months.

Services available to patients include urology referral, continence clinics and physiotherapy. Healthcare professionals perceived that patients' gratitude for their anticancer therapy might be a barrier to mentioning problems with late effects of treatments. Increased training, more patient information and an algorithm based approach to investigation and treatment were suggested as approaches that could help improve services available to patients.

Conclusions
Pelvic radiotherapy for cervical cancer increases the incidence of urological dysfunction. There are similar services available to patients experiencing these symptoms in all regions of Wales but improvements could be as described.

P-119

A SINGLE CENTRE EXPERIENCE OF OUTCOMES FOLLOWING IMAGE GUIDED HIGH DOSE RATE BRACHYTHERAPY IN CERVICAL CANCER

Baird E[1], **McGivern U**[1], **Drake A**[1], Clarke J[1], Hanna G[1,2], Corrigan K[1], Byrne M[1], Workman G[1], Farrell R[1]

[1]Belfast Health And Social Care Trust, Belfast, United Kingdom, [2]Centre for Cancer Research and Cell Biology, Queen's University Belfast, Belfast, United Kingdom

Brachytherapy is a key treatment modality in the management of invasive cervical cancer. GEC-ESTRO 2005 recommendations and RCR guidelines 2009 recommend the use of MRI planning to optimise tumour control and limit toxicity of organs at risk through using a 3D image based planning system. Image guided planning was introduced in the Northern Ireland Cancer Centre in 2008. Recently the use of MRI to aid planning volumes and escalate dose to point A and minimise dose to organs at risk (OAR) has been introduced.

Methodology
Data was collected retrospectively from patient notes treated with HDR brachytherapy and data from the physics brachytherapy database from December 2008 to December 2016. Dose to point A and organs at risk were calculated as equivalent doses in 2Gy per fraction (EQD2).

Results
Two-hundred and seventy patients were treated with curative intent. CT based planning was completed post intra-cavity insertion to contour OAR and calculate doses to Point A. Median dose to point A (EQD2) was 76.1 (55.3-79.9). 170 patients received more than 75Gy. Median point dose to rectum was 66.1Gy (51.6-82.6), 70.6Gy (49.2-84.5) to bowel, and 80.5Gy (55.1-97.8) to bladder. Pelvic recurrence rates of 10.7% and distant metastasis of 8.5% were observed at median follow up of 23.2 months. Late grade 3 bowel and bladder toxicity was observed at 6.1% and 4.2% respectively.

Conclusion
The use of image based planning systems in cervical brachytherapy and the introduction of MRI image guidance to aid outlining of high risk volumes has improved the dose delivered to point A.

P-120

A REVIEW OF THE IMPLEMENTATION OF IMAGE GUIDED BRACHYTHERAPY AT VELINDRE CANCER CENTRE

Parker K[1], Hanna L[1], Powel J[1], **Hudson E**[1]

[1]*Velindre Cancer Centre, Cardiff, United Kingdom*

Background

Image guided brachytherapy (IGBT) with forward planning was implemented in Velindre Cancer Centre in 2015 and is now the standard of care for all patients with locally advanced cervical cancer. Constraints to delivering IGBT include patient fitness and capacity issues.

Method

A review of our experience implementing IGBT including patient outcomes has been undertaken.

Results

Between August 2015 and December 2016, 45 patients were treated with intracavity brachytherapy at Velindre Cancer Centre. In total 69 out of 126 fractions delivered were forward planned, 31 standard and 26 optimised. The HRCTV volume was >30cc in 21% of fractions. The dose to V90 has increased with improved coverage to V100 whilst doses to organs at risk have remained within tolerance.

Of 45 patients 9 are awaiting a post treatment MRI scan. Of 36 patients with known outcomes, 29/36 (81%) have had a complete response, 4/36 (11%) a partial response and 3/36 (8%) had progressive disease. Of the 4 patients with PR, 2 have had pelvic exenterations and are disease free, 1 is awaiting an EUA and 1 is under surveillance. Of the 3 patients with PD 1 patient received just 1 fraction of brachytherapy due to poor tolerance, 1 patient had indeterminate lung nodules on PET scanning which progressed and were metastases and the 3rd patient had high grade neuroendocrine cancer and developed distant metastases despite chemotherapy.

Conclusion

The implementation of IGBT in a stepwise fashion has improved coverage and dose to the HRCTV with no increased doses to the OAR with acceptable response rates. Toxicity data are being collected prospectively and will be analyzed with survival data at a later time point. Plans are in place to implement the use of interstitial needles to increase coverage to larger HRCTV volumes.

P-121

AN AUDIT OF OVERALL TREATMENT TIME IN 'CATEGORY 1' PATIENTS UNDERGOING RADIOTHERAPY FOR GYNAECOLOGICAL CANCER

Hanna L[1], Parker K[1], Welsh R[1], Jones C[1], Banner R[2], **Hudson E[1]**

[1]Velindre Cancer Centre, Cardiff, United Kingdom, [2]Singleton Hospital, Swansea, United Kingdom

Background
In order for radiotherapy to be effective, treatment must be delivered within the prescribed treatment time. The Royal College of Radiologists (RCR) standard for patients with rapidly growing tumours (Category 1), is that there should be no prolongation of overall treatment time in excess of 2 days for at least 95% of the group. A local 'Gaps Policy' details how to compensate for unscheduled gaps in treatment for external beam radiotherapy (XRT).

Methods
Review of overall treatment times for Category 1 patients treated with radical radiotherapy or chemoradiotherapy for gynaecological cancer at Velindre Cancer Centre between April 2015 and March 2016, and comparison with the RCR standard.

Results
Of 49 Category 1 patients, 38 had cervical cancer; 10 vulval cancer; 1 vaginal cancer. Of cervical cancer patients, 35 had primary treatment; 3 had postoperative treatment. Twenty-nine patients had chemotherapy, XRT and brachytherapy (γ); 6 had XRT+γ, 4 had chemoXRT and 10 had XRT alone. Of 45 patients who completed XRT, 43 (96%) finished the XRT on time or within 2 days of intended. Of 2 patients who had daily γ, both (100%) finished on time. Of 29 patients who had weekly γ (in theatre), 24 (83%) finished on time or within two days of intended (average delay 6.4 days for patients whose treatment was prolonged).

Conclusion
The standard was met for XRT and daily brachytherapy treatment but not for weekly brachytherapy, where unscheduled gaps are more difficult to compensate for. Twice daily treatment is not feasible in these patients due to the large dose per fraction and the need for a general anaesthetic. This audit highlighted the need for additional theatre sessions and local policies to manage unscheduled gaps.

P-122

URINARY DIVERSION TECHNIQUES AT PELVIC EXENTERATION: A 20-YEAR EXPERIENCE AT THE ROYAL MARSDEN HOSPITAL.

Bryan S[1], Kolomainen D[2], Thompson A[1], Kumar P[1], Barton D[1]

[1]The Royal Marsden Hospital, Chelsea, United Kingdom, [2]Southend University Hospital NHS Foundation Trust, Westcliff-on-Sea, United Kingdom

Introduction
Pelvic exenteration for recurrent gynaecological cancers can be a highly morbid procedure causing lifelong changes for patients. Here we present experience and follow-up data of urinary diversion techniques following pelvic exenteration.

Aim
To review the outcomes of different urinary diversion techniques following post radiotherapy pelvic exenteration for recurrent/persistent gynaecological cancers.

Methods
Data were taken from our database of gynaecological pelvic exenterations performed at the Royal Marsden Hospital. The current study focused on those patients having a urinary diversion following pelvic exenteration between August 1993 to December 2013. These diversions were most often performed by a urological consultant. Data regarding age, type of cancer, previous treatment, time and site of recurrence, surgical details and complications as well as follow-up and long term sequelae were collected.

Results
There were a total of 86 patients who underwent pelvic exenteration between August 1993 and December 2013. Of these 60 underwent a urinary diversion procedure (69.7%). 31 had cervical cancer (51.7%), 12 vaginal cancer (20%), 9 endometrial cancer (15%) and 8 were vulval cancer (13.3%). Of these 60 cases 13 (21.6%) had a Mitrofanoff continent urinary diversion, 45 (75%) had an ileal conduit, 1 tranverse colonic conduit and 1 Mainz-Sigma II procedure. Common early complications included UTI and stenosis of the Mitrofanoff. Later complications included revision of Mitrofanoff (5), and stones requiring percutaneous removal (1). There was one anastomotic leak, from an ileal conduit. 41 (68%) patients have since died of disease with median time to death being 18 months (3 months to 13 years], and 18 (30%) are alive with 1 lost to follow up. Median follow up was 10 years (7 months to 20 years).

Conclusion
In our cohort of 60 patients undergoing pelvic exenteration over a 20-year period, there was a very acceptable rate of complication related to urinary diversion.

P-123

VULVAL/VAGINAL RECONSTRUCTION FOLLOWING PELVIC EXENTERATION: A 20-YEAR EXPERIENCE AT THE ROYAL MARSDEN HOSPITAL

Bryan S[1], Kolomainen D[2], Power K[1], Barton D[1]

[1]The Royal Marsden Hospital, Chelsea, United Kingdom, [2]Southend University Hospital NHS Foundation Trust, Westcliff-on-Sea, United Kingdom

Introduction
Reconstruction priorities during pelvic exenterations are with urinary and faecal diversion and pelvic floor reconstruction, before reconstruction of the vulva and vagina. We present our experience of vulval/vaginal reconstruction following pelvic exenteration for recurrent gynaecological cancers.

Aim
To review the outcomes of vulval/vaginal reconstruction following post radiotherapy pelvic exenteration

Methods
Data were taken from our database of all gynaecological pelvic exenterations performed at the Royal Marsden Hospital. The current study focused on those patients having vulval/vaginal reconstruction following pelvic exenteration between August 1993 to December 2013. These reconstructions were performed by a consultant plastic surgeon. In addition to demographics, data on complications as well as follow-up and long term sequelae were collected.

Results
There were a total of 86 patients who underwent pelvic exenteration during the study period. Of these, 25 underwent vulval/vaginal reconstruction (29%). Thirteen had vulval cancer (52%), 6 vaginal cancer (24%) 5 had cervix cancer (20%), and 1 had endometrial cancer (4%). The vaginal and vulval reconstructions were 12 (48%) VRAM/ORAM flaps, in 7 patients the bladder dome was used to create a neovagina (28%), 2 lotus petal flaps, 1 latissimus dorsi, 1 gluteal flap and 2 utilising the large bowel. Early complications included 2 wound infections and 3 flap necrosis. Later complications included altered sensation and incisional hernia repair following VRAM flap. Fifteen (60%) patients have since died of disease, 9 (36%) are alive and 1 lost to follow up. Median follow up was 48.9 months (7 months to 20 years). Median time to death was 14 months (7.8 months to 8 years).

Conclusion
In our series, vaginal reconstruction was not commonly requested or performed. These data may reflect the age of patients and their pre-operative sexual function and the well recognised poor functional results from neovaginal reconstruction following pelvic radiotherapy.

P-124

ROLE OF INNATE IMMUNE RESPONSES ON THE EFFECTIVENESS OF ONCOLYTIC ADENOVIRUS AS AN ANTICANCER AGENT

Leung E[1], Weigert M[1], Walton J[1], Ennis D[1], Athineos D[2], Dowson S[1], Hansell C[3], Blyth K[2], Graham G[3], McNeish I[1]

[1]Institute of Cancer Sciences, University Of Glasgow, Glasgow, United Kingdom, [2]CRUK Beatson Institute, Glasgow, United Kingdom, [3]Institute of Infection, Immunity and Inflammation, the University of Glasgow, Glasgow, United Kingdom

Background
Ovarian cancer is the deadliest gynaecological cancer. Oncolytic viruses have been investigated as a new class of anticancer agent for this and other cancers. Oncolytic viruses infect and replicate selectively within malignant cells, while sparing normal cells. These viruses also induce profound immune responses, which might influence clinical efficacy. We investigated the role of innate immune responses, in particular interleukin (IL) 17F, on the effectiveness of oncolytic adenovirus.

Methods
Changes in key human chemokines and cytokines in ovarian cancer lines (TOV21G, OVCAR4) after infection by the E1A CR2-deleted oncolytic adenovirus dl922-947 were identified by RT2 Profiler PCR transcriptional array. The observed changes were confirmed by real-time PCR and ELISA in six primary lines derived from malignant ovarian ascites ex vivo (primary lines) and by real-time PCR in human cancer xenografts in CD1 nu/nu mice (n=12). TOV21G IL17F–/– cells were generated with CRISPR-Cas9 technology.

Findings
dl922-947 infection led to consistent changes of chemokines and cytokines transcription (r=0·56, p<0·0001). The most highly upregulated cytokine was IL17F (167-fold change in TOV21G [p<0·0001] and 98 in OVCAR4 [p=0·02]). IL17F, but not IL17A, was also increased in primary lines and TOV21G xenografts infected with dl922-947 in vivo (92 and 23-fold changes, respectively, p<0·05). Moreover, upregulation of IL17F was confirmed by ELISA in TOV21G (p<0·05) and in primary lines (2086pg/million vs 1381pg/million, p=0·03). IL17F has previously been implicated in neutrophil recruitment; significant neutrophil infiltration was observed after dl922-947 infection in HeLa subcutaneous xenografts by immunohistochemistry (median histoscores 2 for mock and 16·5 for tumours infected with dl922-947, p=0·01).

Interpretation
Oncolytic adenovirus infection upregulates IL17F, but not IL17A, in vitro and in vivo. Moreover, dl922-947 infection was associated with neutrophil infiltration in vivo. Ongoing experiments with TOV21G IL17F–/– cells generated using CRISPR-Cas9 technology will elucidate the influence of IL17F upregulation on tumour microenvironment and viral efficacy.

P-125

SIGNIFICANT REGIONAL VARIATION IN CLINICAL TRIALS PARTICIPATION FOR OVARIAN CANCER

Freshney N[1], Jones A[2]

[1]*Freshney Consulting Ltd, London, United Kingdom,* [2]*Target Ovarian Cancer, London, United Kingdom*

There is significant regional variation in clinical trials participation for ovarian cancer patients, with a seven-fold difference in recruitment between the quartiles of the best and worst performing regions. Target Ovarian Cancer explored some of the reasons for this variation in participation across the UK.

Clinical trials offer women the opportunity to access potential new treatments and improve understanding of disease and treatment options. However, in our published Pathfinder research study, only 33% of women with ovarian cancer have reported being asked to join a clinical trial. Furthermore, low levels of participation in some regions hinder opportunities for patients to join a clinical trial.

Target Ovarian Cancer's analysis looked at participation in observational and interventional clinical trials using data provided by the NIHR Clinical Research Network (CRN). In 2015/16, 22% of women with ovarian cancer took part in a clinical study (observational or interventional), compared with 18% of patients across all cancer types.

In 2015/16, the total number of ovarian cancer patients recruited to interventional clinical trials increased by 25% on the previous year, from 765 (2014/15) to 955 (2015/16). Whilst recruitment to ICON8 decreased in these years, strong recruitment to ROCkeTS boosted overall participation. However, considerable variation between the regions exists, with a 7.2-fold variation between the top and bottom quartiles compared with a 6-fold difference in 2014/15 and a 7.5-fold difference in 2013/14.

CRNs were asked to describe the challenges contributing to the low level of recruitment seen in some regions. The reasons cited include staff shortages, particularly Research Nurses, inadequate financial support and challenges relating to the demands of research and clinical service commitments.

Target Ovarian Cancer also developed and manages the award winning Ovarian Cancer Clinical Trials Information Centre to make it easier for women and clinicians to find suitable clinical trials.

P-126

NIRAPARIB MAINTENANCE THERAPY IN PATIENTS WITH PLATINUM-SENSITIVE RECURRENT OVARIAN CANCER (ENGOT-OV16/NOVA TRIAL)

Ledermann J[1], Mirza M[2], Monk B[3], Oza A[4], Mahner S[5], Redondo A[6], Fabbro M[7], Lorusso D[8], Vergote I[9], Rosengarten O[10], Berek J[11], Herrstedt J[12], Tinker A[13], du Bois A[14], González Martín A[15], Follana P[16], Benigno B[17], Rimel B[18], Agarwal S[19], Matulonis U[20], Banerjee S[21]

[1]UCL Cancer Institute, London, United Kingdom, [2]Rigshospitalet–Copenhagen University Hospital, Copenhagen, Denmark, [3]University of Arizona Cancer Center, Phoenix, USA, [4]University Health Network, Toronto, Canada, [5]University of Munich, Munich, Germany, [6]Hospital Universitario La Paz, Madrid, Spain, [7]Institut du Cancer de Montpellier, Montpellier, France, [8]Fondazione IRCCS National Cancer Institute, Milan, Italy, [9]University of Leuven, Leuven Cancer Institute, Leuven, Belgium, [10]Sha'are Zedek Medical Center, Jerusalem, Israel, [11]Stanford Women's Cancer Center, Stanford, USA, [12]Odense University Hospital, Odense, Denmark, [13]British Columbia Cancer Agency, Vancouver, Canada, [14]Kliniken Essen Mitte, Essen, Germany, [15]MD Anderson Cancer Center Madrid, Madrid, Spain, [16]Centre Antoine Lacassagne, Nice, France, [17]University Gynecologic Oncology, Atlanta, USA: [18]Cedars-Sinai Medical Center, West Hollywood, USA, [19]TESARO, Inc., Waltham, USA, [20]Dana-Farber Cancer Institute, Boston, USA, [21]Royal Marsden Hospital, London, United Kingdom

Background
Niraparib is an oral, highly selective inhibitor of PARP1/2. This was the first randomized phase 3 trial of a PARP inhibitor as maintenance therapy post-platinum chemotherapy in patients (pts) with platinum-sensitive recurrent ovarian cancer.

Methods
Two independent cohorts were enrolled based on results of BRACAnalysis® testing: pts with a germline BRCA mutation (gBRCAmut), and pts who lacked these mutations (non-gBRCAmut). Within each cohort, pts were randomized (2:1) to receive niraparib 300 mg or placebo once daily. Three primary efficacy populations were assessed: 1) the gBRCAmut cohort; 2) pts in the non-gBRCAmut cohort whose tumors were defined as deficient in homologous recombination (HRD) by the myChoice® HRD test; 3) the overall non-gBRCAmut cohort.

Results
553 pts were enrolled; 60% of pts had 2 lines of prior therapy, and 40% of pts had >2 prior lines. 76% of pts had stage IIIc or IV disease at point of diagnosis. Niraparib prolonged progression-free survival (PFS) as compared to placebo in all three primary efficacy populations ; gBRCA mut cohort, 21 months (m) versus 5.5m for niraparib and placebo respectively (P<0.001); non-gBRCAmut HRD positive, 12.9m versus 3.8m (p<0.0001) and overall non-gBRCA mut,9.3m versus 3.9m (P<0.0001). A statistically significant PFS advantage was also demonstrated in 3 exploratory efficacy cohorts. Secondary endpoints of chemotherapy-free interval (CFI), time to first subsequent treatment (TFST), and PFS 2 also showed statistically significant improvement. Patient-reported outcomes (PRO) were similar for niraparib and placebo. Most common (≥10%) treatment-emergent grade 3/4 adverse events in niraparib-treated pts were thrombocytopenia (34%), anaemia (25%), and neutropenia (20%). There were no deaths during study treatment.

Conclusion
Niraparib significantly improved PFS for all study populations as well as significantly prolonging CFI, TFST and PFS 2 with a manageable safety profile and without adversely impacting PRO. Overall survival is immature and will continue to be followed up.

P-127

ARIEL4: AN INTERNATIONAL, MULTICENTRE, RANDOMISED PHASE 3 STUDY OF THE PARP INHIBITOR RUCAPARIB VS CHEMOTHERAPY IN GERMLINE OR SOMATIC BRCA1- OR BRCA2-MUTATED, RELAPSED, HIGH-GRADE OVARIAN CARCINOMA

Kristeleit R[1], Lorusso D[2], Oaknin A[3], Safra T[4], Swisher E[5], Bondarenko I[6], Huzarski T[7], Klat J[8], Póka R[9], Viola L[10], Tankersley C[11], Maloney L[11], Goble S[11], Unger C[11], Giordano H[11], Oza A

[1]University College London, Cancer Institute, London, United Kingdom, [2]MITO and Unità di Ginecologia Oncologica, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy, [3]Vall d'Hebron University Hospital, Vall d'Hebron Institute of Oncology (VHIO), Barcelona, Spain, [4]Sackler School of Medicine, Tel Aviv University & Tel Aviv Sourasky Medical Center, Tel Aviv, Israel, [5]University of Washington, Seattle, USA, [6]Dnipropetrovsk Medical Academy, City Multiple-Discipline Clinical Hospital, Dnipropetrovsk, Ukraine, [7]Private Health Care Innovative Medicine, Grzepnica, Poland, [8]University Hospital Ostrava, Ostrava, Czech Republic, [9]Debrecen University Clinical Center, Debrecen, Hungary, [10]Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, Brazil, [11]Clovis Oncology, Inc., Boulder, USA, [12]Princess Margaret Cancer Centre, University Health Network, Toronto, Canada

Background

Among patients with high-grade epithelial ovarian carcinoma (OC), ≈18% have a germline BRCA1 or BRCA2 (BRCA1/2) mutation and ≈7% have a somatic BRCA1/2 mutation (Pennington et al. Clin Cancer Res. 2014; 20:764-75). Poly (ADP-ribose) polymerase (PARP) inhibitors have demonstrated clinical activity in OC in treatment and maintenance settings; however, comparison to standard of care (SOC) has not been evaluated in the treatment setting. Randomised studies are needed to assess the benefit-risk profile of PARP inhibitors vs current SOC as treatment for BRCA1/2-mutated, relapsed, high-grade OC. The PARP inhibitor rucaparib was recently approved in the United States for treatment of patients with deleterious BRCA1/2 mutation (germline and/or somatic) associated advanced OC who have been treated with ≥2 chemotherapies. An ongoing phase 3 study, ARIEL4 (NCT02855944) is evaluating rucaparib vs SOC chemotherapy in the treatment setting.

Methods

ARIEL4 is enrolling patients with relapsed, high-grade OC (regardless of histology) with a deleterious germline or somatic BRCA1/2 mutation who have received ≥2 prior chemotherapy regimens. Approximately 345 patients stratified by progression-free interval after their most recent platinum regimen will be randomised 2:1 to receive rucaparib 600 mg BID (n=230) or chemotherapy (n=115). Patients with platinum-resistant (progressive disease [PD] ≥1 to <6 months after last platinum) or partially platinum-sensitive disease (PD ≥6 to <12 months after last platinum) will be randomised to rucaparib or weekly paclitaxel; patients with platinum-sensitive disease (PD ≥12 months after last platinum) will be randomised to rucaparib or platinum-based therapy (single-agent or doublet, per investigator discretion). Patients receiving chemotherapy have the option to cross over to rucaparib upon radiographic disease progression. The primary endpoint is investigator-assessed progression-free survival (RECIST v1.1). Secondary endpoints include investigator-assessed objective response rate (ORR) by RECIST, ORR by RECIST/CA-125 criteria, duration of response, overall survival, and patient-reported outcomes. Safety will be summarised descriptively using standard adverse event reporting.

P-128

DEFECTIVE HOMOLOGOUS RECOMBINATION CAN BE IDENTIFIED IN ENDOMETRIAL CANCER CELLS

Warrander L[1], Price M[1], Faraahi Z[1], Crosbie E[1], **Edmondson R**[1]

[1]*University of Manchester, Manchester, United Kingdom*

Dysfunctional DNA damage repair is central to tumour development, but also represents a therapeutic target. PARP inhibitors have shown success in treating BRCA-1/2 positive cancers, which are deficient in homologous recombination (HR) repair. Endometrial cancer is the 4th most common cancer in women in the UK, but its incidence is increasing, due partly to the obesity epidemic, and therefore new treatment strategies are needed for high risk and recurrent disease. We hypothesised that a subset of endometrial cancers would display defective HR, and may consequently benefit from PARP inhibitor therapy.

Our pilot study had two aims, to generate a primary cell culture model of endometrial cancer cells, which could then undergo functional analysis of HR status using our previously developed Rad51 assay. Endometrial cancer tissue was obtained from patients undergoing surgery, prior to digest and subsequent culture. Cells were characterised with a panel of antibodies against pan-CK, Ca125, PTEN and p53. HR competence was confirmed by a two fold increase in Rad51 foci following UV-C induced double strand DNA damage.

Tissue was collected from seven patients undergoing primary surgery for endometrial cancer. Five successful cultures were generated with one sample failing to establish, whilst a further culture developed an infection and had to be discarded. All samples showed antigen expression in keeping with primary endometrial cancer. Three samples were subjected to the Rad51 assay with one culture demonstrating a defective HR phenotype and two samples showing HR competence.

We have demonstrated that it is feasible to generate primary cell cultures from patients undergoing surgery for endometrial cancer. Furthermore these models are suitable for functional analysis. This model has enormous potential for further study. We have also demonstrated that a proportion of endometrial cancers demonstrate a defective HR phenotype and this has important implications for PARP inhibitor therapy in this disease.

P-129

BEVACIZUMAB IN RECURRENT OR ADVANCED STAGE CERVICAL CANCER: EXPERIENCE OF A SINGLE LARGE UK CANCER CENTRE

El-Badri S[1], Hall G[1], Jackson D[1], Hook J[1], Young A[1]

[1]*Leeds Teaching Hospitals Trust, Leeds, United Kingdom*

Introduction
Cervical cancer is the most common cancer in women under 35 with incidence rising by approximately 15% in the last decade in the UK with over 3000 women diagnosed in 2014. The addition of bevacizumab to combination chemotherapy in patients with recurrent, persistent, or metastatic cervical cancer is associated with an improvement of 3.7 months in median overall survival and improvement in response rate and progression free survival compared to chemotherapy alone.

Bevacizumab became available on the National Cancer Drug Fund (CDF) for the treatment of advanced cervical cancer in March 2014.

Methods
We audited the use of Bevacizumab in combination with Carboplatin/Paclitaxel chemotherapy since it became available via the CDF in 2014 in a large single cancer centre. Data was collected using an electronic patient record database (Patient Pathway Manager) and chemotherapy prescription software (ChemoCare).

Results
We identified 29 patients eligible for consideration of treatment with Carboplatin/Paclitaxel plus Bevacizumab via the CDF.

Median age at presentation 47 years (range 26-82) and 86% of patients were PS 0-1.

21 patients received treatment with Bevacizumab.

8 patients received chemotherapy alone due to presence of fistulae (3 patients) with significant PV bleeding, thrombotic risk, radiation proctitis and active IHD in the others preventing the use of Bevacizumab. One patient chose not to have Bevacizumab due to existing hypertension.

For the patients receiving Bevacizumab:

- median cycles received was 6 (range 1-23)
- Best response to treatment was CR (38%), PR (48%) and SD (9.5%)
- Bevacizumab was stopped in 4 patients either due to proteinuria or fistula development.

Further statistical analysis will be carried out for presentation.

Conclusion
The addition of Bevacizumab to chemotherapy increased the response rate but also the toxicity of treatment necessitating treatment stoppage in 19% of patients. Further conclusions will be drawn following statistical analysis.

P – 130

RESULTS OF THE FIRST 13 MONTHS OF THE ASTRAZENECA GERMLINE BRCA TESTING SERVICE

Greenfield I[1], Bannister H[1], Gibson I[2], Day J[1]

[1]AstraZeneca UKMC, [2]ISO.health Ltd

Objectives
The identification of ovarian cancer (OC) patients with BRCA gene mutations (BRCAm) is important as it provides prognostic information and identifies treatment options for patients whilst also allowing for future prevention of cancer. To support this, in January 2016, AstraZeneca UK made available throughout the UK a germline BRCA testing service for a subset of these patients.

Methods
The testing service initiated in January 2016 to women who had relapsed platinum-sensitive high-grade serous OC (including fallopian tube or primary peritoneal). Patients who met the eligibility criteria were consented by healthcare professionals (HCPs) and their blood samples, along with a test request form, were sent to one of two reference centres: the East Anglian Medical Genetics Service or the West Midlands Medical Genetics Service for processing. Results were provided within six weeks via secure email/fax and also posted to the testing clinician.

Results
Between January 2016 and January 2017, 68 different HCPs accessed the service from 52 different centres. A total of 490 evaluable samples were received and tested by the two reference centres. In total 47 germline BRCA gene mutations were identified. This equated to a gBRCAm rate of 9.6%. 16 variants of unknown significance were identified (3%).

Conclusion
Based on the results it appears the service is valuable to UK HCPs, having identified 47 patients with germline BRCAm who may otherwise not have been diagnosed. However, the mutation rate was slightly lower than expected. Although the reason for this is not fully understood, it may be in part because most HCPs refer their highest risk individuals through locally funded pathways rather than through the AZ service. This would mean that the AZ service would have a lower mutation rate than that of other services, as those with the highest probability of gBRCAm would be removed from our sample.

AUTHOR INDEX

A	
Abdaal, Ali	P – 7
Abdallah, Karim	P – 17
Abdullah-Alvi, Mohammed	O – 4
Abdullahi, Jibrin	P – 5
Abu, Jafaru	P – 105, P – 79
Agarwal, Mitali	P – 80 , P – 81
Agarwal, Shefali	P – 126
Ahmed, Amber	P – 35
Ahmed, Haroon	P – 7
Akaev, Iolia	P – 100
Akhtar, Munazza	P – 35
Al-Dujaily, Auos	P – 51
Allan, Emel	P – 53
Alsammoua, Samawal	P – 9
Alsharaydeh, Ibrahim	P – 91
Ang, Christine	P – 60, P – 61, P – 62, P – 63, P – 80, P – 81
Antoniou, Antonis	O – 3, P – 25, P – 50
Arends, Mark	P – 106
Armstrong, Maeve	O – 7
Athineos, Dimitris	P – 124
Attygalle, Ayoma	P – 54, P – 55, P – 56
Aurel-Fuchs, Marc	O – 4
Awad, Mohamed	P – 71, P – 72
B	
B. Aziz, Aliya	P – 35
Bailey, Joanne	P – 37
Bailey, Peter	O – 2
Baird, Elizabeth	P – 119
Banerjee, Susana	P – 126
Banner, Russell	P – 121
Bannister, H	P – 130
Barton, Desmond	P – 14, P – 35, P – 54, P – 55, P – 56, P – 101, P – 102, P – 122, P – 123
Bayne, Louise	P – 82
Bednarek, Antonina	P – 10
Begum, Aliya	P – 13, P – 93
Beirne, James	O – 4, O – 8
Bellamy, Jennifer	P – 8
Benigno, Benedict	P – 126
Bennett, Phillip	P – 90
Berek, Jonathan S.	P – 126
Bharathan, Rasiah	P – 51, P – 52, P – 112
Bhat, Mamta	P – 77
Bil, Agnieszka	P – 105
Bizzarri, Nicolo	P – 61, P – 62, P – 63
Blyth, Karen	P – 124, O – 2
Blyuss, Oleg	P – 50, O – 3
Bodai, Zsolt	P – 6
Bolton, Helen	P – 87, P – 7, P – 8
Bondarenko, Igor M.	P – 127
Bottla, Krishna	P – 50
Boulter, Louise	P – 64
Bowden, Ashley	P – 20
Bradley, Laura	P – 108, P – 33
Brinkmann , Dirk	P – 69, P – 70
Brockbank, Eleanor	P – 28, P-29, P-99, P-114
Brown, Rachel	P – 24
Browne, Hannie	P – 110
Bryan, Stacey	P – 43, P – 122, P – 123, P – 40, P – 41, P – 45
Bryant, Dean	P – 84
Buckley, Niamh	O – 4, O – 8
Burnell, Matthew	P – 50, O – 3
Burton, Sarah	P – 118
Butler, John	P – 14, P – 54, P – 55, P – 56
Butler-Manuel, Simon	P – 24, P – 51, P – 112
Byrne, Monica	P – 119
C	
Cairns, Mary	P – 10
Caisip, Kristel	P – 50
Calman, Lynn	P – 111
Cambridge, Will	P – 110
Cass, Gemma	P – 37, P – 38, P – 74
Chachan, Sonia	P – 16

Chandrasekaran, Dhivya	P – 114
Chatterjee, Jay	P – 51
Chatterjee, Madhuchanda	P – 4
Chauhan, Vishwani	P – 110
Chishti, Uzma	P – 35, P – 93, P – 102
Chopra, M	P – 100
Churcher, Clare	P – 118
Clark, James	P – 15
Clark, William	O – 2
Clarke, Helen	P – 89
Clarke, Jackie	P – 119
Cohen, Claire Rebekah	O – 1
Cohen, James	P – 27
Congiu, Mario	P – 91
Cooper, Allessia	P – 118
Cooper, Nicola	P – 64
Cooper, Rachel	P – 117
Corner, Bronte	P – 80, P – 81
Corner, Jessica	P – 111
Corrigan, Kate	P – 119
Cossar, Laura	P – 4
Coupar , Elaine	P – 115
Crawford, Simon	P – 21
Critchley, Hilary	P – 106
Crosbie, Emma	P – 128
Cuthbertson, Josh	P – 78

D

Darzi, Ara	P – 76
Das, Nagindra	P – 68
Datta, Meghna	P – 16, P – 31, P – 32, P – 33, P – 108
Davies-Oliveira, Jennifer	P – 65, P – 66
Day, J	P - 130
Deo, Nandita	P – 88
Dilley, James	P – 76
Doria, Luisa	P – 98
Dowson, Suzanne	P – 124, O – 2
Drake, Anne	P – 119
Drews, Florian	P – 2, P – 36, P – 59, P – 65, P – 66, P – 71, P – 73, P – 72
du Bois, Andreas	P – 126
Duncan, Timothy	P-12
Duthie, Pamela	O – 7

E

Eddie, Sharon	O – 4
Edmondson, Richard	O – 6, P – 39, P – 128
El-Badri, Salma	P – 129
Ellis, Patricia	P – 24, P – 51, P – 112
Elorbany, Samar	P – 101, P – 102
Emanuwa, Emudiaga	P – 107
Ennis, Darren	P – 124, O – 2
Esnal-Zufiaurre , Arantza	P – 106
Evans, Gareth	P – 25
Ewelina, Rzyska	P – 2

F

Fabbro, Michel	P – 126
Faraahi, Zahra	P – 128, O – 6
Farquharson, Malcolm	O – 2
Farrell, Rosaleen	P – 119
Farrokh-Eslamlou, Tanja	P – 98
Faruqi, Asma	P – 114
Feeney, Laura	O – 8
Fegan, Scott	P – 91, P – 110
Fiander, Alison	P – 84, O – 5
Filipe-Soares, Renata	P – 98
Fish, Andrew	P – 27
Fisher, AD	P – 60
Fisher, Amy	P – 30
Fisher, Ann	P – 61, P – 62, P – 63
Fisher, Anne	P – 80, P – 81
Flora, Rashpal	P – 6
Flott, Kelsey	P – 76
Follana, Philippe	P – 126
Foong, Ke Wei	P – 87
Foster, Claire	P – 111
Foster, Rebecca	P – 111
Freshney, Norman	P – 125
Frost, Jonathan	P – 85
Freshney, Norman	P – 125
Frost, Jonathan	P – 85

G	
Gaba, Faiza	P – 50, O – 3, P – 114
Gabra, Hani	P – 97
Gajjar, Ketankumar	P – 105
Gallagher, David	P – 18
Gallagher, Sarah	P – 108
Gan, Carmen	O – 3, P – 79
Gardner, Francis	P – 100
Gavrielides, Nicos	O – 6
Gayther, Simon	P – 50
Gee, Mary Ellen	P – 39
Gentry-Maharaj, Alexandra	P – 50
Gessler, Sue	P – 50
Ghaem-Maghami, Sadaf	P – 6
Gherghe, Mihai	P – 53
Ghosh, Ballari	P – 16, P – 31, P – 32, P – 33
Gibson, Isabel	P - 130
Gilbert, Annie	P – 82
Giordano, Heidi	P – 127
Gkrozou, Fani	P – 9
Glasspool, Ros	P – 111
Gleeson, Noreen	P – 18
Goble, Sandra	P – 127
Golds, Kate	P – 69, P – 70
González Martín, Antonio	P – 126
Gordeev, Vladimir	O – 3
Gornall, Robert	P – 85
Graham, Gerard	P – 124
Graham, Robert	P – 50
Greenfield, I	P – 130
GUL, SAMINA	P – 113
Gunter, Marc	P – 97
Gurram, Sreedevi	P – 46
Gurumurthy, Mahal-akshmi	P – 10, P – 11
Guttery, David	P – 95
H	
Habib, M	P – 10
Hacking, Matt	P – 44
Hadwin, Richard	P – 20
Hale, Jessica	P – 109
Hall, Geoff	P – 129
Hameeduddin, Ayshea	P – 99
Hamoodi, Ibraheem	P – 46, P – 48, P – 49, P – 47
Hanna, Gerry	P – 119
Hanna, Louise	P – 2, P – 118, P – 120, P – 121
Hansell, Chris	P – 124
Hanson, Helen	P – 101
Harley, Ian	O – 4, O – 8
Heenan, Susan	P – 101, P – 102
Heron, Soraya	P – 23, P – 94
Herrington, C Simon	P – 106
Herrstedt, Jørn	P – 126
Hibbitts, Samantha	P – 84
Hillaby, Kathryn	P – 85
Hinksman, Laura	P – 53
Hook, Jane	P – 129
Hopper, John	P – 25
Horton-Fawkes, Katy	P – 37
Howells, Robert	P – 2, P – 36, P – 59, P – 65, P – 66, P – 71, P-72, P – 73
Hudson, Emma	P – 2, P – 118, P – 120, P – 121
Hurt, Christopher	P – 84, O – 5
Huzarski, Tomasz	P – 127
I	
Idrees, Romana	P – 93
Ihezue, Chukwumobi	P – 69, P – 70
Ind, Thomas	P – 14, P – 40, P – 41, P – 43, P – 44, P – 45, P – 54, P – 55, P – 56
J	
Jackson, David	P – 129
Jacobs, Chris	O – 3
Jacobs, Ian	P – 25, P – 50, O – 3
Jadon, Rashmi	P – 118
Jamall, Hina	P – 88
Janoowala, Khadija	P – 59
Jaynes, Eleanor	P – 20

Jenkins, Lucy	P – 114
Jeyarajah, Arjun	P – 28, P – 29, P – 114
Johnson, Karen	P – 108
Jones, Annwen	P – 125
Jones, Chris	P – 24
Jones, Cindy	P – 121
Jones, Rachel	P – 2
Jones, Rosalind	P – 2, P – 36, P – 59, P – 65, P – 66, P -71, P-72, P – 73
Jones, Sadie	P – 84, O – 5
K	
Kalampokas, Emmanouil	P – 10, P – 11
Kalliala, Ilkka	P – 6, P – 97
Kalpana, Raghupathy	P – 57
Kalsi, Tindie	P – 50
Kamran, Waseem	P – 18
Kaushik, Sonali	P – 27
Kehoe, Sean	P – 82
Keightley, Amy	P – 79
Kendall, Catherine	P – 85
Kennedy, Richard	O – 4, O – 8
Khan, Bushra	P – 13
Khan, Farhan	P – 7
Khasati, Luma	P – 7
Khor, Li Yan	P – 92
Killen, Shannon	P – 19
Klat, Jaroslav	P – 127
Kocher, Hemant	P – 29
Kodampur, Mallikarjun	P – 17
Kolomainen, Desiree	P – 122, P – 123
Konamme, S Prasad	P – 104
Korompelis, P	P – 60
Kotsopoulos, Ioannis	P – 80, P – 81
Kristeleit, Rebecca	P – 127
Krol, Anzhela	P – 100
Kucukmetin, Ali	P – 60, P – 61, P – 62, P – 63, P – 80, P – 81
Kumar, Ajith	P – 114
Kumar, Pardeep	P – 122
Kwek, Ivan	P – 19
Kyrgiou, Maria	P – 6, P – 90, P – 97, P – 98, P – 76
L	
La Russa, Mariaclelia	P – 12
Laios, Alexandros	P – 15, P – 41, P – 43, P – 44, P – 45, P – 54, P – 55, P – 56
Lalondrelle, Susan	P – 54, P – 55, P – 56
Lam Shang Leen, Sarah	P – 114
Lanceley, Anne	P – 50
Lang, Joyce	P – 104
Larsen-Disney, Peter	P – 27
Lavelle, Corina	P – 58
Lawrence, Alexandra	P – 75, P – 114
Ledermann, Jonathan	P – 126
Lee, Andrew	P – 50
Lee, Joanne	P – 79
Lee, Lui Siong	P – 92
Lee, Yun	P – 90
Legood, Rosa	P – 25, P – 114
Leung, Elaine	P – 124
Levy-Lahad, Ephrat	P – 25
Light, Millie	P – 114
Lim, Elizabeth	P – 110
Lim, Jeffrey	P – 68
Lim, Kenneth	P – 2, P – 36, P – 59, P – 65, P – 66, P – 71, P-72, P – 73
Limura, Elsa	P – 14, P – 15, P – 54
Lindley , Christopher	P – 69
Lloyd, Gavin	P – 85
Lloyd, Philippa	P – 28
Lockley, Michelle	P – 114
Lophatananon, Artitaya	P – 50
Lord, Rosemary	P – 4, P – 109
Lorusso, Domenica	P – 126, P – 127
Ludeman, Linmarie	P – 85
Luqman, Iqra	P – 64
Lutchman-Singh, Kerryn	P – 68
Lyons, Deirdre	P – 6, P – 90
Lyons-Ewing, David	O – 8

M	
MAC SWEENY, FERGAL	P – 103
Macdonald, Robert	P – 58
MacInnis, Robert	P – 25
MacIntyre, David	P – 90
Macip, Salvador	P – 95
MacNab, Wendy	P – 47, P – 48, P – 49
Madden, Tracie	O – 5
Madhuri, Thumuluru Kavitha	P – 24, P – 51, P – 112
Mahner, Sven	P – 126
Makris, Vasileios	P – 42
Maloney, Lara	P – 127
Manchanda, Ranjit	P – 25, P – 50, O – 3, P – 114
Marchesi , Julian	P – 90
Markozannes, Georgios	P – 97
Martin, Cameron	P – 91
Martin-Hirsch, Pierre	P – 97
Mason, Susan	O – 2
Masroor, Imrana	P – 13
Mateen, Arif	P – 93
Matulonis, Ursula A.	P – 126
May, Carl	P – 111
May, Felicity	P – 80, P – 81
May, James	P – 91
Mayer, Erik	P – 76
McArt, Darragh	O – 4, O – 8
McCabe, Nuala	O – 4, O – 8
McCluggage, W. Glenn	O – 4, O – 8
Mccomiskey, Mark	P – 19
McCormick, Aiste	O – 6
McDermott, Clara	O – 8
McGaughay, Erica	O – 7
McGivern, Ursula	P – 119
McKenzie, James	P – 98
McMullen, Wendy	O – 7, P – 57, P – 77, P – 115, P – 116, P – 78
McNeish, Iain	P – 124, O – 2
Mehmood, Tahir	P – 22, P – 1, P – 96, P – 3
Menon, Usha	P – 25, P – 50, O – 3
Miles, Tracie	P – 86
Miller, Ian	P – 11
Miller, Rowan	P – 114
Milling-Smith, Oliver	P – 23, P – 94
Mirza, Mansoor	P – 126
Mitra, Anita	P – 6, P – 90
Moneim, Joe	P – 7
Monk, Bradley	P – 126
Moreman, Catherine	P – 95
Morgan, Jennie	P – 67
Moss, Esther Louise	P – 26, P – 95, P – 52, P – 64
Mousa, Kelly	P – 50
Mowatt, David	P – 16
Muglu, Javaid	P – 75
Muir, Kenneth	P – 50
Mullan, Paul	O – 4, O – 8
Mushtaq, Yusuf	P – 7
Music, Robert	O – 1
Myriokefalitaki, Eva	P – 16, P – 31, P – 32, P – 33, P – 34

N	
Naik, Raj	O – 5, P – 60, P – 61, P – 62, P – 63, P – 80, P – 81
Nama, Vivek	P – 37
Natsis, Stavros	P – 41, P – 43, P – 45, P – 63
Nautiyal, Jaya	P – 97
Nellore, Vimala	P – 57, P – 78
Neuzillet, Cindy	P – 29
Newton, Claire	P – 38, P – 74
Nobbenhuis, Marielle	P – 14, P – 15, P – 40, P – 41, P – 43, P – 44, P – 45, P – 54, P – 55, P – 56
Nordin, Andrew	O – 5
Norris, Lucy	P – 18
Northam, Antonia	P – 27

O	
O'Donnell , R	P – 60
Oaknin, Ana	P – 127
O'Donnell, Rachel	P – 63, P – 81, P – 80
O'Dywer, Sarah	P – 34
Oram, David	P – 114
O'Riain, Ciaran	P – 18

Otify, Mohamed	P – 91
Oza, Amit	P – 126, P – 127

P

Page, Alexandria	P – 8
Pang, Minnie	P – 92
Paraskevaidis, Evangelos	P – 97
Parker, Kate	P – 120, P – 121
Parkin, DE	P – 10
Patel, Amit	P – 37, P – 38, P – 74
Patel, Nafisa	P – 64
Patel, Shreeya	P – 25, P – 114
Payne, Fiona	P – 11
Phadnis, Saurabh	P – 29, P – 99, P – 75
Phelps, David	P – 6
Piya, Simran	P – 110
Platt, Sarah	P – 38, P – 74
Póka, Róbert	P – 127
Polymeros, Konstantinos	P – 95
Pontefract, David	P – 20, P – 21
Povolotskaya , Natalia	P – 69, P – 70
Powel, Jane	P – 120
Powell, Melanie	P – 99, P – 114
Powell, Ned	P – 84, O – 5
Power, Kieran	P – 123
Pratt, Philip	P – 76
Price, John	P – 19
Price, Marcus	P – 128, O – 6

Q

Quigley, Mary	P – 114
Qureshi, Aishah	P – 110

R

Ragi, Sreedevi	P – 104
Raglan, Olivia	P – 97, P – 98
Ragupathy, Kalpana	P – 77, P – 115, O – 7, P – 116, P – 78
Rahimi, Siavash	P – 100, P – 69, P – 70
Ramus, Susan	P – 50
Rao, Kalpana	P – 28
Ratnavelu, Nithya	P – 60, P – 61, P – 62, P – 63, P – 80, P – 81
Redman, Charles	P – 17
Redondo, Andres	P – 126
Richardson, Alison	P – 111
Rimel, Bobbie J.	P – 126
Robotin, Catalin	P – 31, P – 32, P – 33
Roche, Melinda	P – 79
Roddy, Aideen	O – 4, O – 8
Rogers, Anne	P – 111
Romano, Fabrizio	P – 14, P – 15, P – 54, P – 55, P – 56
Rosengarten, Ora	P – 126
Rosenthal, Adam	P – 50
Rosini, Francesca	P – 6
Rundle, Stuart	P – 61, P – 62, P – 63
Russell, Bryn	P – 39
Rzyska, Ewelina	P – 36, P-59, P-65, P-66, P – 71, P – 72, P - 73

S

Sadia, Rozilla	P – 13
Safra, Tamar	P – 127
Sahdev, Anju	P – 50
Saleem, Anum	P – 117
Salto-Tellez, Manuel	O – 4, O – 8
Sanderson, Peter	P – 106
Sanderson, Saskia	P – 50
Saunders, Philippa	P – 106
Savage, Adele	P – 6
Savage, Helen	P – 108
Seebaran, Christal Shivana	P – 53
Sharma, Aarti	P – 2, P – 36, P – 59, P – 65, P – 66, P – 71, P – 72, P – 73
Sharma, Simran	P – 66
Sharma, Vijay	P – 11
Shaw, Danielle	P – 4
Sheikh, Irfan	P – 13, P – 93
Sheng, Zhi	P – 83
Shoosmith, Rebecca	O – 1
Shore, Angela	P – 85
Side, Lucy	P – 50, P – 114
SImmons, Lydia	P – 103, P – 113

Singh, Arpana	O – 7
Singh, Naveena	P – 99, P – 114
Singh, Vivek	P – 83
Sircar, Sikhar	P – 53
Skates, Steve	P – 50
Slade, Richard	P – 16, P – 31, P – 32, P – 33, P – 34
Smith, Ann	P – 90
Smith, Fraser	P – 58
Smith, Michael	P – 16, P – 31, P – 32, P – 33, P – 34
Smith, Peter	P – 111
Smolarek, Sebastian	P – 68
Spencer , Katie	P – 117
Stone, Nick	P – 85
Stratton, John F	P – 103, P – 113
Swisher, Elizabeth M.	P – 127

T

Tahmasebi, Farshad	P – 88
Tailor, Anil	P – 24, P – 51, P – 112
Takats, Zoltan	P – 6, P – 98
Tankersley, Chris	P – 127
Tay, Kae Jack	P – 92
Tay, Sun Kuie	P – 92
Taylor, Alexandra	P – 54, P – 55, P – 56
Taylor, Andrew	P – 86
Taylor, Isobel	P – 80
Taylor, Rohan	O – 3
Taylor, Stephanie	P – 8
Thangavelu, Amudha	P – 79
Thom, Fraser	P – 110
Thompson, Alan	P – 122
Thompson, Claire	P – 18
Thompson, Rebecca	P – 89
Timms, John F	P – 50
Tinker, Anna V.	P – 126
Tirlapur, Anushka	P – 28
Todd, Richard	P – 17
Trendall, Lydia	P – 80, P – 81
Trevisan, Giorgia	P – 114
Tripathi, Vishaka	O – 3
Tristram, Amanda	P – 84, O – 5
Trotter, Nicola	P – 115, P – 116
Tsilidis , Konstantinos K	P – 97
Turnbull, Clare	P – 25
Turnbull, Hilary	P – 12
Turner, Joshua	P – 111
Twigg, Jeremy	P – 30
Tyagi, Sonia	O – 6
Tzafetas, Menelaos	P – 6

U

Unger, Caro	P – 127
Upstill-Goddard, Rosanna	O – 2
Uttley , Elizabeth	P – 117

V

Van Tonder, Ashleigh	P – 79
Vanapalli, Manju Rao	P – 103, P – 113
Vergote, Ignace	P – 126
Vernerey, Dewi	P – 29
Vianello, Margherita	P – 110
Viggars , Andy	P – 117
Viola, Luciana S.	P – 127

W

Walker, Patrick	P – 86
Wallace, Andrew	P – 114
Waller, Jo	P – 50
Wallis, Yvonne	P – 50
Walton, Josephine	O – 2, P – 124
Wardle , Jane	P – 50
Warrander, Lynne	P – 128
Warshu Haruna, Iman	P – 5
Watkins, J	P – 60
Watmore, Sven	P – 79
Watt, J	P – 29
Wei, Wei	P – 57
Weigert, Melanie	P – 124
Welsh, Rhian	P – 121
Wenner, Jo	P – 110
Williams, Alistair	P – 106
Williams, Jonathan	P – 101 , P – 102
Willmott, Fredric	P – 28
Winter-Roach, Brett	P – 16, P – 31, P – 32, P – 33, P – 34

Wong, Annabel	P – 73
Wong, Helen	P – 4
Wood, Matthew Glen	P – 26
Woodhouse, Laura	O – 6
Workman, Geraldine	P – 119
Wormald, Ben	P – 101
Worsnop, Bradley	P – 31, P – 32, P – 33
Wuntakal, Rekha	P – 42

Y	
Yakasai, Ibrahim	P – 5
Yap, Jia Yie	P – 77
Yasmeen, Tahira	P – 93
Yeoh, Chit Cheng	P – 100
Young, Alison	P – 129
Young, Helena	P – 10

Z	
Zaikin, Alexey	P – 50, O – 3
Zeniou, Anthi	P – 117

for your notes

for your notes

for your notes

for your notes

Medtronic

YOUR TRUSTED PARTNER IN GYNECOLOGICAL HEALTH

LigaSure™ Curved Jaw Device.

Grasp, seal and cut with one device. Designed for Gynecologists for use in abdominal and vaginal Hysterectomy.

LigaSure™ Impact Device With Nano-Coated Jaws

The reliable performance of LigaSure™ vessel sealing technology is better than ever. Because the nonstick nano-coating on the jaws of the LigaSure Impact™ device reduces sticking,[7] eschar buildup,[7] and cleaning.[7]

LigaSure™ Maryland Jaw Open/ Laparoscopic Sealer/Divider

Combines one-step sealing with the functionality of a Maryland dissector, atraumatic grasper and cold scissors with the reliability of LigaSure™ technology.

Sonicision™ Cordless Ultrasonic Dissector

The industry's first cordless ultrasonic.

REDUCTIONS THAT ADD UP

LigaSure™ technology is proven to reduce procedure time[1], hospital stay[2], blood loss[3], and transfusions[4] compared to traditional ligation.

This may result in:
- **Better clinical outcomes for your patients**
- **Cost savings for your hospital**

61% LESS TIME IN THE OR[1]

When using LigaSure™ technology, compared to traditional ligation

42% LESS BLOOD LOSS[3]

When using LigaSure™ technology, compared to traditional ligation

LESS PAIN FOR PATIENTS[4]

Patients experienced less pain when used*

* Pain was evaluated 12 hours after surgery using a visual analog scale of 0 (no pain) to 10 (unbearable pain)

60% SHORTER HOSPITAL STAY[2]

When using LigaSure™ technology, compared to traditional ligation
From 3 days to 1.2 days