

# The 7<sup>th</sup> Symposium on Primary Breast Cancer in Older Women



**University of  
Nottingham**

UK | CHINA | MALAYSIA

**The Jubilee Hotel & Conferences, Nottingham**

**1<sup>st</sup> March 2024**

Theme: "Involving the Caregivers"

In association with:



INTERNATIONAL SOCIETY  
OF GERIATRIC ONCOLOGY

*Accredited by the Royal College of Surgeons of England for up to 5.25 CPD points*

Information to delegates:	
Wifi:	Is available free of charge in the Jubilee Hotel & Conferences
Programme, speakers' profiles and abstracts	<a href="http://www.futuremedicine.com/10.2217/fon-2024-0144">http://www.futuremedicine.com/10.2217/fon-2024-0144</a>
Slides:	Copies of the slides presented at the Symposium will be available on the Symposia webpage below following the event
Useful links:	Symposia webpage <a href="http://www.nottingham.ac.uk/medicine/breastmeetings">www.nottingham.ac.uk/medicine/breastmeetings</a>
	University of Nottingham <a href="http://www.nottingham.ac.uk">www.nottingham.ac.uk</a>
	International Society of Geriatric Oncology (SIOG) <a href="http://www.siog.org">www.siog.org</a>
<b>Evaluation forms:</b> You will be provided with a QR code to a feedback form on the day, after you have registered your attendance, you will be sent your certificate of attendance upon completion of the feedback form.	

## Welcome message

We would like to offer you a very warm welcome to the '7th Symposium on Primary Breast Cancer in Older Women'. Since 2010 (which was the first event), we are pleased to continue to host the Symposium both by the University of Nottingham and, since 2013, in association with the International Society of Geriatric Oncology (SIOG).

As before, we continue to have oral and poster presentations (with abstracts published in Future Oncology) and the award of the best oral and poster presentations, as well as discussion of multidisciplinary team (MDT) cases submitted by delegates.

Enjoy the event!

**Chair, Professor Kwok-Leung Cheung**

## The 7th SYMPOSIUM ON PRIMARY BREAST CANCER IN OLDER WOMEN

**Theme:** 'Involving the Caregivers'

**Host:** University of Nottingham, UK

**Chair:** Kwok-Leung Cheung

**Date:** Friday 1<sup>st</sup> March 2024

**Venue:** The Jubilee Hotel & Conferences, Nottingham, UK

**Background:**

- This will be the 7<sup>th</sup> symposium, the first one held in 2010. This event is the only one of this kind in the UK National, dedicated to the primary breast cancer in older women. The meetings have recently been organised in association with the International Society of Geriatric Oncology (SIOG).
- Kwok-Leung Cheung, the Symposium chair, is the UK Representative of SIOG. Members of the organising committee and key speakers include the past President of SIOG.
- Details of past symposia can be found: [www.nottingham.ac.uk/medicine/breastmeetings](http://www.nottingham.ac.uk/medicine/breastmeetings)

**Objectives:**

With an overall aim to personalize the management of primary breast cancer in older women, this event has the following specific objectives:

- To develop an in-depth understanding around the biology and treatment options
- To explore the specific physical and psychosocial needs and consideration including patients' perspective
- To gain insight into the development of a holistic and multidisciplinary management approach and the importance of supporting research

**Target participants:**

- Members of multidisciplinary clinical and research teams with an interest in optimising the management of primary breast cancer in older women – breast surgeons, oncologists, geriatricians, pathologists and clinical nurse specialists, as well as patient representatives.
- The main target audience will be within the UK and international delegates are welcome.

**Formats:**

As before, this will be in the form of presentations (lectures from the UK and international faculty) with a number of interactive discussions and sharing of patients' experience. We will continue to include oral and poster presentations, with abstracts to be published as a Supplement to *Future Oncology* (impact factor 3.3 [2022] and citable in PubMed/MEDLINE). We will continue to include a MDT case discussion.

**Auspices & CPD accreditation:**

SIOG auspices and accreditation by the Royal Colleges of Surgeons of England (which implies reciprocal recognition by other medical royal colleges) have been approved.

**Organising committee:**

Professor Kwok-Leung Cheung (Chair)

Dr Etienne Brain

Ms Maggie Ho

Professor Holly Holmes

Miss Ruth Parks

Mrs Sophie Starbuck

**Programme:**

Arrival and registration 09:00–09:45

**Welcome & introduction** (09:45–10:00)

	Presentation	Speaker	Affiliations
09:45–10:00	Welcome and introduction	Kwok-Leung Cheung	Professor of Breast Surgery and Medical Education, University of Nottingham; Consultant Breast Surgeon, University Hospitals of Royal Derby and Burton Hospital; UK National Representative, SIOG; Symposium Chair

**Session 1 Updates (10:00–11:15) Chair: Holly Holmes**

	Presentation	Speaker	Affiliations
10:00–10:30	Updates	Etienne Brain	Medical Oncologist, Institute Curie, Paris, France; Past President, SIOG
10:30–11:00	Challenges in clinical trials participation	Ruth Parks	
11:00–11:15	Discussion	Panel	

Coffee break and poster viewing (11:15–11:35)

**Session 2 Oral abstracts (11:35–12:40) Chair: Ruth Parks**

	Presentation	Speaker	Affiliations
11:35–12:20	Oral Abstracts		
12:20–12:40	MDT case discussion	Panel	

Lunch break and poster viewing (12:40–13:40)

**Session 3 Challenging Areas (13:40–14:55) Chair: Kwok-Leung Cheung**

	Presentation	Speaker	Affiliations
13:40–14:10	Neoadjuvant endocrine therapy – the Edinburgh experience	J Michael Dixon	Professor of Surgery and Consultant, Edinburgh Breast Unit, Western General Hospital, Edinburgh
14:10–14:40	Polypharmacy – is it relevant?	Holly Holmes	Vice President and Joan and Stanford Alexander Chair in Gerontology; Professor, UTHealth Houston, McGovern Medical School, USA
14:40–14:55	Discussion	All faculty	

Coffee break &amp; poster viewing (14:55–15:15)

**Session 4 Patients & caregivers (15:15–16:45) Chair: Etienne Brain**

	Presentation	Speaker	Affiliations
15:15–16:05	Interviewing patients and caregivers	Facilitated by Joanne York	Consultant Radiographer, Royal Derby Hospital
16:05–16:35	Involving patients and caregivers	Holly Holmes	Vice President and Joan and Stanford Alexander Chair in Gerontology; Professor, UTHealth Houston, McGovern Medical School, USA
16:35–16:45	Conclusion – summary and ways forward	Etienne Brain	Medical Oncologist, Institute Curie, Paris, France; Past President, SIOG

Close

**Acknowledgements:** The '7th Symposium on Primary Breast Cancer in Older Women' has been supported by the following companies, to whom we are grateful. The venue hire and subsistence for this Symposium has been sponsored by the following who have had no control over the educational content of this activity.

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## Speakers' profiles

**Kwok-Leung Cheung**

Kwok-Leung Cheung is Professor of Breast Surgery and Medical Education at the University of Nottingham. He qualified and trained in Hong Kong, was appointed as Consultant Breast Surgeon, Nottingham University Hospitals in 2001, and is now an Honorary Consultant Breast Surgeon at the University Hospitals of Derby and Burton. Professor Cheung has clinical and research interests in breast cancer and geriatric oncology. He has served many roles in the International Society of Geriatric Oncology (SIOG) where he is currently the Treasurer and Member of the Board and Executive Committee, and its UK National Representative. He is also a member of the Executive Committee of the European Society of Breast Cancer Specialists (EUSOMA), and of the Breast Cancer Clinical Guidelines Committee of the National Institute for Health and Care Excellence (NICE).

**J Michael Dixon**

I am the senior consultant breast surgeon in the Edinburgh Breast Unit at the Edinburgh Cancer Centre. I have a Personal Chair in Breast Surgical Oncology from the University of Edinburgh and I am Clinical Director of the Edinburgh Breast Cancer Now Research Group within the University's Institute of Genetics and Cancer. I was awarded the Order of the British Empire (OBE) Medal from HRH Queen Elizabeth II in 2013 for my work on improving understanding of breast diseases as well as the optimal management of benign and malignant breast conditions.

I pride myself on the patient centred care I provide and offer the full range of surgical options for the management of all breast disease including specialist surgical oncology procedures for immediate and delayed breast reconstruction, and I work closely with my Plastic Surgery colleagues to deliver these.

My research focuses on the use of endocrine agents in the management of breast cancer and endocrine drug resistance. I have pioneered the development and use of aromatase inhibitors worldwide given in the neoadjuvant setting in large operable and locally advanced breast cancers. I have developed new operative procedures to improve cosmetic outcomes including immediate lipofilling at the same time as cancer excision, and the use of lipofilling LD flaps in breast reconstruction. My work has advanced understanding and management of common benign breast conditions that have improved outcomes for patients internationally.

**Ruth Parks**

Ruth Parks is a breast surgery trainee in the East Midlands, UK and Honorary Assistant Professor at the University of Nottingham. She completed her PhD at the University of Nottingham in 2023 investigating the detailed biology of breast cancer in older women. Ruth was awarded a competitive fellowship from Nottingham Hospitals charity in order to complete this work and also an honorary fellowship from the Royal College of Surgeons of England. Ruth is a member of the International Society of Geriatric Oncology (SIOG) and is the Midlands representative for the Mammary Fold.

**Joanne York**

Joanne York has worked in breast care for many years. In 1991 she worked at the Nottingham breast unit as a mammographer, later working also as a mammography trainer. In 2003 she joined the Derby breast unit as an advanced practitioner. This role was influential to Joanne, encouraging her to extend her role. In 2013 she gained a Master's qualification in advanced practice and became a consultant radiographer. Joanne is now an integral part of the Radiology team within the Derby and Burton breast unit. Leading the radiology for the patients on primary endocrine therapy, she has an interest in improving the patient experience for older patients and patients with learning disabilities.

**Etienne Brain**

Etienne Brain, MD with a board certification in medical oncology (1993), works at Institut Curie since 1998. After a fellowship in Boston in 1996 (Dana Farber Cancer Institute and Boston University), he obtained a PhD in 2005 from Université Paris V and a research supervision accreditation from Université Versailles/Saint-Quentin in 2010. He got a diploma in management and health economics from Bocconi University (Milan, IT, 2015). For more than 20 years, he has been very involved in clinical research for breast cancer and for cancer in older patients. He chaired the group GERICO (Unicancer) and the intergroup DIALOG labeled by INCa, both dedicated to clinical research for cancer in older persons. He chaired the breast cancer group of the European Organisation for Research and Treatment of Cancer (EORTC), and he is the EORTC Secretary General since 2021. He is an executive board member of the Breast International Group and past-president of the International Society of Geriatric Oncology. His works address the management of breast cancer, especially in older patients. He received the B.J. Kennedy Award for Scientific Excellence in Geriatric Oncology (ASCO 2022), the Michel Hery geriatric oncology Award (Monaco Age Oncology conference 2023) and the Prix Albert 1er of the Académie Nationale de Médecine (Biennale Monégasque de Cancérologie 2024).



#### Holly Holmes

Dr Holly Holmes is a professor and Joan and Stanford Alexander Chair in Gerontology. She is the Director of the Alexander Division of Geriatric and Palliative Medicine at McGovern Medical School at UTHealth in Houston, Texas. She is a geriatrician and epidemiologist, and a former pharmacist. Her clinical care is focused on comprehensive geriatric assessment, particularly in older adults with cancer. Her clinical and research interests are centered on optimizing medication use care for vulnerable older adults.

## Lecture abstracts

### Lecture 1: Updates

Etienne Brain

Institut Curie, France

Treatment for breast cancer has derived much benefit from important progresses achieved these past years. This is best exemplified by the development of targeted therapies including modern hormonotherapy and anti-HER2 treatments, the implementation of immunotherapy to the different stages of the disease, the development of prognostic and predictive tools to select the appropriate treatment according to tumour biology, the better diagnosis of emergence of resistance to treatments, etc. How these apply to older patients needs to be assessed with caution. Indeed most have been studied in younger patients or in highly selected and very few older ones. We shall review important recent data, especially for luminal breast cancer, the most frequent phenotype found at this age. This will allow us to discuss the right endpoints of evaluation in order to address better protection of quality of life, key aspect to older patients because related to feeling safe, feeling like a meaningful human being (taken fully into consideration) and maintaining control and independence.

#### Financial & competing interests disclosure

Etienne Brain has been in receipt of travel support from Daiichi, Gilead, Novartis and Pfizer; has been in receipt of honoraria from AstraZeneca, Daiichi, Eli Lilly, Incyte, Pfizer, Seagen and Takeda; and has been in receipt of consultation fees from Daiichi, Menarini, Pfizer and Sandoz. The author has no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the abstract apart from those disclosed.

No writing assistance was utilized in the production of this manuscript.

### Lecture 2: Polypharmacy: is it relevant?

Holly Holmes

McGovern Medical School at UTHealth in Houston, Texas

Polypharmacy has been defined in many ways, most commonly as the use of five or more medications. More than 40% of older adults in the UK and in the USA take five or more medications, exposing them to increased risks of drug interactions and potentially burdensome or unnecessary therapies. In the general older populations, polypharmacy is associated with an increased risks of inappropriate medication use, falls and hospitalizations. Evidence for the associations between polypharmacy and harm in older adults with cancer is mixed, with studies showing an increased risk of drug interactions and chemotherapy toxicity. Studies have not shown an association between polypharmacy and hospitalizations or mortality in older adults undergoing cancer therapy. Few studies are focused on breast cancer, and show similar associations. Older patients diagnosed with cancer are likely to have medications added, rather than reduced, to control cancer and disease- or treatment-related symptoms. A cancer diagnosis presents an opportunity to streamline a medication regimen to reduce the burdens of therapy and potentially improve treatment tolerance. A potential approach to reduce polypharmacy is deprescribing, which is a systematic process to reduce overmedication in light of an individual's overall health, prognosis, goals and preferences, as well as functional status.

#### Financial & competing interests disclosure

This study was funded by Blue Cross Blue Shield. The funder had no role in study design, data collection or reporting. The author has no other relevant affiliations or financial involvement with any organization or entity



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No writing assistance was utilized in the production of this abstract.

#### Ethical conduct of research

The author states that they have obtained appropriate institutional review board approval or have followed the principles outlined in the Declaration of Helsinki for all human or animal experimental investigations.

### Lecture 3: Neoadjuvant endocrine Therapy

J Michael Dixon

Edinburgh Breast Unit at the Edinburgh Cancer Centre

Neoadjuvant endocrine therapy (NET) in women with large or locally advanced estrogen receptor (ER)-rich breast cancer allows more women to be treated by breast-conserving surgery (BCS). In postmenopausal women show that neoadjuvant chemotherapy (NACT) has less efficacy than adjuvant chemotherapy. NET has high response rates in postmenopausal women with large ER rich breast cancers and aromatase inhibitors have a better response rate than tamoxifen. NET has similar response rates to NACT but produces less morbidity. Breast conservation rates are higher with NET than NACT because NET works by producing central scarring with concentric shrinkage. The optimum time of treatment of NET is probably 6–9 months and longer durations increase the numbers of women suitable for breast conserving surgery (BCS). NET is effective in both invasive lobular cancers and in inflammatory breast cancers. Response is better in patients with ER Allred score 7 and 8 cancers so we limit NET to this group. In 435 postmenopausal median duration of NET was 6.8 months. Clinical response was excellent with only 3.2% of tumours progressing. Adjuvant radiotherapy reduced local 5- and 10-year actuarial recurrence rates to 4 and 7%.

Early changes in proliferation with NET predict for long term outcome. NET allows insight into genomic and transcriptomic changes in response to ET and allows studies to better understand endocrine sensitivity and response. NET can be combined with cdk4/6 inhibitors to enhance response rates.

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### Lecture 4: Challenges in clinical trials participation

Ruth Parks

University of Nottingham, UK

The number of older adults living with cancer is increasing, especially in the field of breast cancer. Despite recognition that there is a clear lack of representation of older adults in clinical trials, including cancer trials, this remains an issue. Reasons for this are multifactorial and include protocol, patient and sponsor factors. There are two main issues 1) improving recruitment of older people to cancer clinical trials in general and 2) increasing research including clinical trials specifically exploring issues related to older people with cancer.

Potential solutions to overcome issues with trial design include varied methods of recruitment with flexible inclusion criteria. Possible alternatives to randomised trials include prospective cohort studies, pragmatic trials and the use of national population-based data sets. Patient factors may be addressed by integration of geriatric assessment, so patients can be randomised or treated based on their individual needs. Sponsors and supporting bodies need to be aware of the unique needs of this patient population.



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**Lecture 5: Involving Patients & Caregivers**

Holly Holmes

McGovern Medical School at UTHealth in Houston, Texas

Understanding the goals and preferences of patients and their caregivers is critical to optimal cancer care delivery and discovery. Patients diagnosed with breast cancer may already be struggling with several other medical problems and daily demands of medication, therapy, and monitoring, and a diagnosis of cancer can become overwhelming in this setting. Caregivers play a critical role in the daily care of patients with cancer, including medication management, monitoring of disease, providing for activities of daily living and providing critical social support, among many roles. Caregivers are at high risk of medical problems, such as heart disease and depression, due to the stressful demands of caregiving. Support of patients and caregivers will be discussed, along with specific strategies to help clinicians understand patients' and caregivers' priorities.

**Financial & competing interests disclosure**

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**Ethical conduct of research**

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**Oral abstracts****Oral 1: Uptake of post-mastectomy immediate breast reconstruction in older women - a real-world analysis of the European Society of Breast Cancer Specialists (EUSOMA) database**

R.X.N Lee<sup>1,2</sup>, R.M Parks<sup>1,3</sup>, L. Marotti<sup>4</sup>, A. Ponti<sup>5</sup>, M. Tomatis<sup>6</sup>, C. Aristei<sup>7</sup>, G. Curigliano<sup>8,a,b</sup>, J. De Vries<sup>9</sup>, D. Santini<sup>10</sup>, F. Sardanelli<sup>11,a,b</sup>, P. Van Dam<sup>12</sup>, I.T. Rubio<sup>13</sup>, K.L. Cheung<sup>1,3</sup>, M.J. Cardoso<sup>14</sup> and the Eusoma Working Group.

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<sup>5</sup>CPO Piemonte, Turin and European Society of Breast Cancer Specialists, Florence, Italy

<sup>6</sup>European Society of Breast Cancer Specialists, Florence, Italy

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<sup>13</sup>Breast Surgical Oncology, Clinica Universidad de Navarra, Madrid, Cancer Center Universidad de Navarra, Spain

<sup>14</sup>Breast Unit, Champalimaud Clinical Center/Champalimaud Foundation, and Lisbon University Faculty of Medicine, Lisbon, Portugal

**Background:** Post-mastectomy immediate breast reconstruction (PMIBR) improves patients' quality of life and psychosocial well-being. Despite the increasing worldwide population of older women living with breast cancer, studies suggest there is a lower uptake of PMIBR in older women versus younger women. We aim to explore whether there is a disparity, how we can attempt to overcome this, and to see if the disparity was influenced by the COVID-19 pandemic. **Methods:** Real-world prospectively collected data was retrieved and analysed from the European Society of Breast Cancer Specialists database on primary breast cancer cases diagnosed and treated in certified European Breast Centres. Female patients who had undergone mastectomy for primary breast cancer from 2017 to 2021 were included. **Results:** Between 2017 and 2021, a total of 16,614 women who underwent mastectomy for primary breast cancer were included, of which 73.5% (12204) were aged <70 years and 26.5% (4410) were ≥70 years old. Overall, 70.1% of younger women underwent PMIBR, while only 14.4% of older women underwent PMIBR. The majority of women (73.8%) did not receive any neoadjuvant treatment, 23.5% received neoadjuvant chemotherapy and 2.8% neoadjuvant endocrine therapy. Radiotherapy was an independent predictor for younger women not undergoing PMIBR. The percentage of PMIBR in both age groups decreased as tumour stage increased from cT1S to cT4. Tumour characteristics and treatment related factors were not significantly associated with the uptake of PMIBR in both age groups. There was no significant impact of COVID-19 on the disparity in uptake of PMIBR in older women compared to younger women. **Conclusion:** Our study is the only study currently available which provides statistical evidence that there is disparity in uptake of PMIBR between older and younger women. However, the underlying reasons remain inadequately understood. Further research such as conducting qualitative interviews to explore patient-, physician- and system-associated factors is required.

#### Financial & competing interests disclosure

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No writing assistance was utilized in the production of this abstract.

#### Oral 2: G8 in breast cancer survivorship: a protocol for risk stratified survivorship care for older adults with breast cancer

Emily Sargent<sup>1</sup>, Annelise Gonzalez<sup>2</sup>, Holly Holmes<sup>3</sup>, Jessica Jones<sup>2</sup> & Dana Giza<sup>3</sup>

<sup>1</sup>Department of Internal Medicine, McGovern Medical School at The University of Texas Health Science Center, Houston, TX, USA

<sup>2</sup>Division of Hematology/Oncology, McGovern Medical School at The University of Texas Health Science Center, Houston, TX, USA

<sup>3</sup>Division of Geriatrics and Palliative Care Medicine, McGovern Medical School at The University of Texas Health Science Center, Houston, TX, USA

**Background:** Older breast cancer survivors are a unique population of cancer survivors, as they have a higher incidence of comorbid conditions leading to increased symptom burden, functional and cognitive decline and decreased adherence to survivorship recommendations. Survivorship care for this population requires identifying the high-risk patients needing a comprehensive approach that includes oncologic-geriatric co-management. We propose here a model of survivorship care delivery that includes risk stratification of older breast cancer survivors using the G8 tool to receive comprehensive geriatric assessment during survivorship care. **Methods:** An IRB approval was sought at Memorial Hermann Breast Cancer Clinic, Houston, Texas, USA, to include older adults ≥65 years old with a history of breast cancer who have finished active treatment for breast cancer, with or without endocrine therapy and who are seen for routine, standard of care survivorship care visits and have a G8 score ≤14. Frail patients are further referred to Geriatrics Clinic for comprehensive geriatric assessment done by a geriatrician. Results of the geriatric assessment are further communicated to the oncology provider, as well as proposed geriatric assessment-driven interventions. **Results:** This model of survivorship care plan was initiated in 2022, and currently in the phase of enrolling patients. This cohort are currently undergoing evaluations in treatment burden, quality

of life at baseline (at their visit with the geriatrician) and 12 months (phone visit) to assess the impact of geriatric assessment and geriatric co-management during survivorship care on patient reported outcomes. **Conclusions:** The risk stratification based on G8 results, and the geriatric assessment-guided survivorship care is an innovative approach to breast cancer survivorship care. Assessing the effect of this risk stratification on patients' quality of life and symptom burden will be very informative for further evidence-based interventions to improve the quality of survivorship care for older adults with breast cancer.

#### Financial & competing interests disclosure

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#### Ethical conduct of research

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### Oral 3: Degree of frailty impacts treatment & outcomes of breast cancer

Olivia Turner<sup>1,2</sup>, Maria-Cruz Villa-Urriol<sup>1,3</sup>, Tamara Tchkonja<sup>5</sup>, James L. Kirkland<sup>5</sup>, Jon Griffin<sup>1,6</sup>, Ilaria Bellantuono<sup>1,2</sup> & Lynda Wyld<sup>1,2</sup>

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<sup>5</sup>Department of Physiology and Biomedical Engineering, The Mayo Clinic, Minnesota, USA

<sup>6</sup>Department of Histopathology, Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, UK

**Background:** Frailty affects 25–50% of those aged  $\geq 85$  and is defined as an impaired ability to respond to adverse events, including surgery. Recovery is also impaired with capacity remaining lower than baseline following a stressor event. An essential sign of frailty is reduced ability to perform daily activities (APDA). **Objectives:** The objective of this study was to calculate a Rockwood Frailty Index (FI) and correlate degree of frailty against breast cancer treatment decision making and outcomes. **Methods:** This unplanned secondary analysis of 3460 women over the age of 70 with early breast cancer uses a validated FI derived for each patient using data from a baseline comprehensive geriatric assessment. A multivariate Cox's proportional hazards model was developed to determine risk factors for overall and non-breast cancer specific mortality, including frailty. The role of frailty as a predictor of treatment allocation and the recovery from surgery was also assessed. **Results:** The median age of the cohort was 77 (range 70–102). Frailty was identified in 1176/3275 (37%) of patients, prefrailty in 1668/3275 (50%) and 431/3275 (13%) were robust, aligning with reported literature. The FI correlated with age (univariate) ( $R = 0.29$ , 95%CI 0.26–0.32). A multivariate Cox's proportional hazards model identified frailty as an independent predictor of overall (HR = 2.71, 95%CI 1.60–4.62;  $p < 0.001$ ) and non-breast cancer specific survival (HR = 4.37, 95%CI 2.00–9.53;  $p < 0.001$ ). Robust patients were significantly more likely to receive surgery (HR 1.33, 95%CI 1.275–1.393) than frail patients. Of the patients who received major surgery (mastectomy/axillary clearance) between baseline and 6 weeks, 42/129 (35%) of robust patients, 247/447 (55%) of prefrail and 213/268 (79%) frail experienced limitations at the 6 week follow up. By 12 months post-surgery, majority of robust patients had made a full recovery, with only 17/101 (17%) having limitations, while 172/394 (44%) of prefrail and 153/189 (81%) of frail patients still had limitations. **Conclusions:** These data suggest that the degree of frailty impacts the choice of treatment for early breast cancer and also impacts on treatment outcomes and resilience. As cellular senescence is a driver of frailty, work is ongoing to determine whether levels of tissue senescence correlate with frailty and the development of post-surgical limitations.

#### Financial & competing interests disclosure

James L Kirkland: patents on senolytic drugs and their uses are held by Mayo Clinic. This research has been reviewed by the Mayo Clinic Conflict of Interest Review Board and was conducted in compliance with Mayo Clinic Conflict of Interest policies. The authors were financially supported but this is not included in the abstract- we do not intend to publish as a manuscript. The authors have no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the abstract apart from those disclosed.

No writing assistance was utilized in the production of this abstract.

#### Ethical conduct of research

The authors state that for investigations involving human subjects, informed consent has been obtained from the participants involved (not included in abstract, do not intend to submit as manuscript).

#### Data sharing statement

The authors certify that this manuscript reports the secondary analysis of clinical trial data that have been shared with them, and that the use of this shared data is in accordance with the terms (if any) agreed upon their receipt.

### Oral 4: Adjuvant Robotic Stereotactic Accelerated Partial Breast Irradiation (RSAPBI) for post-menopausal hormone receptor-positive early-stage breast cancer: 3-year outcomes of a prospective multi-institutional registry

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**Background:** In older adults with early-stage breast cancer novel local therapies are needed to reliably eradicate tumors with minimal side effects and burden. Robotic stereotactic accelerated partial breast irradiation (RSAPBI) with fiducial tracking is an attractive treatment option, but outcomes data are limited. We report 3-year outcomes for a prospective multi-institutional registry treating select women with adjuvant RSAPBI. **Methods:** Post-menopausal women with DCIS and stage IA breast cancer were treated over a 5-year period (2015–2020) and were followed for a minimum of 24 months. Treatments were delivered with a robotic radiosurgery system. Four gold fiducials were implanted around the lumpectomy cavity prior to treatment onset for tumor bed delineation and target tracking. The planning treatment volume (PTV) was prescribed 30 Gy in five fractions over 2 weeks. Cosmesis was scored per the Harvard Breast Cosmesis Scale and toxicity was graded per RTOG toxicity criteria. **Results:** 81 patients (median age 68 years) with hormone receptor-positive tumors were treated. 68 women had invasive ductal carcinoma (84%) and 13 had DCIS (16%). The median clinical treatment volume expansion was 10 mm (range 5–10) and the median PTV expansion was 3 mm (range 0–5). At a median follow up of 3 years there was one new ipsilateral breast tumor occurrence with no local, regional, or distant treatment failures. Overall survival was 95%, with no breast-cancer-related deaths. Chronic grade 1 skin toxicity was observed in two women at 3 years. No grade 2–4 toxicity of any kind was observed. Cosmesis at last follow-up was rated excellent for 84% and good for 15% of patients. **Discussion:** The 3-year outcomes of this prospective multi-institutional registry suggest that RSAPBI is a practical, effective and well-tolerated technique for the adjuvant treatment of early-stage breast cancer. A planned prospective multi-institutional registry will enroll older adults (>70 y/o) with early-stage breast cancer who decline surgery and wish to complete radical RSAPBI treatment alone.

**Financial & competing interests disclosure**

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No writing assistance was utilized in the production of this abstract.

**Ethical conduct of research**

The authors state that they have obtained appropriate institutional review board approval or have followed the principles outlined in the Declaration of Helsinki for all human or animal experimental investigations. In addition, for investigations involving human subjects, informed consent has been obtained from the participants involved.

**Poster abstracts****Poster 1: Exploring genomic changes in breast cancer among individuals aged 65 & older: observations from the 100,000 genomes project at a tertiary breast cancer centre**

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**Background:** The 100,000 Genomes Project (100KGP), a groundbreaking British initiative exploring the genetic factors influencing health and disease, including breast cancer, concluded in December 2018, with ongoing data analysis. This study focuses on data analysis derived from the 100KGP conducted at our tertiary breast cancer centre, specifically focusing on patient older than 65. **Methods:** A comprehensive examination of data from 100KGP reports, encompassing identified somatic mutations, was conducted. Electronic records from hospital systems, including pathology, radiology, clinical letters and correspondence, were scrutinized to ascertain the incidence of local recurrence, metastasis and mortality. Patients under the age of 65 at the time of breast cancer diagnosis were excluded. **Results:** A total of 116 patients were diagnosed and enrolled in the 100KGP, with results available for 96 patients. Among these, 43 (44.8%) patients were aged 65 or older. In this cohort, the average age of diagnosis was 74 (65–82). At the 5-year mark, 33 out of 43 patients remained alive (76.7%). Interestingly, patients with metastatic disease exhibited a comparable number of somatic mutations to those with low-risk disease. The most prevalent somatic mutation gene was PIK3CA (51%), followed by TP53 (32.5%). Notably, half of the patients who succumbed to breast cancer displayed TP53 mutations. Some genetic mutations were uniquely associated with patients who did not survive at the 5-year mark (CDKN2A, NOTCH1, RAD50). ER+ cancers were more likely to have PIK3CA mutations compared to ER- cancers (56 vs 37.5%). No significant age-related disparity in somatic mutations was observed. **Discussion:** Elderly patient demonstrated a positive willingness to participate in 100KGP. Our findings are consistent with broader genomic datasets in existing literature. The final analysis of national results from the 100KGP will clarify the correlation between somatic mutations and patient outcomes.

**Financial & competing interests disclosure**

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**Ethical conduct of research**

The authors state that for investigations involving human subjects, informed consent has been obtained from the participants involved

**Poster 2: The association between psychosocial factors & decision making regarding primary treatment in older women with early-stage breast cancer**

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**Background:** Breast cancer is increasingly prevalent among older adults, who are likely to have numerous comorbidities and unique psychosocial challenges. The aim of this study was to measure the prevalence of psychosocial factors in a cohort of older women diagnosed with early-stage operable breast cancer and their influence on treat-



ment decisions. **Methods:** As part of a prospective study in three UK centres, 199 patients with a new diagnosis of early-stage operable primary breast cancer, aged  $\geq 70$  years (mean 77, range 68–93) were recruited. Assessment using a cancer-specific Comprehensive Geriatric Assessment (CGA) was conducted within 6 weeks of diagnosis. Association between treatment decision and psychosocial aspects (as defined by the ‘psychosocial support’, ‘social activity’ and ‘social support’ domains) of the CGA was determined. **Results:** Overall, psychosocial health was positive in the cohort. Scores for ‘psychosocial support’ averaged 82.1/102, ‘social activity’ averaged 13.5/24, and ‘social support’ averaged 43.3/72. CGA determined that there was no association between total scores in these domains and the type of treatment received. When looking at individual questions within these three domains, a lower score in three questions were statistically associated with likelihood of non-surgical treatment: ‘Within the past two weeks did you feel depressed?’ ( $p = 0.019$ ), ‘Compared to others your age, are your social activities more or less limited because of your physical health or emotional problems?’ ( $p = 0.005$ ) and ‘Is there someone whose advice you really want?’ ( $p = 0.012$ ). **Conclusions:** While no direct link emerged between overall psychosocial scores and treatment decisions using CGA, specific sub-questions displayed associations. This study is the only one of its kind to our knowledge. At the present time, there is not enough evidence to suggest that measurement of psychosocial factors could be used as a surrogate (e.g. screening tool) for who should go on to receive full CGA. The study is ongoing.

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#### Ethical conduct of research

The authors state that for investigations involving human subjects, informed consent has been obtained from the participants involved.

### Poster 3: Oncoplastic breast surgery in older women with primary breast cancer: a systematic review of the literature

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**Background:** Oncoplastic procedures allow for excision of larger breast tumours, or unfavourable tumour/breast ratio lesions whilst achieving good cosmetic outcome. This increases the pool of patients eligible for breast conservation over a mastectomy, reducing the need for more extensive surgery in older women and potentially improving their quality of life. Nonetheless, studies to date suggest a poor uptake of oncoplastic breast surgery (OBS) in this age group. Therefore, this literature review aims to establish whether a disparity in uptake of OBS exists between older and younger women, and to explore the underlying reasons for this. **Methods:** The literature search was conducted on 17th of January 2022 using MEDLINE and EMBASE. Eligible studies included full-text articles of patients who underwent OBS for primary invasive breast cancer and included (any number of) patients aged  $\geq 65$  years. **Results:** Ten studies published were identified. One study was ranked as level-2 evidence, whilst the remaining were level-3. A total of 567 women underwent OBS for primary breast cancer, of whom only 10.8% (61/567) were aged  $\geq 65$  years. None of the studies directly compared younger to older women or explored the underlying factors contributing to this discrepancy in uptake. **Discussion:** This review has demonstrated a lower uptake of OBS in older, compared to younger women. Given our ageing population and the increasing number of older women living with breast cancer who may now be eligible for breast conservation surgery, further research into this area is required.

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**Poster 4: Factors influencing the choice of first-line treatment of hormone receptor-positive Her2-negative metastatic breast cancer, single institutional experience**

Nasr Mohammed Mohammed Ali Allahloubi, Beshoy Mokhles Makram, Ahmed Magdy Rabea & Dalia Negrin Eldin Mohammed

National Cancer Institute, Cairo University, Egypt

Abstract for poster presentation only - not for publication.

**Poster 5: Revisiting primary endocrine therapy versus surgery in older women with breast cancer: a systematic review & meta-analysis**

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**Background:** Old age is associated with increased co-morbidities, resulting in reduced life expectancy. Primary endocrine therapy (PET) is an alternative to primary surgical therapy (PST) for patients with increased co-morbidities. This study aims to review outcomes of PET versus PST in older women ( $\geq 65$  years) with breast cancer. **Methods:** PubMed, Embase (Ovid), Scopus and Cochrane were systematically searched from Jan 2000–May 2022. Exclusion criteria were single-arm studies. Primary outcomes were overall survival (OS) and breast cancer-specific survival (BCSS). Secondary outcomes were local and regional failure (for PET) and recurrence (for PST), and health-related quality of life (HRQoL). **Results:** There were 14 studies including 14,254 patients (PET:  $n = 2829$  [19.8%], PST:  $n = 11425$  [80.2%]), with four more studies (9538 patients) compared to the latest review in 2014. Seven studies defined PST as surgery with adjuvant ET, and six studies included patients with estrogen receptor positive tumors only. Patients were older in PET group (mean difference 2.43 years, 95% CI: 0.73–4.13). PET has worse OS compared to PST (Hazards ratio [HR] 1.42, 95% CI: 1.06–1.91). Subgroup analysis however showed comparable OS between PET and PST in RCTs and prospective studies. BCSS was comparable between PET and PST (HR 1.28, 95% CI: 0.87–1.87). Patients had significant arm symptoms and illness burden following major breast surgery compared to PET at 6 weeks. QLQ-C30 and EQ-5D-5L were comparable between PET and PST. **Discussion:** PET has worse OS compared to PST in older women. This may be confounded by increased age and co-morbidities in patients receiving PET. This finding is further reinforced by comparable BCSS between PET and PST, suggesting that worse OS in PET may be due to non-cancer related deaths. Overall evidence on HRQoL of PET compared with PST is equivocal, with only a minority of studies reporting these outcomes.

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**Poster 6: A literature review: treatment strategies for triple-negative primary breast cancer (TNBC) in older women**

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**Introduction:** 16,000 women over 70 are diagnosed with breast cancer annually in England and Wales. Despite approximately a fifth being oestrogen receptor negative, there's a relative lack of data on optimal treatment. Due to higher preponderance of co-morbidities in this age cohort, systemic therapy is often deemed unsuitable, leaving surgery as the primary modality – either mastectomy or conservation with radiotherapy. Of late, guided by NICE and other geriatric oncological bodies, there is an increasing drive to treat patients irrespective of chronological age. We aim to compare outcomes for surgery alone, surgery with radiotherapy, or sole radiotherapy treatment. **Methods:** We are conducting a PRISMA-compliant literature search on women  $\geq 70$  with primary TNBC. We searched Medline, PubMed, Embase, Web of Science, Scopus and the Cochrane Central Register of Controlled Trials for articles published in the last 10 years. **Results:** Our literature search yielded 7171 unique hits, with 38 papers meeting the inclusion criteria after title and abstract screening. Full text screening is ongoing. Preliminary findings support a shift in TNBC treatment attitudes over the last 10 years, with increased uptake of surgery, mastectomy and breast-conserving surgery and adjuvant radiotherapy. In adjuvant setting, controversy exists regarding regimen efficacy, with different studies yielding varying effects of treatments on outcomes. Older women accepted less radiotherapy yet still exhibited higher overall survival rates when matched with younger for clinicopathological characteristics. In primary radiotherapy setting, there appears to be a lack of literature. **Conclusions:** The literature on older primary TNBC, primarily retrospective analyses, reveals a notable gap. While a trend towards active treatment is evident, supported to some extent by data, diverse outcomes may suggest distinct TNBC subtypes or stem from cohort and study design biases. This highlights the necessity for further evidence and potentially trials to refine treatment strategies for this cohort especially with expanding ageing population.

#### Financial & competing interests disclosure

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No writing assistance was utilized in the production of this abstract.

#### Poster 7: The magnetic effect of Magseed with patient-centric outcomes, reduced patient pathway with time & cost saving

B Lake, M Wilson, L Deane, L Cielecki, G Thomas, T Usman

**Background:** Magseed has transformed the conventional guided procedures for impalpable breast cancer. We previously demonstrated that Magseed localisation for breast cancer promotes a patient-centric approach by reducing need for further surgery and ensuring high patient satisfaction, with our cost saving analysis described in NICE guidance MIB236. Another major advantage is improved patient pathway as placement can occur prior to surgery. This means patients don't have to attend different sites on day of surgery for conventional guidance. The aim of this study was to see if patient outcomes and cost saving is sustained following 5 years of experience. **Methods:** A 5-year service evaluation was conducted at Shrewsbury and Telford Hospital of all patients who had image-guided wide local excision for impalpable breast cancer from July 2017 to June 2022. Outcomes recorded included re-excision rate, theatre cost-saving analysis, radiology time and patient satisfaction. **Results:** 907 cases were performed, 501 Magseed guided procedures and 406 conventional guided procedures, with 20% of cases in patients  $>70$ . Significantly lower re-excision rates were maintained post-Magseed compared to pre-Magseed of 12.9 vs 22.4% ( $\chi^2 = 11.1377$ ;  $p < 0.000846$ ). Cost was saved in terms of surgery and radiology time. £94,321 was saved per year, with 58.6% fewer further operations, with an overall saving of £471,605. Significantly less radiology time with Magseed insertion, with an average of 36 minutes, compared to wire insertion, 52 min (t-value = -2.24215; p-value  $< 0.01854$ .) High patient satisfaction was maintained with the Magseed service described as “completely comfortable” and “quick and straightforward”. **Discussion:** Magseed continues to be the technique of choice for the detection of impalpable breast cancer, and its benefits of reducing re-excision rates, cost saving in surgery and radiology and high patient satisfaction are sustainable: the magnetic effect. An added benefit for particularly the elderly patient is only one journey on the day of surgery.

**Financial & competing interests disclosure**

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**Poster 8: Correlating frailty & senescence: a biomarker study**

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**Backgrounds:** Frailty affects 25–50% of those aged  $\geq 85$ , it is defined as reduced resilience to stressors such as surgery and correlates with poor outcomes. Senescence is a driver of frailty in animal models. Very few studies have investigated the correlation between tissue senescence and frailty in humans. **Objectives:** The objective of the study was to measure tissue levels of p16 positive adipocytes in normal human breast adipose and correlate this against a calculated Rockwood Frailty Index (FI). **Methods:** A prospective cohort of 3450 women over age 70 with early breast cancer were studied recruited between 2013 and 2018 from 56 UK breast units. The FI was calculated using comprehensive geriatric assessment data. Surgical resection tissue was retrieved from nine UK sites. Blocks contained formalin fixed, paraffin embedded normal breast adipose tissue taken at the time of breast cancer surgery. Blocks were sectioned and stained for the senescence marker p16, and proliferation marker Ki67, to calculate the proportion of p16-expressing senescent cells. Such cells are expected to be p16 positive and ki67 negative. Frailty index and percentage of tissue senescent cells were then correlated using Spearman's Rank test. **Results:** To date 420/3275 samples have been retrieved and tissue analysed in 103. Frailty was identified in 1176/3275, (37%) of the parent population, aligning with reported literature. The FI correlated with age ( $R = 0.29$ , 95%CI: 0.26 – 0.32) and frail patients had a higher relative risk of non-breast cancer related mortality ( $RR = 3.8$ , 95%CI 2.786 – 5.145) than robust. The median proportion of Ki67 positive adipocytes was negligible (less than 1 in 2000 adipocytes,  $n = 16$ , IQR = 0.098), therefore only p16 staining was performed. Interim analysis show increased P16 correlates weakly with increasing age ( $R = 0.135$ , 95%CI = -0.093 – 0.349), but not with frailty ( $R = -0.030$ , 95%CI = -0.253 – 0.196;  $n = 81$ ). **Conclusions:** Work is ongoing to increase the sample size and the number of sections per patient and correlate frailty with other markers of senescence, such as p21, especially since not all senescent cells express p16 and cancer therapy induced senescent cells may be more likely to have increased expression of p21.

**Financial & competing interests disclosure**

James L Kirkland: Patents on senolytic drugs and their uses are held by Mayo Clinic. This research has been reviewed by the Mayo Clinic Conflict of Interest Review Board and was conducted in compliance with Mayo Clinic Conflict of Interest policies. The authors were financially supported but this is not included in the abstract—the authors do not intend to submit as a manuscript, solely as an abstract for conference use. This Abstract has also been submitted at the international ICFSR conference. The authors have no other relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the abstract apart from those disclosed.

No writing assistance was utilized in the production of this abstract.

**Ethical conduct of research**

The authors state that for investigations involving human subjects, informed consent has been obtained from the participants involved (not included in abstract, do not intend to submit as manuscript).

#### Data sharing statement

The authors certify that this abstract reports the secondary analysis of clinical trial data that have been shared with them, and that the use of this shared data is in accordance with the terms (if any) agreed upon their receipt.

#### Poster 9: Patient Priorities Care – a tool to elucidate older patient's values in breast cancer survivorship

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**Background:** Aligning healthcare provision to patient values is crucial for delivery of appropriate, patient-centered care to older adults with breast cancer transitioning to survivorship care. Currently, there is a lack of evidence-based tools that: 1) identify and clarify patient's health priorities, and 2) incorporate and align survivorship care with the identified health priorities. We plan to adopt a patient centered approach to breast cancer for older adults, by using Patient Priorities Care framework (PPC) to elucidate patient's values and improve decision-making by focusing on health priorities – health outcomes patients want to achieve with the care that they are willing and able to achieve. **Methods:** For the development of a patient centered approach to breast cancer survivorship, a user center design has been employed to adapt the Patient Priorities Care tool to breast cancer survivorship. The adaptation process involves multiple phases including 1) assessing patients' and healthcare professionals' perspectives on the PPC framework, 2) adapting the priorities identification step with participating patients, and 3) adapting the care alignment step with oncology specialists. As part of phase one, we asked a group of community scientists (CS) (n = 8) who were breast cancer survivors or caregivers for older adults with breast cancer about perceived barriers and facilitators to implement PPC framework. **Results:** We identified several barriers to PPC implementation including time commitment, lack of patient' comfort to discuss about values and lack of overall knowledge of the PPC process. Based on this input, we are currently making adjustments in the delivery of PPC to activate patients and healthcare professionals, address changeability, accommodate concerns and promote communication about values. **Conclusions:** Adopting a tool that elucidates patient priorities is important in aligning breast cancer survivorship care with patients' personal values. Further research will assess and improve the feasibility and implementation of the tool in breast cancer survivorship.

#### Financial & competing interests disclosure

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No writing assistance was utilized in the production of this abstract.

#### Ethical conduct of research

The authors state that they have obtained appropriate institutional review board approval or have followed the principles outlined in the Declaration of Helsinki for all human or animal experimental investigations.

#### Poster 10: Are over 70s being undertreated for breast cancer? – primary surgery at a tertiary referral breast unit

Grace Lancaster, Georgette Oni & Daisy Cartwright

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**Background:** Recent data from National Audit of Breast Cancer in Older Patients (NABCCOP) suggest that surgery in patients aged over 70 is increasing. Evidence also points to improved survival if they undergo surgery as part of their treatment. **Objective:** To compare if surgical rates and types performed in patients aged 70+ were similar to those in patients under 70 at the Nottingham Breast Institute (NBI), and if they are being discriminated against based on age. **Methods:** Patients diagnosed with breast cancer at the NBI between April and October 2022 were included in this retrospective study. Patient demographics, comorbidities, primary diagnostic features, and subsequent management data were collected and analyzed using Excel. Additionally, information about surgeries

offered, accepted and their justifications were gathered. 452 patients were identified, and 124 were excluded due to incomplete data leaving 328 to analyse. **Results:** Patients aged 70+ had less surgery than those under 70 (68.6 vs 97.6%). Of the women having surgery, older women had less reconstruction than women under 70 (20.5 vs 50.5%). The proportion of women aged 70+ having at least one comorbidity was higher than those under 70 (77.7 vs 57.8%). There was no statistical difference between the rate of postoperative complications in the two groups. Reconstruction was offered to 31.3% of surgical candidates over 70 and common reasons for decisions were to keep things simple or follow doctor's recommendations. **Discussion:** The surgical rate in patients over 70 is in keeping with national averages, though the type of surgery offered is less complex. The lower rates of oncoplastic surgery and reconstruction are partly explained by fitness and patient choice. Surgery in the over-70s age group is feasible but is limited in what is offered and accepted.

#### Financial & competing interests disclosure

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#### Poster 11: Comprehensive geriatric assessment (CGA) for older women with early-stage breast cancer – an updated systematic review of the literature over the decade

Chantae Reid-Agboola<sup>1,2</sup>, Francesca L Malcolm<sup>1,2</sup>, Anita Klukowska<sup>1,2</sup>, Cora Harrison<sup>1,3</sup>, Kwok-Leung Cheung<sup>1,2</sup> & Ruth M Parks<sup>1,2</sup>

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**Background:** The importance of comprehensive geriatric assessment (CGA) in oncology has emerged in the last decade. A previous review conducted by our team in 2012 assessed CGA in breast cancer, and concluded there was not sufficient evidence to instate CGA as mandatory practice in this setting. Given the updated SIOG/EUSOMA guidelines published in 2021 recommending GA in a breast cancer setting, this present review will analysis work in the field published between 2012 and 2022. **Methods:** Cochrane, Pubmed and Embase were searched to identify full-texts published in English in the last 10 years (September 2012 – June 2022). The following search terms were used: comprehensive geriatric assessment, primary, operable, breast cancer. **Results:** A total of 18 articles including 4734 patients with breast cancer were identified. The level of evidence of studies were graded level 2 or 3. The studies covered four themes for use of CGA in breast cancer: 1) to determine factors influencing survival 2) as an adjunct to treatment decision making 3) to help maintain quality of life 4) to determine which tools should be included. There was evidence to support the use of CGA in themes 1 – 3, however, it is uncertain which assessment tools are best to use in a breast cancer setting (theme 4). **Discussion:** Work performed in the last decade has shown that CGA can be used to help determine factors affecting survival and quality of life in breast cancer patients and can therefore be used to aid treatment decision making. Further work is required to determine gold standard CGA.

#### Financial & competing interests disclosure

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No writing assistance was utilized in the production of this abstract.

#### Poster 12: Surgery as the primary treatment in newly diagnosed breast cancer in the over 70's are we getting better or worse?

Daisy Cartwright, Grace Lancaster, Miss Georgette Oni

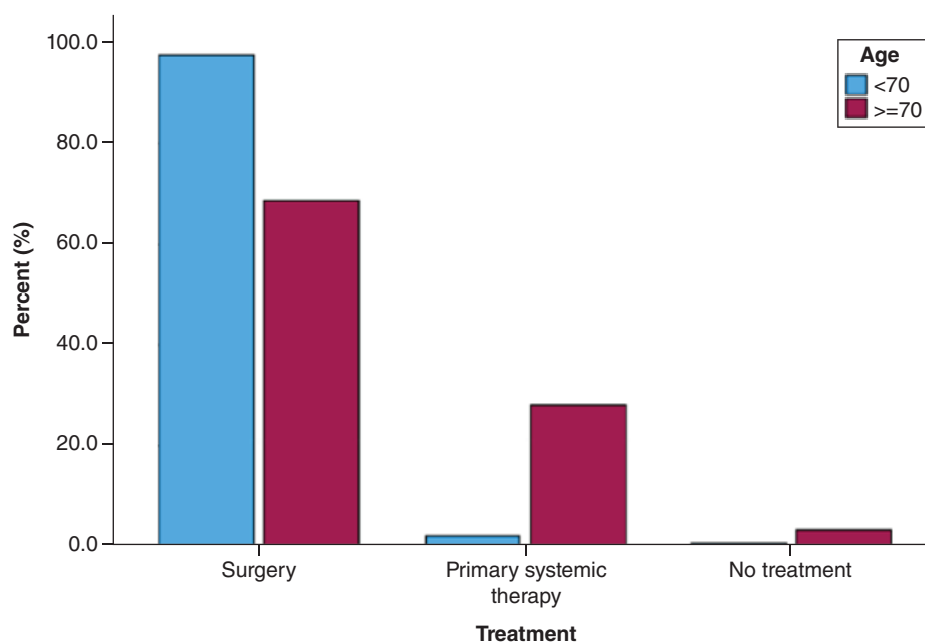
**Background:** Despite breast cancer in older women usually having less aggressive clinicopathological features than that of younger women, the outcome and survival rate of breast cancer does not improve with age. One of the reasons for this may be due to the differences in the treatment that older women receive. NABCOP released data

suggesting that women over the age of 70 are less likely to receive surgery, radiotherapy and chemotherapy compared to women aged between 50 and 69. **Aims:** To compare the type of treatment received by patients diagnosed with breast cancer under the age of 70 vs those over the age of 70 at a tertiary referral breast cancer unit. **Method:** Patients diagnosed with breast cancer within Nottingham City Hospital between April and October 2022 were included in this retrospective study. Data regarding patient demographics/comorbidities, primary diagnostic features as well as subsequent management was collated in excel and analysed using SPSS. **Results:**

			Surgery	Treatment Primary Systemic Therapy	No Treatment	Total
Age	<70	Count	201	4	1	206
		% within Age	97.6	1.9	0.5	100.0
	≥70	Count	83	34	4	121
		% within Age	68.6	28.1	3.3	100.0
Total	Count	284	38	5	327	
	% within Age	86.9	11.6	1.5	100.0	

452 patients were identified during the time period. 125 were excluded due to incomplete data, leaving 327 to analyse. 68.6% of women over 70 had surgery compared to 97.6% of those below 70. A higher percentage of women aged 70+ received primary non curative therapy (28.1 vs 1.9%) or no treatment at all (3.3 vs 0.5%) compared to women under the age of 70. A chi squared test confirmed that the differences in type of treatment received between the age groups were statistically significant ( $p < 0.001$ ).

#### Treatment of breast cancer in patients under vs over 70



**Conclusion:** The results show that fewer patients than nationally over the age of 70 were likely to receive surgery for breast cancer than younger women, and more likely to receive non curative treatment or no treatment instead. This is below the reported levels in the most recent NABCOP report and warrants further investigation to the causative factors e.g., regional variation in patient and/or service provision factors.

#### Financial & competing interests disclosure

The authors have no relevant affiliations or financial involvement with any organization or entity with a financial interest in or financial conflict with the subject matter or materials discussed in the abstract. This includes employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties.

No writing assistance was utilized in the production of this abstract.

#### Ethical conduct of research

The authors state that for investigations involving human subjects, informed consent has been obtained from the participants involved.

#### Poster 13: Post-mastectomy reconstruction practices & outcomes for older women in a UK tertiary care centre

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**Background:** Older women represent an under-studied subset of patients in breast cancer. In this audit, we review the indications and kind of reconstruction in this cohort within our institution. **Methods:** A retrospective analysis of women above 70 years at University Hospitals Birmingham (UHBT) between 2015–23 for post-mastectomy reconstruction surgery. At baseline, we collected information regarding demographics, oncological features, we then identified the type of breast reconstructive surgery performed. **Results:** Our cohort consisted of 25 patients (age range: 70–84, mean 71.5). Invasive ductal carcinoma accounted for majority of tumours (n = 8), followed by radiation-associated angiosarcomas (n = 6), invasive lobular carcinoma (n = 4) and ductal carcinoma *in situ* (n = 4), Malignant phyllodes n = 1, Squamous cell n = 1, metaplastic carcinoma n = 1. Eight patients were classified as T1 (tumour size <20 mm), 11 as T2 (20–50 mm) and seven as T3 (>50 mm). Majority (n = 24) had no nodal involvement. While 11 patients received no adjuvant treatment, two had Neo- adjuvant and all others any combination of the three. 48% received resurfacing soft tissue coverage (n = 12), Latissimus Dorsi flap (n = 10), was commonly used procedure (TRAM for 2), followed by 2-stage expander/implant-based immediate delayed reconstruction (n = 10), immediate breast reconstruction performed in three (DIEP, LD and implant -one each). 32% experienced short-term complications (n = 8), four returned to theatre (16%). Eight patients experienced long-term complications, 6 (24%) requiring revisional surgery. **Discussion:** Our cohort consisted of large number of locally advanced cancers requiring soft tissue coverage with autologous flaps technique used in most women. A cautious approach of tissue expansion utilised as immediate delayed two stage reconstruction. Our findings, however, are limited by its small sample size and highly selected cohort of patients.

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No writing assistance was utilized in the production of this abstract.

#### Ethical conduct of research

The authors state that they have obtained appropriate institutional review board approval or have followed the principles outlined in the Declaration of Helsinki for all human or animal experimental investigations. In addition, for investigations involving human subjects, informed consent has been obtained from the participants involved.

#### Poster 14: A local survey on the preferences of healthcare professionals treating older adults with breast cancer

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**Background:** The management of breast cancer in older adults differs substantially. Operation is considered as the gold standard treatment for patients with operable breast cancer, and yet primary hormonal therapy has been introduced as an alternative to surgery for older adults. For better understanding of our local practice, we conducted a survey to look at healthcare professionals' preferences in treating older patients with operable breast cancer. **Methods:** This study was approved by the Institutional Review Board of the University of Hong Kong / Hospital Authority Hong Kong West Cluster. Local practicing fellow surgeons and oncologists were invited to join an anonymous survey by email. **Results:** A total of 68 fellows responded (14.8% of 460 eligible fellows). 30.9% (21/66) of respondents considered primary hormonal therapy even if older patients were fit for surgery.



For surgical options, majority of the respondents offered mastectomy, to a lesser extent breast conservation, and only a few immediate breast reconstruction. After lumpectomy, 89.7% (61/66) offered adjuvant radiotherapy for older patients. 88.2% (60/66) of respondents offered sentinel node biopsy, whereas 7.4% (5/66) offered nothing to older patients with clinically negative axilla. Co-morbidity, general health status and American Society of Anaesthesiologists (ASA) score were the most commonly used assessment tools to assess older patients' fitness for treatment. Only five respondents knew about comprehensive geriatric assessment (CGA). **Discussion:** Healthcare professionals' opinion differed on the best way to treat older women with operable breast cancer. This highlighted the need for evidence based guidelines and assessment for decision making in this age group.

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