



Health

Western Sydney
Local Health District

ANNUAL REPORT

2022

Department of Gynaecological Oncology



Women's &
Newborn Health
Westmead Hospital

TABLE OF CONTENTS

Report from the Director	4
Overview of Our Service and Team	5
Summary of Department Activity for 2022	8
Outpatient occasions of service	
In-patient admissions	
Surgery / procedure breakdown	
Multidisciplinary team (MDT) case reviews	
Bio-banking	
Summary of Activity Trends (2001 – 2022)	11
Outpatient occasions of service	
Admissions and bed days	
Average length of stay (ALOS)	
Multidisciplinary team (MDT) meetings	
Case-mix Treated by the Department	14
Diagnosis of malignancy by site of disease	
Cervical malignancies	
Uterine malignancies	
Ovarian, fallopian tube & primary peritoneal malignancies	
Non-cancer diagnosis	
Morbidity / Mortality Review	17
Clinical quality indicators	
Important Key Surgical Performance Indicators	19
Length of stay for major surgery	
Surgery for uterine malignancy	
Non-cancer adnexal surgery	
Surgery for ovarian malignancy	
Socio-demographic Characteristics of Patients	21
Country of birth	
Age distribution	
Body mass index	
Referral base	
Clinical Trials and Research Studies	24
Trials and studies open to recruitment in 2022	
Trials closed with patients in long-term follow-up	
Research Grants Held	28
New grants awarded in 2022	
Previous grants awarded and still held in 2022	
Multidisciplinary Team Profile	31
Gynaecological Oncologists	
Nursing and Allied Health	
Translational Research	
Publications	37
Peer reviewed journals	
Conferences	50

Invited Speaker / Panellist
Oral / Poster / Abstracts
Organising / Chairing Sessions

Consumer and Community Engagements 53

Gynaecological Cancer Support Group
Mindfulness-Based Stress Management Program
Industry, Community and Media engagements
Consumer and Community Representation on Research Committees

List of Tables

- Table 1. Out-patient occasions of service*
- Table 2. In-patient admissions*
- Table 3. Surgery / Procedure breakdown*
- Table 4. MDT case reviews*
- Table 5. Diagnosis of malignancy by site of disease*
- Table 6. Cervical malignancy by stage of disease*
- Table 7. Uterine malignancy by stage of disease*
- Table 8. OTP malignancy by stage of disease*
- Table 9. Non-cancer diagnosis*
- Table 10. Clinical quality indicator events*
- Table 11. Residual disease after debulking for OTP cancers*
- Table 12. Country of birth*
- Table 13: Age distribution*
- Table 14: Body mass index*
- Table 15. Referral base by LHD*
- Table 16. Referrals by medical practitioner / specialist type*
- Table 17. Trials and research studies open to recruitment*
- Table 18. Trial patients in long-term follow up*
- Table 19. New research grants awarded*
- Table 20. Research grants carried over*

List of Figures

- Figure 1. Out-patient occasions of service - new patients*
- Figure 2. Out-patient occasions of service – all patients*
- Figure 3. Admissions and bed days*
- Figure 4. Admissions*
- Figure 5. Average length of stay (days)*
- Figure 6. No. cases discussed at MDT meetings*
- Figure 7. Average no. cases discussed / MDT meeting*

REPORT FROM THE DIRECTOR



Prof Alison Brand AM
MD, MMEd, FRCS(C), FRANZCOG, CGO
Director, Gynaecological Oncology

I am pleased to present the 2022 Department of Gynaecological Oncology Annual Report which showcases our achievements over the past year. We continued to see an increase in patient numbers, with a 50% increase in new patients and 63% increase in follow-up visits the last 5 years, despite having only 2.6 FTE Gynaecological Oncologists. We had two fellows, Gaithri Mylvalingam and Marilyn Boo, who were instrumental in ensuring patients were seen in a timely manner.

Cancers (invasive and borderline), make up almost 60% of our workload, with suspicious masses, pre malignant disease and risk reducing surgery making up the remainder. We saw 470 new cancer cancers, a 43% increase in the number of cancers seen in the last 5 years. In late 2022, we were finally able to secure additional theatre time, in the form of 3 extra lists per month, which has greatly reduced the number of ad hoc lists we have needed to meet demand.

In terms of clinical quality indicators, our average length of stay continues to be low (2.2 days) with a postoperative LOS of 1.9 days (our lowest ever). This is undoubtedly due to the ever increasing number of cases performed laparoscopically and our excellent ERAS program. Unplanned readmission rate is <5%. Eighty-five percent of our endometrial cancer patients treated surgically had a laparoscopic procedure, well above international standards of 60-80%. For advanced ovarian cancer, the rate of optimal debulking (i.e. \leq 1cm residual disease) has continued to improve over time (96% in 2022, 95% in 2021, 79% in 2020, and 66% in 2015). There has also been an improvement in the number of patients left with no macroscopic residual disease (66% in 2022, 55% in 2021, 51% in 2020, and 32% in 2016), again above international standards.

Whilst we had less new grant funding this year (\$0.8M), we still hold \$21M as carry over from previous years. Sixteen intervention or clinical research studies and 1 prospective surgical audit were recruiting patients during 2022, with 163 patients recruited. We published 29 papers, many in high impact journals, and presented 36 papers at conferences.

Many thanks to all team members who contribute so much to patient care, each and every day. Many thanks to Annie Stenlake for once again compiling this report.

OVERVIEW OF OUR SERVICE AND TEAM

The Department of Gynaecological Oncology is a centralised specialist service, one of 6 public gynaecological cancer units in NSW. It is staffed by a multidisciplinary team of surgeons, nurses, allied health professionals and researchers providing specialist care in the treatment of gynaecological cancers, pre-malignant conditions, suspicious and/or complex pelvic masses, as well as planned and emergency management of obstetrical conditions. Patients have access to radiation and medical oncology services, the Familial Cancer Service where indicated, as well as an extensive range of clinical trials.

Gynaecological Oncologists

Prof Alison Brand (Director)

Dr Unine Herbst

Dr Michael Burling (0.6FTE)

Dr Leon Foster, Clinical Fellow RANZGOG CGO Training Program (until Feb 2022)

Dr Gaithri Mylvalingam, Clinical Fellow RANZGOG CGO Training Program (from Feb 2022)

Dr Marilyn Boo, Unaccredited Clinical Fellow (from Feb 2022)

Nursing

Quintina Reyes - Clinical Nurse Consultant

Zahra Anoneuvo, Wendy Jessep, Evangline Madiaga – Clinical Nurse Specialists

Linc Marlow - Nursing Unit Manager

Allied Health

Kiim Hobbs - Clinical Specialist Social Worker

Suparna Karpe - Clinical Psychologist

Clinical Data Manager

Annie Stenlake General Nursing Cert, Cert Emergency Care Nursing, BHSM (Info)

MDT Coordinator

Dr Jacqueline Greig MA MBBS FRACGP FRANZCOG

Clinical Trial Co-ordinators

Kate Campbell (0.8 FTE)

Kylie Fell

Letitia Lancaster (0.2 FTE)

Matina Lim

Administrative Support

Kathleen Burrows

Emma Turner

Translational Research and Biobanking

Prof Anna deFazio BSc (Hons), PhD - Head

Catherine Kennedy BSc (Hons) - GynBiobank and Research Manager

Researchers

Clinical Prof Rosemary Balleine MBBS (Hons), PhD, FRCPA

Jessica Boros BSc (Hons)

Yoke-Eng Chiew BSc (Hons)

Dr Natalie Gava-Bouantoun BSc (Hons), PhD

Dr Seema Kumari MBBS, FRACP, Masters of Health Promotion

Dr Eunice Lee BBiomedSc (Hons), PhD

Dr Karin Lyon MSv, PhD

Ida Christina Barner Madsen MSc (to Nov 2022)
Dr Cristina Mapagu MBBS (Hons), FRACP, PhD
Dr Tania Moujaber BMedSci, MBBS (Hons), FRACP, PhD
Nikilyn Nevins BSc, MSc
Marina Pavanello BSc (Hons), MSc (to Jun 2022)
Pamela Provan BAppSci (Hons) MBA
Dashni Srirangan MSc

Multidisciplinary Team

The multidisciplinary team maintains a close working relationship with the Departments of Radiation Oncology and Medical Oncology, Tissue Pathology, Supportive and Palliative Medicine, Cancer Genetics, Psycho-oncology and Diagnostic Imaging.

Medical Oncology

Prof Paul Harnett
Dr Bo Gao
Dr Blossom Mak (Locum), Dr Rosemary Habib (Locum)

Radiation Oncology

Dr Jennifer Chard
Dr Alison Salkeld
Dr Niluja Thiruaneeswaran

Tissue Pathology and Diagnostic Oncology

A/Prof Raghwa Sharma
Dr Anita Achan
Dr Tayyaba Khan
Dr Jennifer Kim
Dr Spinder Samra
Dr Seethalakshmi Viswanathan

Supportive and Palliative Medicine

Dr Sally Greenaway
Dr Clare Zachulski
Dr Jusveer Rakhra

Cancer Genetics

A/Prof Judy Kirk
Dr Abiramy Ragunathan
Dr Christina Girgis

Psycho-oncology

Dr Catherine Mason

Diagnostic Imaging

Dr David Farlow (PET and Ultrasound)
Dr Kevin Choong (PET and Ultrasound)
Dr George Larcos (PET and Ultrasound)
Dr Katherine Saunders (PET and Ultrasound)
Dr Labib Rahman (PET and Ultrasound)
Dr Luke Baker (CT and MRI)
Dr Alan O'Grady (CT and MRI)

Affiliations With Other Cancer Centres

The Gynaecological Oncology Department, as a tertiary referral service, draws referrals from within and across Local Health Districts. Patients are referred back to other Cancer Centres for adjuvant treatment once their surgical treatment or assessment is complete.

The Department maintains a close affiliation with the following centres: Nepean Cancer Care Centre, Blacktown Haematology and Oncology Centre, Central West Cancer Service (Orange and Bathurst), Riverina Cancer Centre (Wagga Wagga), Liverpool Cancer Therapy Centre, Macarthur Cancer Therapy Centre (Campbelltown).

SUMMARY OF DEPARTMENT ACTIVITY FOR 2022

Out-patient Occasions of Service

The unit provided an average of 17 (combined new and follow-up) clinics per fortnight. There has been a considerable increase in both the number of new-patient (36%) and follow-up (61%) occasions of service over the last 5 years.

Table 1. Out-patient occasions of service

	No. New Patient Visits	No. Follow-up Visits	Total No. Clinic Visits
2022	761	3,336	4,097
2021	810	3,358	4,168
2020	734	2,948	3,682
2019	607	2,196	2,803
2018	558	1,971	2,529

In-patient Admissions

For the last 25 years, the unit has had two full operating days available each week. In November 2022, the unit was successful in securing a third operating list each week for 3 out of the 4-week operating theatre rotation. All patients are admitted to the Women's Health Ward post-operatively, unless planned for admission to ICU.

Table 2. In-patient admissions

	No. Surgical Admissions (non-malignant)	No. Surgical Admissions (malignancy)	No. Medical Admissions	Total No. Admissions	Average Length of Stay (ALOS)
2022	205 (39%)	253 (48%)	63 (12%)	524	2.2 days
2021	184 (37%)	272 (54%)	46 (9%)	502	2.2 days
2020	160 (34%)	281 (59%)	33 (8%)	474	2.5 days
2019	185 (39%)	247 (52%)	43 (9%)	475	2.4 days
2018	140 (32%)	249 (57%)	44 (10%)	433	2.5 days
2017	136 (33%)	247 (59%)	37 (9%)	420	2.7 days

Of the 205 surgical admissions for non-malignant conditions, 75 (36%) had benign pathology, 79 (38%) were treated for precursor conditions, 22 (11%) had borderline tumours and 29 (14%) had risk-reduction surgery. A further 3 patients (1%) had a non-diagnostic procedure and have not been assigned to either a malignant or non-malignant category.

Of the 63 medical admissions, 14 (22%) were for post-operative complications, 3 patients (5%) had an interventional radiology procedure and 30 patients (48%) were admitted for symptom management or pre-operative optimisation of their clinical condition. Sixteen patients had a planned procedure cancelled on the day of surgery and were counted as a medical admission (25% of all medical admissions and 3% of planned surgical procedures).

Reasons for cancellation included: out of operating theatre time [10], cancelled on the day of surgery for clinical reasons [3], and patient self-cancelled on the day of planned surgery [3].

Surgery / Procedure Breakdown

Laparoscopic procedures, other than for diagnostic purposes, are included in the 'major procedures' category.

Table 3. Surgery / Procedure breakdown

	No. Minor Procedures	No. Major Procedures	Total No. Procedures
2022	163 (35%)	298 (65%)	461
2021	151 (33%)	305 (67%)	456
2020	130 (29%)	311 (71%)	441
2019	137 (32%)	295 (68%)	432
2018	113 (29%)	276 (71%)	389

Surgical patients with private health insurance have the option to have their procedure performed at Westmead Private Hospital in an effort to reduce the operating theatre load at the public hospital. Approximately 6 half-day sessions are available each month. A total of 223 procedures were performed there in 2022 (180 major and 43 minor procedures).

Multidisciplinary Team (MDT) Case Reviews

Table 4. MDT case reviews

	No. Diagnostic Reviews (e.g. curette / biopsy / cytology)	No. Reviews for Definitive Management Plan	No. Diagnostic Imaging or General Discussion Reviews (no histopathology)	No. Cases Discussed (*)
2022	472	450	195	983
2021	500	497	179	1,091
2020	433	460	222	1,047
2019	437	409	211	963
2018	408	457	130	907

(*) Not all cases scheduled and written up for MDT meetings are discussed on the day due to unavailability of slides, films or staff.

Bio-banking

Since 1990's, the Gynaecological Oncology Bio-bank at Westmead (GynBiobank), has banked tumour tissue and blood from 1658 consenting patients undergoing surgery where cancer is a possible or confirmed diagnosis. In 2022, samples were collected from 72 consented patients, mostly with an ovarian cancer diagnosis.

Seven publications arose from collaborations with other national and international research bodies. The GynBiobank was invited to submit its standard operating procedures (SOPs) to the NIH National Cancer Institute Biospecimen Research Database. The SOPs are available to researchers worldwide to download (<https://brd.nci.nih.gov/brd>). In 2022 the SOPs from the GynBiobank were downloaded 305 times.

SUMMARY OF ACTIVITY TRENDS (2001- 2022)

Out-patient Occasions of Service

There were just over 4,000 out-patient occasions of service in 2022. The number of new patients seen (761 in 2022) has continued to increase rapidly since 2016, although slightly fewer than in 2021 when the Department was also providing a service for South Western Sydney LHD. The number of patients seen in follow-up (just over 3,300) has also continued to increase despite increasing shared-care arrangements with other oncology specialists (particularly in rural areas), and discharging patients with benign or pre-invasive disease back to their referring specialist or GP.

Figure 1. Out-patient occasions of service - new patients

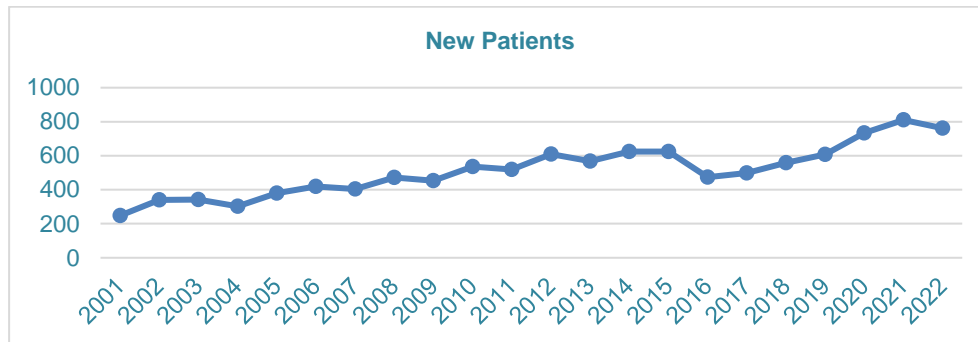
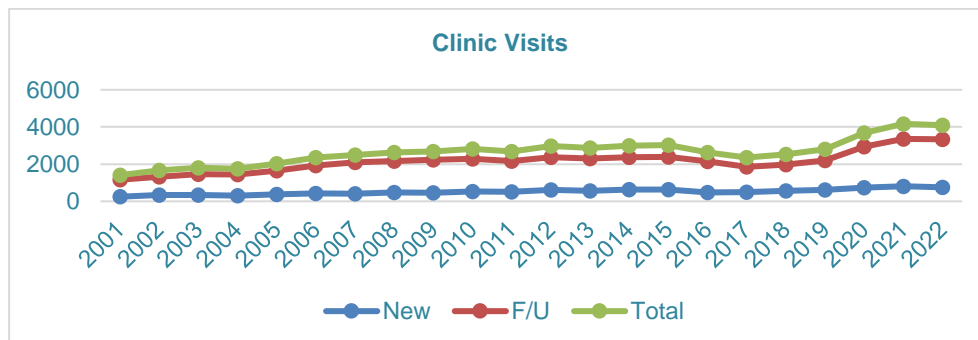


Figure 2. Outpatient occasions of service – all patients



Admissions and Bed Days

Figure 3. Admissions and bed days

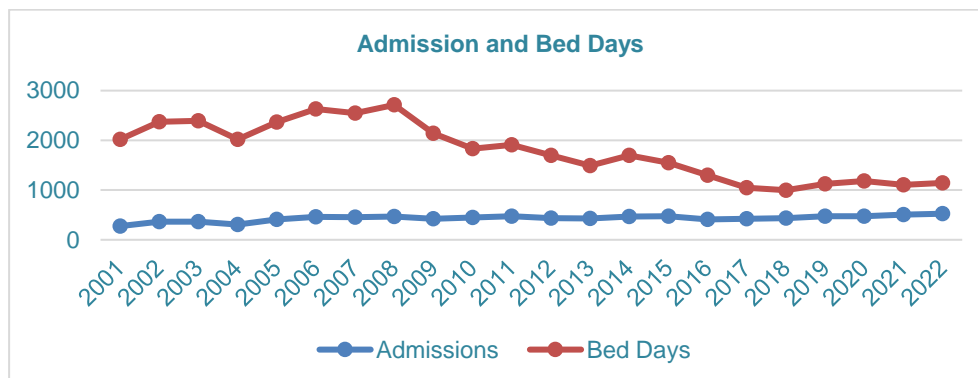
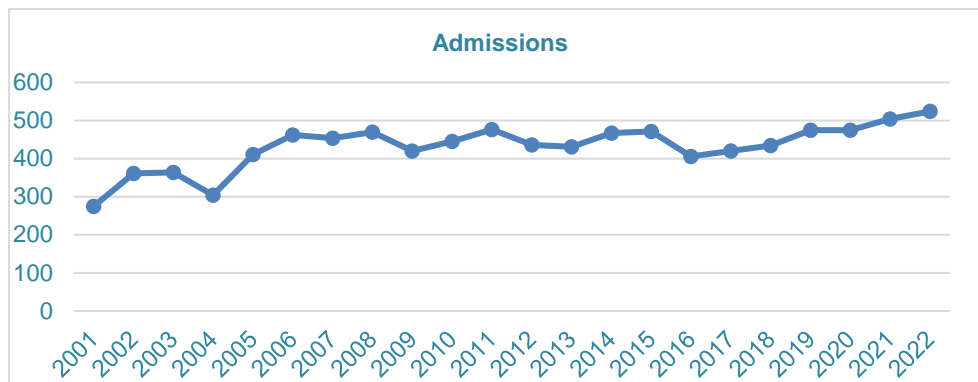


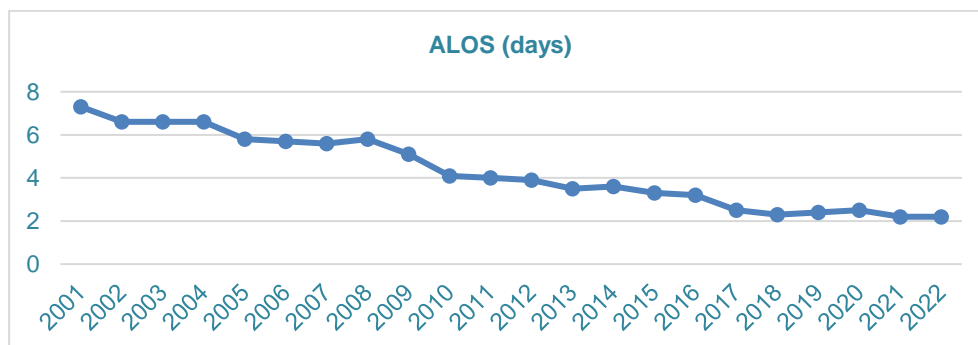
Figure 4. Admissions



Average Length of Stay (ALOS)

There has been a significant decrease in ALOS since the introduction of Enhanced Recovery After Surgery (ERAS) in 2008, and an increase in the number of laparoscopic procedures being performed, particularly for endometrial cancers. The ALOS has remained at 2.2 - 2.5 days since 2017. The post-operative LOS for 2022 was 1.9 days.

Figure 5. Average length of stay (days)



Cases Discussed at Multidisciplinary Team (MDT) Meetings

In 2022, 49 MDT meetings were held, with 983 cases discussed (an average of 20.6 cases per meeting). All cancer cases are discussed at least once, some more than once.

There were 472 diagnostic reviews (e.g. curette, biopsy, ascites), accounting for 50% of all reviews and is an important step in confirming an initial working diagnosis. There were 450 reviews of operative pathology to determine whether further management was recommended (e.g. chemotherapy, radiotherapy, genetic testing).

Of all the cytopathology cases discussed (diagnostic and post-operative), 313 sets of stained slides +/- paraffin blocks were requested from outside laboratories. This amounts to 32% of all cases discussed and it is therefore important to acknowledge the ever increasing workload that this puts on our local Westmead cytopathologists.

There were 195 reviews of imaging (mostly PET and CT scans) to help document management plans for more difficult cases. This number has increased significantly over the last few years (only 88 imaging reviews in 2017). Again, this imposes an increased workload on our local diagnostic imaging staff.

Following review of evidence and consensus on management, referrals are made to other specialist services, either locally or regionally (e.g. medical and/or radiation oncology, Familial Cancer Service, or indeed other MDTs and/or specialists where the diagnosis is found not to be a gynaecological malignancy). Patients may also be identified at this point for participation in clinical trials or other research projects. Documentation from MDT meetings,

referrals and other relevant documents are forwarded to referring doctors, GPs and other treating specialists when patients have been informed of their diagnosis and management plan – this usually occurs within a week of MDT meetings.

Figure 6. Cases discussed at MDT meetings

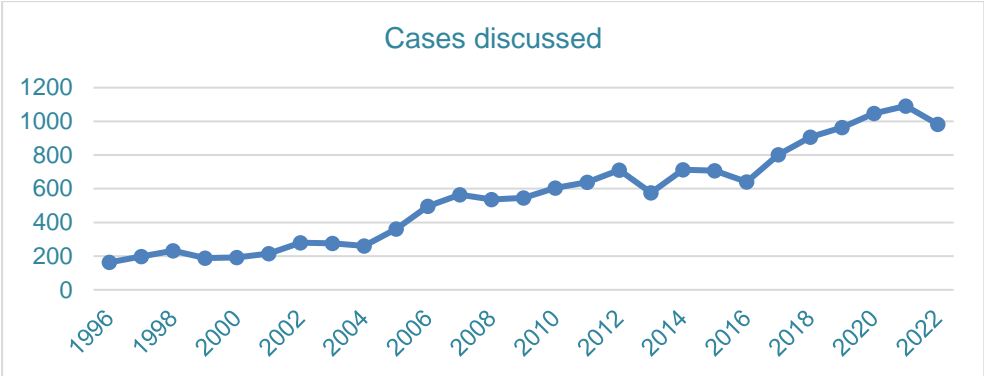
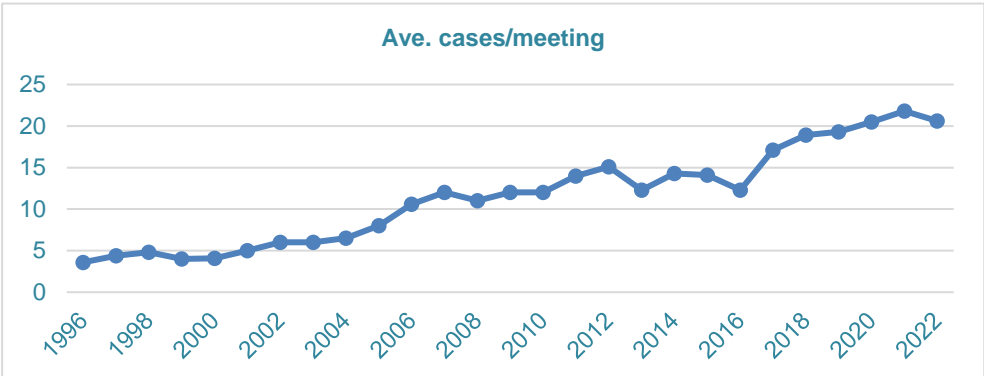


Figure 7. Average no. cases discussed / MDT meeting



CASEMIX TREATED BY THE DEPARTMENT

A total of 806 new patients were seen during 2022 which is slightly fewer than the previous year (839). This is an increase of 50% over the past 5 years (432 in 2017).

Seven patients had synchronous uterine and ovarian / peritoneal tumours and have been included in each of the relevant 'primary site of malignancy' tables.

A further seventy-three patients were referred to the Gynaecological Oncology MDT meetings for histopathology review and discussion on best management plan and advice on whether referral to a gynaecological oncologist is required (usually by general gynaecologists) and have not been included in any further analysis.

Diagnosis of Malignancy by Site of Disease

Patients with a diagnosis of malignancy, excluding low-malignant-potential (LMP or otherwise known as borderline) tumours, accounted for 54% of cases treated or managed by the Department. When including LMP tumours, it was 58%.

The number of cancer cases cancer seen by the Department is similar to 2021, however there has been a 43% overall increase in the number of cancer cases referred to the Department since 2017. Despite the increase in number of malignancies the overall proportions of cancers, by site, remains similar.

Table 5. Diagnosis of malignancy by site of disease

Primary Site of Malignancy	No. Cases 2018	No. Cases 2019	No. Cases 2020	No. Cases 2021	No. Cases 2022
Cervix	45 (14%)	47 (15%)	51 (14%)	65 (15%)	62 (14%)
Uterus	149 (47%)	138 (44%)	173 (47%)	215 (50%)	214 (49%)
Ovary / Fallopian Tube / Peritoneum Malignancy	84 (27%)	86 (27%)	101 (27%)	97 (22%)	99 (23%)
Ovarian Borderline Tumours (LMP)	#	#	(40)	(32)	(34)
Vulva / Vagina / Bartholin's	18 (6%)	14 (6%)	16 (4%)	22 (5%)	30 (7%)
Gestational Trophoblastic Disease	2 (< 1%)	9 (3%)	5 (1%)	7 (2%)	7 (2%)
Other primary sites	18 (6%)	20 (6%)	22 (6%)	28 (6%)	21 (6%)
TOTAL	316	314	368 (408)	434 (466)	436 (470)

[#] Ovarian borderline (LMP) tumours were not included in yearly totals for 'malignancy by primary site' prior to 2020

Cervical malignancies

There were 62 patients referred to the Department with a diagnosis of cervical malignancy (a 30% increase since 2018). Of these, only 60 patients with a new malignancy have been included in Table 6. Two patients were excluded: one patient had been treated overseas prior to 2022, and the other presented with recurrence of her cervical cancer 37 years later.

There are 2 areas of concern noted. Three patients had a late diagnosis of malignancy during the second trimester of their pregnancy (23-26/40), emphasising the importance of an accurate screening history and CST's if overdue, as part of antenatal care. Secondly, for the

first time in 7 years, advanced stage disease accounted for more than 60% of cervical malignancy presentations.

Table 6. Cervical malignancy by stage of disease

Stage of Disease	No. Cases 2018	No. Cases 2019	No. Cases 2020	No. Cases 2021	No. Cases 2022
Stage I	28 (62%)	20 (43%)	27 (65%)	33 (53%)	23 (38%)
Stage II	7 (16%)	5 (11%)	1 (<1%)	7 (11%)	6 (10%)
Stage III	3 (7%)	18 (38%)	7 (17%)	14 (23%)	23 (38%)
Stage IV	3 (7%)	4 (9%)	7 (17%)	8 (13%)	7 (12%)
Un-staged	4 (9%)	0	0	0	1 (2%)
TOTAL	45	47	42	62	60

Uterine malignancies

There were 214 patients referred with a uterine malignancy (37% increase since 2017). Of these, only 210 with a newly diagnosed uterine malignancy have been included in Table 7. The 4 patients that were excluded had either been treated elsewhere prior to 2022 (either overseas or at another unit), or were seeking a 2nd opinion on management. Six patients had a synchronous tumour of the ovary / fallopian tube / peritoneum (5 with malignant tumour and 1 with a borderline tumour). These patients have also been included in Table 8.

Ten patients had been operated on by a general gynaecologist prior to referral to the Department. Twenty-one patients did not have surgical staging but were managed medically with progestin therapy, or with chemotherapy or radiotherapy because of their young age and desire for fertility preservation (43% of medically managed); or because of co-morbidities, advanced disease or declining treatment.

Table 7. Uterine malignancy by stage of disease

Stage of Disease	No. Cases 2018	No. Cases 2019	No. Cases 2020	No. Cases 2021	No. Cases 2022
Stage I	96 (64%)	89 (64%)	106 (64%)	128 (64%)	142 (68%)
Stage II	9 (6%)	11 (8%)	8 (5%)	14 (7%)	8 (4%)
Stage III	17 (11%)	14 (10%)	18 (11%)	29 (15%)	18 (9%)
Stage IV	17 (11%)	15 (10%)	15 (9%)	6 (9%)	21 (10%)
Un-staged	10 (7%)	10 (7%)	19 (11%)	34 (5%)	21 (10%)
TOTAL	149	139	166	211	210

Ovarian, fallopian tube and primary peritoneal (OTP) malignancies

There were 103 new patients referred to the Department with an OTP malignancy. Of these, only 99 have been included in Table 8. One was seeking a 2nd opinion on management, 2 were diagnosed with disease recurrence having been previously treated elsewhere, and 1

was referred to another unit for treatment within their LHD. One patient with a LMP tumour was also excluded, having been previously treated elsewhere.

Ten patients with early-stage disease (Stage 1 or 2) had their initial surgery performed by a general gynaecologist (4 with an OTP malignancy and 10 with LMP tumours). Due to the unexpected diagnosis these patients were referred to the Department for either further surgical staging or clinical follow-up.

Table 8. OTP malignancy by stage of disease

Stage of Disease	No. Cases 2018	No. Cases 2019	No. Cases 2020	No. Cases 2021	No. Cases 2022
Stage I	22 (26%)	28 (32%)	25 (29%)	26 (30%)	30 (30%)
Stage II	8 (9%)	8 (9%)	9 (10%)	7 (8%)	12 (10%)
Stage III	24 (29%)	27 (32%)	37 (43%)	34 (40%)	35 (35%)
Stage IV	19 (23%)	19 (22%)	15 (17%)	18 (21%)	20 (20%)
Un-staged	11 (13%)	5 (6%)	1 (1%)	1(1%)	2 (2%)
Total OTP Malignancies	84	87	87	87	99
Borderline tumours (low malignant potential - LMP)	31	29	40	31	34
Total OTP including LMP	115	116	127	118	133

Non-cancer Diagnosis

Fifty-three patients were referred for consideration of prophylactic surgery (which includes patients having surgical removal of their ovaries for hormonal control of breast cancer). Forty-four procedures were performed during 2022. The remainder of patients were placed on a waiting list for surgery at a future date, or had decided not to proceed with surgery.

Table 9. Non-cancer diagnosis

Site of Disease	No. Cases 2018	No. Cases 2019	No. Cases 2020	No. Cases 2021	No. Cases 2022
High grade dysplasia, hyperplasia with atypia, carcinoma <i>in situ</i>	40 (17%)	54 (21%)	56 (17%)	79 (21%)	81 (24%)
Benign, low-grade dysplasia or no suspicion of malignancy (but no tissue diagnosis)	127 (53%)	168 (64%)	229 (68%)	249 (66%)	202 (59%)
Prophylactic	37 (15%)	37 (14%)	48 (14%)	43 (11%)	53 (15%)
Unknown diagnosis	4 (2%)	2 (<1%)	3 (<1%)	7 (2%)	7 (2%)
TOTAL	239	261	336	378	343

CASEMIX TREATED BY THE DEPARTMENT

Clinical Quality Indicators

The Gynaecological Oncology Department presents its morbidity/mortality cases on 4-monthly basis at the Women's Health M and M meetings. In 2022 there were a total of 139 events recorded for 74 patients which is similar to previous years.

Table 10. Clinical quality indicator events

Total Number of Surgical Admissions	389	434	445	492	460
Critical Event	No. CQI events 2018	No. CQI events 2019	No. CQI events 2020	No. CQI events 2021	No. CQI events 2022
Blood loss > 500mls	24 (6.2%)	22 (5%)	24 (5.4%)	23 (4.7%)	27 (5.9%)
Damage to internal organ	12 (3.1%)	7 (1.6%)	5 (<1%)	11 (2.2%)	6 (1.3%)
Conversion from laparoscopy to open	9	11	10	11	10
Anaesthetic complication	0	1 (<1%)	2 (<1%)	2 (<1%)	3 (<1%)
Intra-op blood trans > 2 u	5 (1.3%)	3 (<1%)	1 (<1%)	4 (<1%)	4 (<1%)
Peri-op cardiac event/stroke	0	0	1 (<1%)	3 (<1%)	0
Renal failure/ AKI	3 (<1%)	1 (<1%)	4 (<1%)	6 (1.2%)	1 (<1%)
DVT or pulmonary embolus	0	2 (<1%)	4 (<1%)	2 (<1%)	4 (<1%)
Death within 30 days	1 (<1%)	2 (<1%)	1 (<1%)	1 (<1%)	1 (<1%)
Unplanned transfer to ICU	3 (<1%)	10 (2.3%)	8 (1.8%)	7 (1.5%)	5 (1%)
Unplanned return to theatre	3 (<1%)	11 (2.5%)	10 (2.2%)	6 (1.3%)	4 (<1%)
Post-op LOS > 7 days	4 (<1%)	13 (3%)	16 (3.6%)	9 (1.8%)	7 (1.5%)
Unplanned readmission 30 days	17 (4.4%)	17 (3.9%)	20 (4.5%)	17 (4%)	22 (4.8%)
Wound complication (no infection)	3 (<1%)	16 (3.7%)	12 (2.7%)	18 (3.7%)	18 (3.9%)
Febrile morbidity incl wound	15 (3.8%)	17 (3.9%)	15 (3.4%)	12 (2.4%)	12 (2.6%)
Bowel complication	1 (<1%)	4 (<1%)	8 (1.8%)	3 (<1%)	4 (<1%)
Urinary complication	0	1 (<1%)	2 (<1%)	7 (1.4%)	3 (<1%)
Post-op blood transfusion > 2 u	2 (<1%)	2 (<1%)	2 (<1%)	2 (<1%)	5 (1%)
Other	1 (<1%)	5 (1%)	1 (<1%)	2 (<1%)	1 (<1%)
Total No. Events / Total No. Patients with Events	103 / 63	145 / 72	145 / 79	145 / 75	139 / 74

IMPORTANT KEY SURGICAL PERFORMANCE INDICATORS

Length of Stay for Major Surgery

Two hundred and ninety-six major surgical procedures were performed at Westmead Public Hospital in 2022. This is similar to 2021 (305), but an increase of 15% since 2017. Nine patients (<1%) had a post-operative length of stay > 7 days (range 9 - 23 days). These patients each had one or more adverse events listed in the clinical quality indicators. This is similar to previous years. The overall post-operative length of stay was 1.9 days.

Uterine Malignancy

Westmead Public Hospital

There were 93 hysterectomies performed for uterine malignancy. One other patient had a 2nd procedure following a hysterectomy performed by a general gynaecologist (e.g. removal of ovaries, pelvic lymph node assessment).

Seventy nine patients had a laparoscopic hysterectomy performed (85%) which is similar to the last few years (up from 39% in 2016).

There were 3 unplanned conversions from laparoscopic to open surgery due to adhesions.

Fourteen women had insertion of a Mirena for medical management of their uterine malignancy, either because of their young age and wanting to preserve fertility (57%), or because of multiple co-morbidities putting them at high anaesthetic risk (43%). A further 9 women had a Mirena inserted for management of their precursor-to-malignancy condition (hyperplasia with atypia). Half of these women wanted to retain their fertility.

Westmead Private Hospital

There were 61 hysterectomies performed for uterine malignancy. Fifty-seven of these were performed laparoscopically (93%). Three of the 4 open procedures were commenced laparoscopically, but were converted to open due to adhesions. Four women had a Mirena insertion to medically manage their malignancy either due to desire to retain their fertility, or because of age and co-morbidities.

Non-cancer Adnexal Surgery

Westmead Public Hospital

There were 81 surgical procedures performed on adnexa for non-malignant conditions (31 for benign conditions and 28 for risk-reduction). A further 22 procedures were performed for borderline ovarian tumours.

Of the 81 surgical procedures for non-malignant conditions 55 (68%) procedures were performed laparoscopically and, of these, 32 (58%) were discharged on the same day. In general, those patients less likely to have a diagnosis of malignancy tend to be put lower down the operating list, thus often necessitating an overnight stay.

Westmead Private Hospital

There were 57 surgical procedures performed on adnexa for non-malignant conditions (33 for benign conditions and 20 for risk-reduction). A further 4 procedures were performed for a final diagnosis of borderline ovarian tumours. Of the 57 surgical procedures for non-malignant conditions 49 (86%) procedures were performed laparoscopically.

Ovarian / Tubal / Peritoneal (OTP) Malignancy

Fifty-three patients were identified as having advanced (Stage III or IV) epithelial ovarian, fallopian tube or primary peritoneal (OTP) cancers. Five patients have been excluded from further analysis (1 had surgery performed in a rural hospital and was an unexpected diagnosis, 3 were referred to another unit for surgery and 1 was seeking a 2nd opinion on the order of treatment regimens).

Of the remaining 48 patients, 33 had cytoreductive surgery during 2022 as part of their cancer treatment and a further 5 patients went on to have this done in early 2022 (total 38 patients) and have been included in Table 11 below.

Ten patients (21%) did not have cytoreductive surgery at any time and half of these did not receive chemotherapy either. One patient declined any treatment and the remainder were deemed unsuitable for either surgery and/or chemotherapy due to a poor response to NACT or poor performance status. Half these patients have since died of their disease.

Thirteen patients (34%) had upfront debulking surgery and 25 (66%) had interval cytoreductive surgery after 3-4 cycles of neoadjuvant chemotherapy. There has been an increasing number of patients having NACT prior to surgery over the last few years. This is common to most Gynaecological Oncology Units across Australia.

Overall, the rate of optimal debulking (i.e. ≤ 1 cm residual disease) has continued to improve over time but is now stabilising (currently 92%, 95% in 2021, 79% in 2020, and 66% in 2015). There has also been improvement over time in the number of patients left with no macroscopic residual disease (currently 66%, 55% in 2021, 51% in 2020 and 32% in 2016).

The optimal debulking (i.e. ≤ 1 cm residual disease) rate for OTP cancers is most likely due to better assessment and increased use of neoadjuvant chemotherapy. Despite this, after neoadjuvant chemotherapy, there still remain patients who cannot be optimally debulked.

Table 11. Residual disease after debulking for OTP cancers

		No macroscopic residual disease (25/38) 66%		≤ 1 cm residual disease (10/38) 26%		> 1 cm residual disease (3/38) 8%	
	Neoadjuvant chemo rate	Upfront surgery	Interval debulk	Upfront surgery	Interval debulk	Upfront surgery	Interval debulk
2022 (n=38)	66%	8 (21%)	17 (45%)	3 (8%)	7 (18%)	2 (5%)	1 (3%)
2021 (n=40)	52.2%	11 (27.5%)	11 (27.5%)	8 (20%)	8 (20%)	2 (5%)	0
2020 (n=39)	48.8%	10 (25.6%)	10 (25.6%)	7 (17.9%)	4 (10.3%)	3 (7.7%)	5 (12.8%)
2019 (n=35)	48.7%	9 (25.7%)	8 (22.9%)	3 (8.6%)	7 (20%)	6 (17.1%)	2 (5.7%)
2018 (n=41)	56.1%	4 (9.8%)	9 (21.9%)	14 (34.1%)	9 (21.9%)	1 (2.4%)	4 (9.8%)
2017 (n=24)	46.7%	6 (25%)	5 (20.8%)	4 (16.7%)	4 (16.7%)	4 (16.7%)	1 (4.2%)
2016 (n=28)	17.9%	8 (28.6%)	1 (3.6%)	11 (39.3%)	3 (10.7%)	4 (14.3%)	1 (3.6%)

SOCIODEMOGRAPHIC CHARACTERISTICS OF OUR PATIENTS

Country of Birth

Just over half (52%) of all new patients to the Department were born in Australia, whilst 57% were born in either Australia or another English-speaking country (*). Of the 421 patients born in Australia, 29 (7%) identified as being Aboriginal and/or Torres Strait Islander. This is similar to previous years. Patients born in a country other than Australia hailed from an incredible 70 different countries!

Table 12. Country of birth

Country of Birth	No. Patients (%)	Country of Birth	No. Patients (%)	Country of Birth	No. Patients (%)
Afghanistan	5	Greece	3	Portugal	1
Argentina	2	Hong Kong	7	Romania	1
Armenia	1	Hungary	1	Samoa	4
Australia *	421 (52)	India	40 (5)	Scotland *	4
Bangladesh	4	Indonesia	5	Singapore	1
Belarus	1	Iran	9	Slovakia	1
Belgium	1	Iraq	5	Solomon Is	1
Bosnia	1	Ireland *	3	South Africa *	7
Brazil	1	Israel	1	South Korea	4
Chile	6	Italy	12 (1)	Sri Lanka	12 (1)
China	39 (5)	Laos	2	Sudan	1
Colombia	3	Lebanon	19 (2)	Switzerland	1
Cook Is	1	Macedonia	1	Syria	3
Croatia	8	Malaysia	7	Taiwan	1
Cyprus	1	Malta	8	Thailand	1
Czechoslovakia	1	Mauritius	2	Tonga	5
Egypt	3	Nepal	5	Turkey	3
El Salvador	2	Netherlands	1	Ukraine	2
England *	21 (3)	New Zealand *	9 (1)	Uruguay	1
Eritrea	1	Nigeria	1	US of America *	2
Fiji	9 (1)	Pakistan	4	Vietnam	10 (1)
France	1	Peru	1	Wales *	3
Germany	3	Philippines	49 (6)		
Ghana	1	Poland	5		

Age Distribution

This is similar to previous years, with 307 patients (38%) aged less than 50 years of age (pre-menopausal age-range).

Table 13: Age distribution

Age Range (years)	2018 No. Patients (%)	2019 No. Patients (%)	2020 No. Patients (%)	2021 No. Patients (%)	2022 No. Patients (%)
< 20	5 (1)	4 (<1)	7 (< 1)	4 (< 1)	3 (<1)
20 – 29	17 (3)	34 (5)	39 (5)	40 (5)	37 (4)
30 – 39	64 (12)	88 (14)	102 (14)	116 (14)	111 (14)
40 – 49	81 (15)	103 (16)	142 (19)	154 (18)	156 (19)
50 – 59	137 (25)	124 (20)	155 (21)	183 (22)	170 (21)
60 – 69	105 (19)	137 (22)	151 (20)	162 (19)	172 (21)
70 – 79	99 (18)	96 (15)	108 (14)	132 (16)	113 (14)
80 – 89	32 (6)	36 (6)	37 (5)	40 (5)	41 (5)
> 89	9 (2)	4 (<1)	4 (< 1)	8 (< 1)	3 (<1)

Body Mass Index (BMI)

BMI was unable to be calculated from the department files or other information sources for 19 patients (2%). Where BMI was calculated, 67% of patients had a BMI higher than the normal range, 40% were obese and 22% were morbidly obese. This is similar to previous years.

Table 14: Body mass index

BMI	2018 No. Patients (%)	2019 No. Patients (%)	2020 No. Patients (%)	2021 No. Patients (%)	2022 No. Patients (%)
< 20	27 (5)	35 (6)	28 (4)	36 (5)	54 (7)
20-25	107 (21)	139 (23)	187 (25)	219 (27)	212 (27)
>25 – 30	149 (30)	151 (25)	191 (26)	214 (27)	209 (27)
>30 – 35	100 (20)	141 (23)	140 (19)	146 (18)	140 (18)
>35 – 40	59 (12)	64 (11)	86 (12)	78 (10)	82 (10)
>40 - 50	44 (9)	54 (8)	74 (10)	77 (10)	76 (10)
>50 – 60	11 (2)	13 (2)	15 (2)	26 (3)	14 (2)
>60	4 (1)	7 (1)	13 (2)	4 (<1)	0

NB: Normal range 20-25 Overweight > 25-30 Obese > 30-35 Morbidly obese > 35

Referral Base

More than half of the patients seen (69%) are referred to the Department from within Western Sydney Local Health District (LHD) or the adjacent Nepean Blue Mountains LHD. Rural and regional referrals account for 17% of all patients, with the majority of these referrals from Western NSW and Murrumbidgee LHDs.

Table 15. Referral base by LHD

Local Health District (LHD)	2018 No. Patients (%)	2019 No. Patients (%)	2020 No. Patients (%)	2021 No. Patients (%)	2022 No. Patients (%)
Western Sydney LHD	284 (52)	257 (41)	345 (46)	317 (38)	389 (48)
Nepean Blue Mountains LHD	109 (20)	189 (30)	183 (25)	211 (25)	173 (21)
South Western Sydney LHD	30 (5)	41 (6)	57 (8)	157 (19)	64 (8)
Northern Sydney LHD	26 (5)	18 (3)	10 (1)	22 (3)	17 (2)
Sydney LHD	5 (1)	7 (1)	13 (2)	25 (3)	17 (2)
South Eastern Sydney LHD	0	1 (<1)	0	0	6 (<1)
Illawarra Shoalhaven LHD	0	2 (<1)	1 (<1)	1 (<1)	2 (<1)
Central Coast LHD	3 (<1)	2 (<1)	5 (<1)	2 (<1)	4 (<1)
Western NSW LHD	56 (10)	60 (10)	82 (11)	53 (6)	65 (8)
Murrumbidgee LHD	28 (5)	32 (5)	34 (5)	39 (5)	39 (5)
Southern NSW LHD	5 (2)	11 (2)	11 (1)	6 (<1)	11 (1)
Hunter New England LHD	1 (<1)	1 (<1)	2 (<1)	2 (<1)	13 (2)
Mid North Coast LHD	0	2 (<1)	0	1 (<1)	4 (<1)
Northern NSW LHD	1 (<1)	0	0	0	1 (<1)
Far West LHD	0	0	0	1 (<1)	0
Interstate / ACT	2 (<1)	3 (<1)	2 (<1)	2 (<1)	1 (<1)

CLINICAL TRIALS AND RESEARCH STUDIES

The Department, along with Radiation and Medical Oncology Units and the Familial Cancer Service, participates in a number of phase II and III clinical trials that explore better treatment options for patients with gynaecological cancers. The Department maintains a balance of trials sponsored by pharmaceutical companies and not-for-profit organisations through a strong association with the collaborative clinical research group, Australia and New Zealand Gynaecological Oncology Group (ANZGOG). ANZGOG is the peak clinical trials research group for gynaecological cancers in Australia and New Zealand.

Additionally, the Department has a strong translational research and basic science research group. Laboratory research is conducted in the Westmead Institute for Medical Research. The Department is also affiliated with the University of Sydney and is striving to rapidly translate research findings into new tests and treatments that will eventually be of benefit to patients.

Studies Open to Recruitment in 2022

Seventeen trials or research studies were active for all or part of 2022. Staff were able to consent 163 patients to clinical trials and studies which is similar to 2021. Some clinical trials have been difficult to recruit to because of eligibility criteria or because of competing trials offering different treatment options which may be more appealing to patients. Other trials closed early, world-wide, because of low accrual or safety issues.

Table 17. Trials and research studies open to recruitment

Name	Trial / Research Study / Audit	Local PI(s)	Status	No. patients recruited Total / 2022
GynBiobank	Research Study	Prof Anna DeFazio Prof Paul Harnett	Opened to recruitment 1992	1,634 / 72
INOVA <i>To implement molecular testing as routine for ovarian cancer patients, not including borderline cases</i>	Research study	Prof Anna DeFazio	Opened to recruitment Mar 2016	All sites 814 / 110 Westmead 347 / 54
NGOR <i>National GynaeOncology Register</i>	Opt-out study	Prof Alison Brand	Opened to recruitment Jan 2018	N/A
<i>Exploring the cell of origin model systems of non-high-grade serous ovarian cancer</i>	Research study	Prof Alison Brand Prof Anna DeFazio A/Prof Raghwa Sharma	Open to recruitment	N/A
<i>Partnering with patients and healthcare professionals to improve availability and access to high-quality support groups for people living with metastatic cancer across Australia</i>	Research study	Kim Hobbs (AI)	N/A	N/A
<i>Development of psycho-oncology telehealth recommendations: a Delphi study</i>	Research study	Kim Hobbs (AI)	N/A	N/A
KEYNOTE B96 (MK3475-B96) <i>A phase 3 randomized double-blind study of Pembrolizumab versus placebo in combination with Paclitaxel with or without Bevacizumab for platinum-resistant recurrent ovarian cancer</i>	Trial	A/Prof Bo Gao	Opened to recruitment 9/2/22	0/0
KEYNOTE C93 (MK3475-C93) <i>A phase 3 randomized, open-label, active-comparator controlled clinical study of Pembrolizumab vs platinum doublet chemotherapy in participants with mismatch repair deficient (MMRD) tumours for first line treatment of advanced or recurrent endometrial cancer</i>	Trial	A/Prof Bo Gao	Opened to recruitment 18/5/22	0/0

VESPA <i>A phase 2 study of the use of vaginal oestrinol to prevent vaginal stenosis in patients treated with pelvic radiotherapy for gynaecological, rectal and anal malignancies</i>	Non-portfolio Trial	Prof Alison Brand	Opened to recruitment May 2014	33 / 8
Sentinel Node Audit <i>Prospective audit of sentinel node biopsy for vulvar carcinoma in Australia and New Zealand</i>	Audit	Prof Alison Brand	Opened to recruitment Oct 2013	28 / 8
PARAGON-II <i>A phase 2 basket study of an aromatase inhibitor plus PI3KCA inhibitor or CDK4/6 inhibitor in women with hormone receptor positive recurrent / gynaecological neoplasms</i>	Portfolio trial	A/Prof Bo Gao	Opened to recruitment 11/7/22	7 / 7
ICON 9 <i>A phase 3 randomised trial of Cediranib and Olaparib maintenance in patients with relapsed platinum sensitive ovarian cancer</i>	Portfolio trial	Prof Paul Harnett A/Prof Bo Gao	Opened to recruitment Apr 2019 Closed to recruitment 4/11/22	16 / 3
STICs and STONes <i>A randomised phase 2 double-blind, placebo-controlled trial of Acetylsalicylic acid (ASA) in the prevention of ovarian cancer in women with BRCA 1/2 mutation</i>	Non-portfolio trial	Prof Alison Brand A/Prof Judy Kirk	Opened to recruitment Feb 2020 Closed to recruitment 15/11/22	6 / 0
DUO-E (D9311C00001) <i>A randomised, multicentre, double-blind, placebo-controlled, phase 3 study of first line Carboplatin and Paclitaxel in combination with Durvalumab, followed by maintenance Durvalumab with and without Olaparib in patients with newly diagnosed advanced or recurrent endometrial cancer</i>	Trial	A/Prof Bo Gao	Opened to recruitment Mar 2021 Closed to recruitment 16/2/22	2 / 0
ECHO <i>A phase 2 randomised, controlled trial evaluating an exercise intervention among women undergoing chemotherapy for ovarian cancer</i>	Portfolio trial	Prof Alison Brand	Opened to recruitment Apr 2017 Closed to recruitment 31/1/23	43 / 6
TIPS <i>Testing individual interventions to optimize peri-operative care in ovarian cancer surgery (pilot)</i>	Portfolio trial	Prof Alison Brand	Opened to recruitment Feb 2020 Closed to recruitment 31/1/22	12 / 0
IGNITE <i>A phase 2 signal-seeking trial of Adavosertib (AZD1775) targeting recurrent high grade serous ovarian cancer with Cyclin E1 (CCNE1) over-</i>	Trial	A/Prof Bo Gao	Opened to recruitment Sep 2020	12 / 5

<i>expression with and without gene amplification</i>				Closed to recruitment 20/10/22	
A18 (MK3475-A18) <i>A randomised, phase 3, double-blind study of chemo-radiotherapy with or without Pembrolizumab for the treatment of high-risk, locally advanced cervical cancer</i>	Trial	A/Prof Bo Gao Dr Jennifer Chard	Opened to recruitment Sep 2020 Closed to recruitment 23/3/23	0 / 0	
MOST <i>Getting the MOST out of Ovarian Cancer Follow-up: a randomised controlled trial to compare three-monthly nurse-led follow-up via telehealth, including monitoring serum CA125 and patient reported outcomes using the MOST (Measure of Ovarian Symptoms and Treatment concerns) with routine clinic-based or telehealth follow-up, following completion of first-line chemotherapy in patients with epithelial ovarian cancer</i>	Trial	Prof Alison Brand	Opened to recruitment Jan 2022 Closed to recruitment Dec 2022	0 / 0	
TOTAL				2,140 / 163	

Trials Closed - Patients Still in Long-term Follow-up

Table 18. Trial patients in long-term follow up

Name	Trial / Research Study / Audit	Local PI(s)	Status
VELIA (M13-694) <i>Phase 3 placebo-controlled study of Carboplatin / Paclitaxel with or without concurrent and continuation maintenance Velaparib (PARP inhibitor) in newly diagnosed subjects with previously untreated Stages III or IV high grade serous epithelial ovarian, fallopian tube or primary peritoneal cancer</i>	Trial	A/Prof Bo Gao	1 patient in follow up
LEAP 001 (MK7902-001) <i>A phase 3 randomised, open-label study of Pembrolizumab (MK-3475) plus Lenvatinib versus chemotherapy for first-line treatment of advanced or recurrent endometrial carcinoma</i>	Trial	A/Prof Bo Gao	2 patients in follow-up
iPRIME <i>A phase 2 study of Durvalumab (PD1) (MED114736) and Tremelimumab (CTL4) in combination with neoadjuvant Carbo / Taxol in newly diagnosed women with advanced high grade serous ovarian, fallopian tube and peritoneal cancers</i>	Portfolio trial	A/Prof Bo Gao	2 patients in follow-up
ATHENA <i>A multicenter, randomized, double-blind, placebo-controlled phase 3 study of Nivolumab and Rucaparib combination switch maintenance following front-line Platinum-based chemotherapy in ovarian, fallopian tube, or primary peritoneal cancer patients</i>		A/Prof Bo Gao	2 patients in follow-up

MOCOG <i>Long-term survival in ovarian cancer</i>	Research study	Prof Anna DeFazio	N/A
PORTEC 3 <i>Randomised phase 3 trial comparing concurrent chemo-radiation and adjuvant chemotherapy with pelvic radiation alone in high-risk and advanced stage endometrial carcinoma</i>	Trial	Prof Alison Brand	15 patients in follow-up
TOTAL			22

RESEARCH GRANTS HELD

New Grants Awarded in 2022

New grant funding or project support was awarded for 5 new trials or research support.

Table 19. New research grants awarded

Funding Source	Title	Investigators	Grant Period and Amount
Cancer Australia Medical Research Future Fund (MRFF ID 2014936)	<i>ICON 9 - A phase 3 randomised trial of Cediranib and Olaparib maintenance in patients with relapsed platinum sensitive ovarian cancer</i>	Prof Linda Mileschkin (CIA), Prof Alison Brand	2022-2025 \$494,131
Sydney Cancer Partners Clinical Academic Group, Sydney Health Partners		Prof Anna DeFazio	2022 \$50,000
ANZGOG 2022 Fund for New Research Grants program.	<i>Pre-clinical testing of combined MEK and CDK4/6 inhibition for low-grade serous ovarian cancer</i>	Dr Tania Moujaber, Prof Rosemary Balleine, Prof Anna DeFazio for the INOVATe investigators	2022 \$99,938
Sydney Cancer Partners Scholarship PhD Scholarship		Dr Seema Kumari	2022-24 \$93,451
Sydney Cancer Partners Scholarship PhD Scholarship[p		Nikilyn Nevins	2022-2025 \$125,825
TOTAL			\$813,395

Previous Grants Awarded and Still Held in 2022

Grant funding was carried over into 2022 (or beyond) for 13 clinical trials or research projects.

Table 20. Research grants carried over

Funding Source	Title	Investigators	Grant Period and Amount
Medical Research Future Fund (MRFF) Clinical Trials Activity (Rare cancers, rare diseases and unmet needs)	<i>PARAGON-II: Phase 2 basket study of an aromatase inhibitor plus P13KCA inhibitor or CDK4/6 inhibitor in women with hormone receptor positive recurrent / metastatic Gynaecological Neoplasms</i>	Prof Ching Kwan Lee, Prof Michael Friedlander, Prof Clare Scott, Prof Sherene Loi, A/Prof Tarek Meniawy, A.Prof Jeffrey Goh, Prof Anna DeFazio , Prof Alicia Jenkins, Dr Alison Davis, Dr Rachel O'Connell	2020 – 2023 \$1,995,422
Medical Research Future Fund (MRFF) (MRFF1199155)	<i>HyNOVA – a randomised study comparing hyperthermic and normothermic intraperitoneal chemotherapy following interval cytoreductive surgery for stage</i>	A/Prof Rhonda Farrell, Prof Alison Brand (AI)	2020 - 2023 \$686,674

	<i>III epithelial ovarian, fallopian tube and primary peritoneal cancer</i>		
Cancer Council NSW Translational Program Grant TPG 20-01	<i>INOVAte 2.0 – Individualised ovarian cancer treatment through integration of genomic pathology into multidisciplinary care – Phase 2: evaluation, implementation and integration into clinical practice</i>	Prof Anna DeFazio, Prof Paul Harnett, Prof Michael Friedlander, Prof Rosemary Balleine, Prof David Bowtell, Dr Goli Samimi, Prof Alison Brand, Prof Deborah Marsh, A/Prof Philip Beale, A/Prof Lyndal Anderson	2020 – 2024 \$3,747,602
Medical Research Future Fund (MRFF) (MRFF1200102)	<i>Measuring adherence to best clinical practice guidelines for the management of ovarian cancer in Australia to determine the extent to which variation in care influences clinical and patient-reported outcomes</i>	Prof John Zalcborg, A/Prof Robert Rome, Janice Antony, Prof Penelope Schofield, Prof Alison Brand , Prof Gary Richardson, A/Prof Rhonda Farrell, Prof Sue Evans, Sue Hegarty, A/Prof Arul Earnest	2020 - 2025 \$3,520,935
Medical Research Future Fund (MRFF) (MRFF1200503)	<i>Ovarian cancer: investigating variance in care, survival, aetiology and risk factors to improve outcomes in Australia via National data linkage: the OVARIAN study</i>	Prof Penelope Webb, Prof Alison Brand (AI)	2020 - 2025 \$2,707,035
Department of Defence. U.S. Army Medical Research and Material Congressionally Directed Medical Research Programs Ovarian Cancer Research Program (OCRP) Protogenomics Research Award OC200511	<i>Going to extremes: Learning from exceptional responders to improve outcomes for women with high-grade serous ovarian cancer</i>	Prof David Bowtell, Prof Brad Nelson, Prof Thomas Conrads, Dr Lyndal Maxwell, Prof Anna DeFazio , Dr Dale Garsed, Dr Kathryn Alsop, Prof Ellen Goode	2021 – 2023 \$US262.345 (Sub-award (\$US9,585) (~\$AUD13,300)
NH&MRC Clinical Trials and Cohort Studies APP2006101	<i>Prospective ovarian cancer cohort to authenticate stratification of prognosis in ovarian tumour (POCCA-SPOT)</i>	Prof Susan Ramus, Prof Anna DeFazio , Prof Michael Friedlander, Dr Paul Pharoah, Prof James Brenton, Prof Iain McNeish, A/Prof Martin Köebel, A/Prof Aline Talhouk, Dr Beth Karlan, C Wakefield	2021 – 2026 \$993,580
Cancer Institute NSW: Translational Cancer Research Capacity Building Grant 2021/CBG0002	<i>Sydney Health Partner (Sydney Cancer Partners)</i>	Prof Anna DeFazio	2021 – 2026 \$6,999,805
NSW Ministry of Health	<i>Extending the benefit of targeted therapy for women with ovarian cancer</i>	Prof Anna DeFazio	2021 - 2022 \$200,000

Westmead Charitable Trust ECR Medical Clinician Researcher Grant 2021	<i>Molecular drivers and targeted treatment in low-grade serous ovarian cancer</i>	Dr Tania Moujaber	2021 – 2022 \$240,000
ICPMR Jerry Koutts Scholarship	<i>PhD Scholarship</i>	Dr Seema Kumari	2021 – 2022 \$41,831
Westmead Institute for Medical Research Eliza's Student Support Scheme	<i>PhD support</i>	Dr Seema Kumari	2021 - 2022 \$1,000
Westmead Institute for Medical Research Eliza's Student Support Scheme	<i>PhD support</i>	Nikilyn Nevins	2021 - 2022 \$1,000
		Total (New)	\$813,395
		Total (Cont'd)	\$21,106,353
		GRAND TOTAL	\$21,919,748

MULTIDISCIPLINARY TEAM PROFILE

Gynaecological Oncologists

Professor Alison Brand AM: (Director) MD, MMed, FRCS(C), FRANZCOG, CGO

Professional Memberships

- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)
- Australian Society of Gynaecological Oncologists (ASGO)
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)
- Australian Medical Association (AMA)
- Clinical Oncology Society of Australia (COSA)
- International Gynecologic Cancer Society (IGCS)
- Royal College of Physicians and Surgeons of Canada (RCPSC)
- Society of Obstetricians and Gynaecologists of Canada (SOGC)
- Gynaecologic Oncologists of Canada (GOC)

Committee Appointments

- Australian Government Department of Health
Member, Clinical Expert Panel; Cervical Screening, Cancer Policy and Services Branch
- ANZGOG
Board Member
Member, Research Advisory Committee
Member, TR-ANZGOG Steering Committee
Deputy Chair, Endometrial cancer initiative steering committee
Member, OASIS Steering Group (*Ovarian cancer Alliance for Signal-Seeking clinical trials*)
Member, Research Management Group Committee
Member, Operations Executive Committee
Member, Quality Assurance Committee (past chair)
Member, Trial Management Committee, TIPS
Member, Trial Management Committee, STICs and STONes
- Gynaecological Cancer Inter-Group (GCIG)
Chair (as at Oct 2022)
Non-member Director, Board of Directors
Member, GCIG Executive Committee
- RANZCOG
Training Supervisor, Certification in Gynaecological Oncology (CGO)
Examiner, Certification in Gynaecological Oncology
- National Gynae-oncology Registry (NGOR)
Member, Steering Committee
Chair, Endometrial Cancer Working Group
- Cancer Council NSW
Lead Reviewer, *Understanding cancer of the vulva and vagina* consumer booklet
- GynBiobank at Westmead: Member, Management Committee

Supervision, RANZCOG Trainee Research Projects

- Dr Leon Foster: *Survey of uptake of sentinel lymph node biopsy in endometrial cancer patients in Australia and New Zealand*

- Dr Leon Foster: *Outcomes with intra-peritoneal chemotherapy at Westmead Hospital*

Dr Unine Herbst: MBChB, FCOG(SA), MMed (O&G) (UP), FRANZCOG, CGO

Professional Memberships

- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)
- Australian Society of Gynaecological Oncologists (ASGO)
- European Society of Gynaecological Oncology (ESGO)
- Australian Society for Colposcopy and Cervical Pathology (ASCCP)

Dr Michael Burling: BHB, MBChB, PGDipOMG, FRANZCOG, CGO

Professional Memberships

- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)
- Australian Society of Gynaecological Oncologists (ASGO)
- European Society of Gynaecological Oncology (ESGO)
- Society of Gynecologic Oncology (SGO)
- Pacific Medical Association (PMA)

Committee Appointments

- ANZGOG
Member, Endometrial Cancer Working Group
- National Gynae-oncology Registry (NGOR)
Member, Cervical Cancer Working Group
Member, Rare Tumour Working Group
- Western Pacific Gynaecological Oncology Liaison Group (Chair)

Supervision, RANZCOG Trainee Research Projects

- Dr Elizabeth Correy: *Surgical management of cervical cancer in the Westmead Gynaecology Unit: An audit*

Clinical Fellows

Dr Leon Foster: BA, MBBS, MPH, FRACGP, FRANZCOG
RANZCOG CGO Training Program (until from Feb 2022)

Professional Memberships

- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)

Supervision

- Registrars and Resident Medical Officers rotating through the Gynaecological Oncology Department as part of Women's and Newborn Health and RANZCOG training program

Dr Gaithri Mylveganam: MBBS, MPH
RANZCOG CGO Training Program (from February 2022)

Professional Memberships

- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)

- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)
- European Society of Gynaecological Oncology (ESGO)
- Society of Gynecologic Oncology (SGO)

Supervision

- Registrars and Resident Medical Officers rotating through the Gynaecological Oncology Department as part of Women's and Newborn Health and RANZCOG training program

Dr Marilyn Boo: BSc, MBChB, PGDipOMG, FRANZCOG
Unaccredited Fellow (from February 2022)

Professional Memberships

- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)

Supervision

- Registrars and Resident Medical Officers rotating through the Gynaecological Oncology Department as part of Women's and Newborn Health and RANZCOG training program

Nursing and Allied Health

Quintina Reyes (Clinical Nurse Consultant): BN, Grad Cert Cancer Nursing, FACN

Professional Memberships

- Australian College of Nursing (CAN)
- Agency for Clinical Innovation (ACI), Gynaecological Oncology Nurses Group (GONG)
- Cancer Nurses Society of Australia (CNSA)

Kim Hobbs (Specialist Clinical Social Worker): BSocStuds Hons, MSW

Professional Memberships

- Clinical Oncology Society of Australia (COSA)
- Oncology Social Work Australia and New Zealand (OSWANZ)
- NSW Social Workers Oncology Group (SWOG)
- Psycho-Oncology Co-operative Research Group (PoCoG)
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)
- NSW Agency for Clinical Innovation (ACI), Gynaecological Oncology Nurses Group (GONG)
- Honorary Associate, Faculty of Health, University of Technology Sydney

Committee Appointments

- Agency for Clinical Innovation (ACI)
Member, Gynaecological Oncology Nurses Group (GONG), ACI
- Australian Centre for Prevention of Cervical Cancer (ACPCC)
Member, National Strategy for the Elimination of Cervical Cancer Working Group
- Cancer Council NSW
Member, Health Services Advisory Group
- Clinical Oncology Society of Australia (COSA)
Member, COSA Survivorship Group – Financial Toxicity Working Group
OSWANZ Representative, COSA
- National Cervical Screening Program (NCSP)
Working Group Member, NCSP Guidelines

- Oncology Social Work Australia and New Zealand (OSWANZ)
Member, OSWANZ Committee
- Ovarian Cancer Australia (OVCA)
Member, Scientific and Clinical Expertise Advisory Panel
Member, Resilience Kit Advisory Group
- Psycho-Oncology Co-operative Research Group (PoCoG)
Member, Scientific Advisory Committee
- Westmead Hospital
Member, End of Life Committee
Leadership Member, Westmead Hospital Schwartz Rounds
- Western Sydney Local Health District (WSLHD)
Social Work representative Allied and Community Health Research Steering Committee
Committee Member, Palliative Care Governance Committee

Suparna Karpe (Clinical Psychologist): MA (Clin Psych), MPhil (Clin Psych)

Professional Memberships

- Agency for Clinical Innovation (ACI)
- American Psycho-oncology Society
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)
- Australian Psychological Society (APS)
- Psycho-Oncology Co-operative Research Group (PoCoG)
- Sydney West Translational Cancer Research Centre (SW-TCRC)

Committee Appointments

- Co-chair, Psychologists in Oncology Group NSW

Supervision

- Clinical psychologists in Western Sydney Local Health District
- Genetic counsellors in Westmead Familial Cancer Service

Translational Research and Bio-banking

Prof Anna DeFazio: BSc Hons, PhD

Professor, Sydney West Chair in Translational Cancer Research, University of Sydney; Director, Centre for Cancer Research, Westmead Institute for Medical Research; Director, Sydney Cancer Partners; Honorary Professor, Western Sydney Local Health District; Co-Leader, Ovarian Cancer Stream, The Daffodil Centre, The University of Sydney, a joint venture with Cancer Council NSW

Professional Memberships

- American Society for Clinical Oncology (ASCO)
- American Association for Cancer Research (AACR)
- Australian Society for Medical Research (ASMR)
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)
- Australasian Biospecimens Network Association (ABNA)
- International Gynecologic Cancer Society (IGCS)

Committee Appointments

- Australian Gynaecological Cancer Foundation
Scientific Advisory Committee
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)
Research Advisory Committee
Ovarian Tumour Working Group

Chair, Translational ANZGOG (TR-ANZGOG) Steering Group
PARAGON-II, Clinical Trial Management Committee

- Australian Ovarian Cancer Study (AOCS)
Management Committee
Access Committee
- Cancer Australia
Priority-driven Collaborative Research Scheme. Grant Review Committee
- CellBank Australia
Scientific Advisory Committee
- Genomic Cancer Clinical Trials Initiative
Scientific Steering Group
- GynBiobank at Westmead
Management Committee
Access Committee
- International Consortium for Low-Grade Serous Ovarian Cancer (ICLC)
Steering Committee
Chair, Translational Sub-committee
- Ovarian Cancer Australia
Co-chair, Clinical and Scientific Expert Advisory Panel
- University of Sydney
Convenor, Cancer Research Network Steering Committee
- Westmead Institute for Medical Research (WIMR)
Faculty
Faculty Executive
Research Hub, Biobank Scientific Advisory Committee

Research Supervision

- Nicola Meagher: University of NSW PhD candidature (co-supervisor with Prof Susan Ramus and Prof Michael Friedlander), *Unravelling mucinous tumours of the ovary and intestinal tract: diagnosis, classification and molecular profiling*
- George Joun: University of Sydney PhD candidature (co-supervisor with Dr Naisana Seyedasli and Dr James Cornwell), *Dissecting the cellular and molecular regulation of chemo-resistance in human epithelial carcinoma*
- Dr Seema Kumari: University of Sydney PhD candidature (co-supervisor with Prof Paul Harnett and Dr Tania Moujaber), *Response to targeted treatment and chemotherapy in low-grade serous ovarian cancer*
- Nikilyn Nevins: University of Sydney PhD candidature (co-supervisor with Clinical Prof Rosemary Balleine and Dr Christina Mapagu), *Mechanisms underlying homologous recombination DNA repair deficiency in ovarian cancer and association with treatment response*

Catherine Kennedy (GynBiobank and Research Manager): BSc Hons

Professional Memberships

- Australasian Biospecimens Network Association (ABNA)
- International Society for Biological and Environmental Repositories (ISBER)
- Australia and New Zealand Gynaecological Oncology Group (ANZGOG)

Committee Appointments

- Australian Biospecimens Network Australia (ABNA)
Management Committee
- GynOncology Biobank at Westmead
Management Committee
Operational Committee
- International Society for Biological and Environmental Repositories

International Tissue Repository Locator Working Group
Science Policy Committee

- Proteome of Human Cancer (ProCan) Sample Source Review Committee -Children's Medical Research Institute (CMRI)
- TR-ANZGOG Network Laboratory Committee

PUBLICATIONS

Peer Reviewed Journals

Members of the Department as well as those of affiliated units contributed to 29 articles that were published or accepted for publication in peer reviewed journals.

1. Cunningham JM, Winham SJ, Wang C ... **Brand AH, Chiew Y-E ... Kennedy CJ ... DeFazio A** ... Goode EL. *DNA Methylation Profiles of Ovarian Clear Cell Carcinoma*. Cancer Epidemiol Biomarkers Prev. 2022 Jan; 31(1):132-141
2. Dareng EO, Tyrer JP, Barnes DR ... **Chiew Y-E ... OPAL Study Group, AOCs Study Group ... DeFazio A** ... Pharoah PDP. *Polygenic risk modelling for prediction of epithelial ovarian cancer risk*. Eur J Hum Genet. 2022 Jan 14; Vol 30: 349–362
3. **Foster L, Burling M, Brand A**. *The utilisation of sentinel node biopsy for endometrial cancer in Australia and New Zealand*. Aust N Z J Obstet Gynaecol. 2022 Feb; 62(1):104-109
4. Beesley VL, Ross TL, King MT ... **DeFazio A** ... Friedlander M, on behalf of the **OPAL Study Group**. *Evaluating patient-reported symptoms and late adverse effects following completion of first-line chemotherapy for ovarian cancer using the MOST (Measure of Ovarian Symptoms and Treatment concerns)*. Gynecol Oncol. 2022 Feb;164(2):437-445. doi: 10.1016/j.ygyno.2021.12.006. Epub 2021 Dec 24
5. **Boo M**, Sykes P, Simcock B. *Use of direct oral anticoagulants for postoperative venous thromboembolism prophylaxis after surgery for gynaecological malignancies*. Int J Gynecol Cancer. 2022 Feb; 32(2):189-194. doi: 10.1136/ijgc-2021-003006. Epub 2022 Jan
6. Pockett R, **Hobbs K**. *Social work and cancer: The unique contribution of social workers*. Australian Social Work. 2022 Mar; 75(2):133-34 doi: 10.1080/0312407X.2021.1988664
7. Cohen P, Webb P, King M ... **Brand A**... Friedlander M. (Apr 2022). *Getting the MOST out of follow-up: a randomized controlled trial comparing three-monthly nurse-led follow-up via telehealth, including monitoring CA125 and patient reported outcomes using the MOST (Measure of Ovarian Symptoms and Treatment concerns) with routine clinic-based or telehealth follow-up, following completion of first-line chemotherapy in patients with ovarian cancer*. Int J Gynecol Cancer. 2022 Apr; 32(4):560-565. doi: 10.1136/ijgc-2021-002999
8. Karaitis K, Madut AS, Subramanian ... **Brand A ... DeFazio A**. *Sleep symptom-related phenotypic clustering differs across three cancer specific patient cohorts*. J Sleep Res. 2022 Oct; 31(5):e13588. doi: 10.1111.jsr.13588. Epub 2022 Apr
9. Heinze K, Nazeran T, Lee S ... **Kennedy CJ, Boros J ... Sharma R, Brand AH, Harnett PR, DeFazio A** ... Anglesio MS. *Validated biomarker assays confirm ARID1A loss is confounded with MMR deficiency, CD8 TIL infiltration, and provides no independent prognostic value in endometriosis-associated ovarian carcinomas*. J Pathol. 2022 April; 256 (4) 388-401
10. Wohlmuth C, Djedovic V, Kjaer S ... **DeFazio A** ... May T. *CA-125 levels are predictive of survival in low-grade serous ovarian cancer – a multicenter analysis*. Cancers (Basel). 2022 Apr 13;14(8):1954. doi: 10.3390/cancers14081954
11. Gordon LG, Nabukalu D, Chan R ... **Hobbs K** ... McLeone J on behalf of the COSA Financial Toxicity Working Group. *Opinions and strategies of Australian health professionals on tackling cancer-related financial toxicity: A nationwide survey*. Asia Pac J Clin Oncol. 2023 Feb;19(1):126-135. doi: 10.1111/ajco.13786. Epub 2022 May 19
12. Bolton K, Chen D, de la Fuente R ... **Brand A, Chiew Y-E ... DeFazio A** ... Papaemmanuil E. *Molecular subclasses of clear cell ovarian carcinoma and their impact on disease behaviour and outcomes*. Clin Cancer Res. 2022 Jul 11. doi: 10.1158/1078-0432.CCR-21-3817.

13. Kang EY, Millstein J, Popovic G ... **Boros J, Brand A, Harnett PR, Kennedy CJ, Nevins N ... DeFazio A** ... Köbel M. *MCM3 is a novel proliferation marker associated with longer survival for patients with tubo-ovarian high-grade serous carcinoma.* Virchows Arch. 2022 April; 480:4:855-871
14. Gersekowski K, Delahunty R, Alsop K ... **DeFazio A ... OPAL Study Group, AOCS Study Group**, Webb P. *Germline BRCA variants, lifestyle and ovarian cancer survival.* Gynecol Oncol. 2022 Jun; 165(3):437-445. doi: 10.1016/j.ygyno.2022.03.020. Epub 2022 Apr 7
15. Guccione L, Fisher K, Mileskin ... **DeFazio A ... Gao B ... Schofield P.** *Uncertainty and the unmet informational needs of patients with cancer of unknown primary (CUP): a cross-sectional multi-site study.* Support Care Cancer. 2022 Oct; 30(10):8217-8229. doi: 10.1007/s00520-022-07228-7. Epub 2022 Jul 9
16. Sandeford J, Anderson L, **Burling M**, Carter J. *Vulvar granular cell tumour in a recently post-partum woman: a case report.* Eur J Gynaecol Oncol. 2022 Aug 15; 43(4):96-100
17. Chou H-H, Fereday S, **DeFazio A ... AOCS Study Group** ... Kim B-G. *Contrasting clinical characteristics and treatment patterns in women with newly diagnosed advanced stage epithelial cancer in Australia, South Korea and Taiwan.* J Gynecol Oncol. (Accepted for publication 26 August 2022)
18. Allanson E, **Burling M**, Yao S, Moloney K, Rajadevan N. *Cancer in pregnancy.* O&G Magazine – Cancer. Spring 2022; 21(3)
19. Yap S, Vassallo A, Goldsbury D ... **Brand A ... DeFazio A ... Steinberd J.** *Pathways to diagnosis of endometrial and ovarian cancer in the 45 and Up study cohort.* Cancer Causes Control. 2023 Jan; 34(1):47-58. doi: 10.1007/s10552-022-01634-2. Epub 2022 Oct 9
20. Weir A, Kang E-Y, Meagher N ... **Boros J, Brand A ... Harnett PR ... Kennedy CJ ... DeFazio A ... AOCS Study Group** ... Ramus S. *Increased FOXJ1 protein expression is associated with improved overall survival in high-grade serous ovarian carcinoma: an Ovarian Tumor Tissue Analysis Consortium study.* British Journal of Cancer. 2022 Nov 2. doi: 10.1038/s41416-022-02014-y
21. Brieger K, Phung MT, Mukherjee B ... **DeFazio A ... Ovarian Cancer Association Consortium.** *High pre-diagnosis inflammation-related risk score associated with decreased ovarian cancer survival.* Cancer Epidemiol Biomarkers Prev. 2022 Feb; 31(2):443-452. doi: 10.1158/1055-9965.EPI-21-0977. Epub 2021 Nov 17
22. **Moujaber T, Balleine R, Gao B, Madsen I, Harnett PR, DeFazio A.** *New therapeutic opportunities for women with low-grade serous ovarian cancer.* Endocr Relat Cancer. 2021 Nov 11; 29(1):R1-R16. doi: 10.1530/ERC-21-0191
23. DeVries AA, Dennis J, Tyrer JP ... **DeFazio A ... OPAL Study Group, AOCS Study Group** ... Jones MR. *Copy number variants are ovarian cancer risk alleles at known and novel risk loci.* J Natl Cancer Inst. 2022 Nov 14;114(11):1533-1544. doi: 10.1093/jnci/djac160
24. Garsed DW, Pandey A, Fereday S, **Kennedy CJ ... Chiew Y-E ... Provan P ... Brand A ... Harnett P ... DeFazio A**, Bowtell D. *The genomic landscape of high-grade serous ovarian cancer in long-term survivors.* Nature Genetics. Vol 54:1853–1864. Published online Dec 2022
25. Meagher N, Gorringer K, Wakefield M ... **Boros J ... AOCS Study Group, Brand AH ... Harnett PR ... Kennedy CJ ... DeFazio A** ... Ramus S. *Gene expression profiling of mucinous ovarian tumors and comparison with upper and lower gastrointestinal tumors identifies markers associated with adverse outcomes.* Clin Cancer Res. 2022 Dec 15; 28(24):5383-5395. doi: 10.1158/1078-0432.CCR-22-1206

26. Ho GY, Kyran EL, Bedo J... **DeFazio A** ... Barker HE. *Epithelial-to-mesenchymal transition supports ovarian carcinosarcoma tumorigenesis and confers sensitivity to microtubule-targeting with eribulin.* Cancer Res. 2022 Dec 2; 82(23):4457-4473. doi: 10.1158/0008-5472.CAN-21-4012
27. Subramanian H, Fuchsova V, Elder E, **Brand A** ... **DeFazio A** ... Karaitis K. *Screening for obstructive sleep apnoea in post-treatment cancer patients.* Cancer Reports. Published online 2022 Dec 13. doi: 10.1002/cnr2.1740
28. Kang E-Y, Weir A, Meagher N ... **Boros J, Brand A** ... AOCS Group ... **Harnett PR** ... **Kennedy CJ** ... **DeFazio A** ... Köbel M. *CCNE1 and survival of patients with tubo-ovarian high-grade serous carcinoma: an Ovarian Tumor Tissue Analysis Consortium study.* Cancer. Published on line 2022 Dec 26. doi: 10.1002/cncr.34582
29. Majidi R, Na S, Jordan A, **DeFazio A** ... Webb P and **OPAL Study Group.** *Common analgesics and ovarian cancer survival: the Ovarian cancer Prognosis And Lifestyle (OPAL) study.* J Natl Cancer Inst. (Accepted for publication 2022 Dec 1)

CONFERENCES

Invited Speaker / Panellist

Prof Anna DeFazio. Teal Ribbon Federal Parliamentary Breakfast, 9 Feb 2022 (Keynote speaker, virtual meeting)

Prof Anna DeFazio. *Sydney Cancer Partners.* Research capacity building grant plans for 2021-26. NSW Cancer Research Education. Statewide Seminar Series 2022.15 Feb 2022 (Invited speaker)

Prof Anna DeFazio. *Low grade serous ovarian cancer: GENOMICS.* ICLC Retreat, 17 Mar 2022 (Invited speaker, virtual meeting)

Dr Cristina Mapagu. *Assessment of HR deficiency in ovarian cancer to increase PARP inhibitor targets beyond BRCA1/2.* Illumina Satellite Symposium to ANZGOG Annual Scientific Meeting, Melbourne, 22 Mar 2022 (Invited speaker)

Prof Alison Brand. *HPV: More important than ever in gynae cancer.* ANZGOG Annual Scientific Meeting, Melbourne, 23-26 March 2023 (Invited speaker)

Prof Alison Brand. Rare Tumours Workshop. ANZGOG Annual Scientific Meeting, Melbourne, 23-26 March 2023 (Panel member)

Suparna Karpe. *Mindful-based therapies in oncology.* Gynaecological Oncology Nurses Group (GONG) Annual Conference, Royal Prince Alfred Hospital, 20 May 2022 (Invited speaker)

Prof Anna DeFazio. *Mentorship, funding and resilience in the changing research landscape.* Cancer Institute NSW Fellow's Forum, 3 Jun 2022 (Invited speaker)

Prof Anna DeFazio. *Harnessing new treatment opportunities for ovarian cancer.* Drug Discovery Initiative and Cancer Research Network Workshop, University of Sydney, 8 Jun 2022 (Invited speaker)

Prof Anna DeFazio. Opening address. Sydney Cancer Partners, One Year Anniversary Forum. 20 Jul 2022 (Invited speaker)

Prof Anna DeFazio. KPMG (Risk Strategy and Technology) Ovarian Cancer and Precision Medicine, 28 Jul 2022 (Invited speaker, virtual meeting)

Dr Michael Burling. *Cancer outcomes for indigenous populations. Can we do better.* AGES Focus Meeting, 11-12 August 2022 (Invited speaker)

Prof Anna DeFazio. Young Australian's Cancer Initiative, *Cancer Research at WIMR*. High School Cancer Symposium, Westmead Institute for Cancer Research, 18 Nov 2022 (Invited speaker)

Burling M. *Gynae Oncology as a career*. AGES Annual Scientific meeting, 3-5 November 2022, Melbourne (Invited speaker)

Prof Anna DeFazio. Pink Hope. *Tumour testing for cancer*. Panel discussion, Sydney, 30 Nov 2022 (Panelist)

Prof Anna DeFazio. WIMR Foundation. Discovery Partners End of Year Event. MC and Cancer Research Overview. Westmead Institute for Cancer Research, 1 Dec 2022 (Invited speaker and MC)

Organising / Chairing Conference Sessions

Prof Anna DeFazio. *Translational genomics and precision medicine*. NSW Cancer Conference. 15-16 Sep 2022 (Session Chair and Panelist)

Catherine Kennedy. *Biobanking – Blue Sky Horizons*. Australasian Biospecimen Network Association 19th Annual Conference, Perth, 19-21 Oct 2022 (Session Chair)

Oral Presentations, Posters and Lectures

Hobbs K. *The impact of cancer on families: Assessment and intervention*. Lecture to University of Sydney Post-Graduate Nursing Course, Navigating the Cancer Experience

Posner A, Wong HL, Sivakumaran T ... DeFazio A ... Tothill R. *Establishing tumour organoid models of cancer of unknown primary enables invitro testing of genomically informed and individualised drug treatments*. Lorne Cancer Conference, Lorne 10-12 Feb 2022

Meagher NS, Gorringer KL, Wakefield M ... Boros J, Kennedy CJ ... DeFazio A ... Ramus SJ. *Prognostic features of mucinous ovarian cancer: an ovarian tumour tissue analysis consortium study*. ANZGOG Annual Scientific Meeting, Melbourne 23-26 Mar 2022

Pavanello M, Ariff A, Bolithon ... DeFazio A ... Ramus SJ. *Cancer susceptibility genes in non-high-grade serous ovarian cancer*. ANZGOG Annual Scientific Meeting, Melbourne, 23-26 Mar 2022

Hobbs K. *Managing psychosocial distress in the context of cervical screening*. NSW Aboriginal Cervical Screening Network meeting. Mar 2022

Hobbs K. *Assessing and responding to sexuality and intimacy concerns*. OSWANZ webinar, Mar 2022

Bouantoun N, Provan P, Boros J, Chiew Y-E, Kennedy CJ, Lee E, Mapagu C, Nevins N, Pavanello M, Srirangan S, Athavale R, Burling M ... Gao B ... Herbst U ... Balleine R ... Brand A ... Harnett P ... DeFazio A for the INOVATe Investigators. *The INOVATe Study: Individualising treatment for ovarian cancer patients*. Westmead Association Research Session. Westmead (virtual) 8 March 2022 (**PRIZE AWARDED** - Poster)

Madsen I, Moujaber T, Gao B, Provan P for the INOVATe Investigators, **Srirangan S, Mapagu C, Bouantoun N, Kennedy CJ, Chiew Y-E, Boros J, Nevins N, Sharma R, Traficanti N** for the **Australian Ovarian Cancer Study Group ... Brand A ... Balleine R, Harnett PR, DeFazio A.** *Targeting cyclin-dependent kinase 4/6 low-grade serous and mucinous ovarian cancer cell lines*. Westmead Association research Session. Westmead (virtual), 8 Mar 2022 (Poster)

Boo M. *Use of direct oral anticoagulants for postoperative venous thromboembolism prophylaxis after surgery for gynaecological malignancies.* ASGO Annual Scientific Meeting, Melbourne, 27 April – 2 May 2022 (Oral presentation)

Boo M. *Endometrial cancer recurrence on a foot – an unusual tale.* ASGO Annual Scientific Meeting, Melbourne, 27 April – 2 May 2022 (Poster)

Burling M. *Participation in gynaecological oncology clinical trials at Westmead Hospital Gynaecology Unit: Who, when, why and why not.* ASGO Annual Scientific Meeting, Melbourne, 27 April – 2 May 2022 (Oral presentation)

Burling M. *Sentinel lymph node mapping for uterine cancer: An approach to fulfil the Surgical Competency Assessment tool and to improve CGO Fellow training.* ASGO Annual Scientific Meeting, Melbourne, 27 April – 2 May 2022 (Oral presentation)

Burling M. *The use of ICG lymphatic channels to identify the uterine artery during sentinel lymph node mapping for uterine cancer.* ASGO Annual Scientific Meeting, Melbourne, 27 April – 2 May 2022 (Oral presentation)

Foster L. *The use of intra-peritoneal chemotherapy for advanced ovarian cancer. The Westmead experience 2016 – 2018.* ASGO Annual Scientific Meeting, Melbourne, 27 April – 2 May 2022 (Oral presentation)

Hobbs K. *Voluntary assisted dying.* Australian Association of Social Workers Connect: Ed webinar, Jul 2022

Hobbs K. *Challenges of advanced cervical cancer: Observations from the front line.* National Cervical Cancer Elimination Strategy Project, Jul 2022

Madsen I, Moujaber T, Gao B, Provan P for the **INOVA** Investigators, **Srirangan S, Mapagu C, Bouantoun N, Kennedy CJ, Chiew Y-E, Boros J, Nevins N, Sharma R, Traficante N** for the **Australian Ovarian Cancer Group, Brand A ... Balleine R, Harnett P, DeFazio A.** *Cyclin-dependent kinase 4/6 inhibition in low-grade serous and mucinous ovarian cancer cell lines.* NSW Cancer Conference, Sydney 15-16 Sep 2022 (Poster)

Provan P, Bouantoun N, Boros J, Chiew Y-E, Kennedy CJ, Lee E, Mapagu C, Nevins N, Pavanello M, Srirangan S ... Burling M ... Gao B ... Herbst U ... Samra S ... Sharma R ... Balleine R ... Brand A ... Harnett P ... DeFazio A. *Optimizing molecular tumour profiling in the treatment of ovarian cancer patients: The INOVATE Study.* NSW Cancer Conference, Sydney, 15-16 Sep 2022 (Poster)

Burling M. *Systematic approach to identifying and the dissection of a posterior chain sentinel lymph node in endometrial cancer.* IGCS Annual Global Meeting, New York, 29 September – 1 October 2022 (Surgical video)

Hobbs K. *Ageism in cancer care.* COSA online forum, Nov 2022

CONSUMER and COMMUNITY ENGAGEMENT

Gynaecological Cancer Support Group

Due to COVID-19 restrictions, the Gynaecological Cancer Support Group was unable to have face-to-face meetings in 2022. Group members were kept up to date with regular emails about relevant webinars or other online activities.

Face-to-face meetings were planned to resume in 2023, subject to the evolving COVID-19 situation.

Industry, Community and Media Engagement

Suparna Karpe. *Carer well-being.* Series of 4 workshops for Pink Safari Inc.

Consumer and Community Representation on Research Committees

Again, we are incredibly grateful for the time and effort the following people have given to Westmead translational research and bio-banking:

- Sapna Lazarus
- Janet Taylor

Department of Gynaecological Oncology
Westmead Hospital
(Cnr Hawkesbury & Darcy Roads, Westmead)
PO Box 533
Wentworthville NSW 2145
AUSTRALIA

Phone: +61 2 8890 6801

Fax: +61 2 8890 8311

<http://www.wslhd.health.nsw.gov.au/WNH/Clinics---services/Gynaecological-cancer>