

Breast cancer care in the 21st year of the 21st Century

Mr Samuel Rice

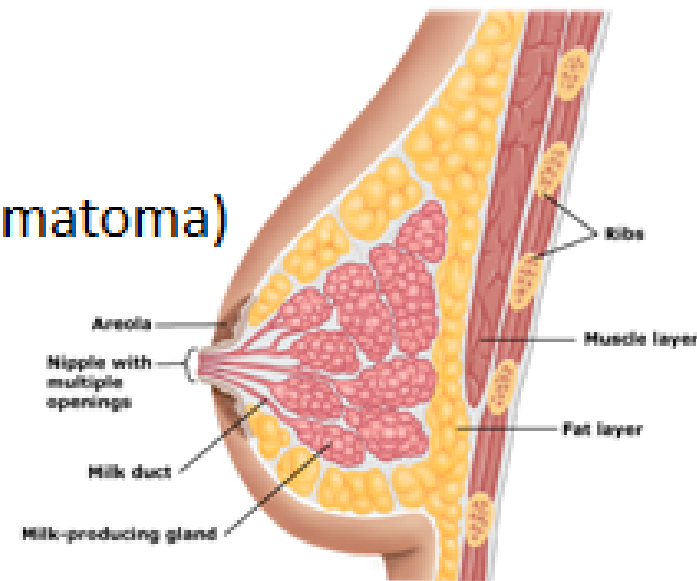
Breast/Endocrine Surgeon

Northern Breast and Endocrine Centre

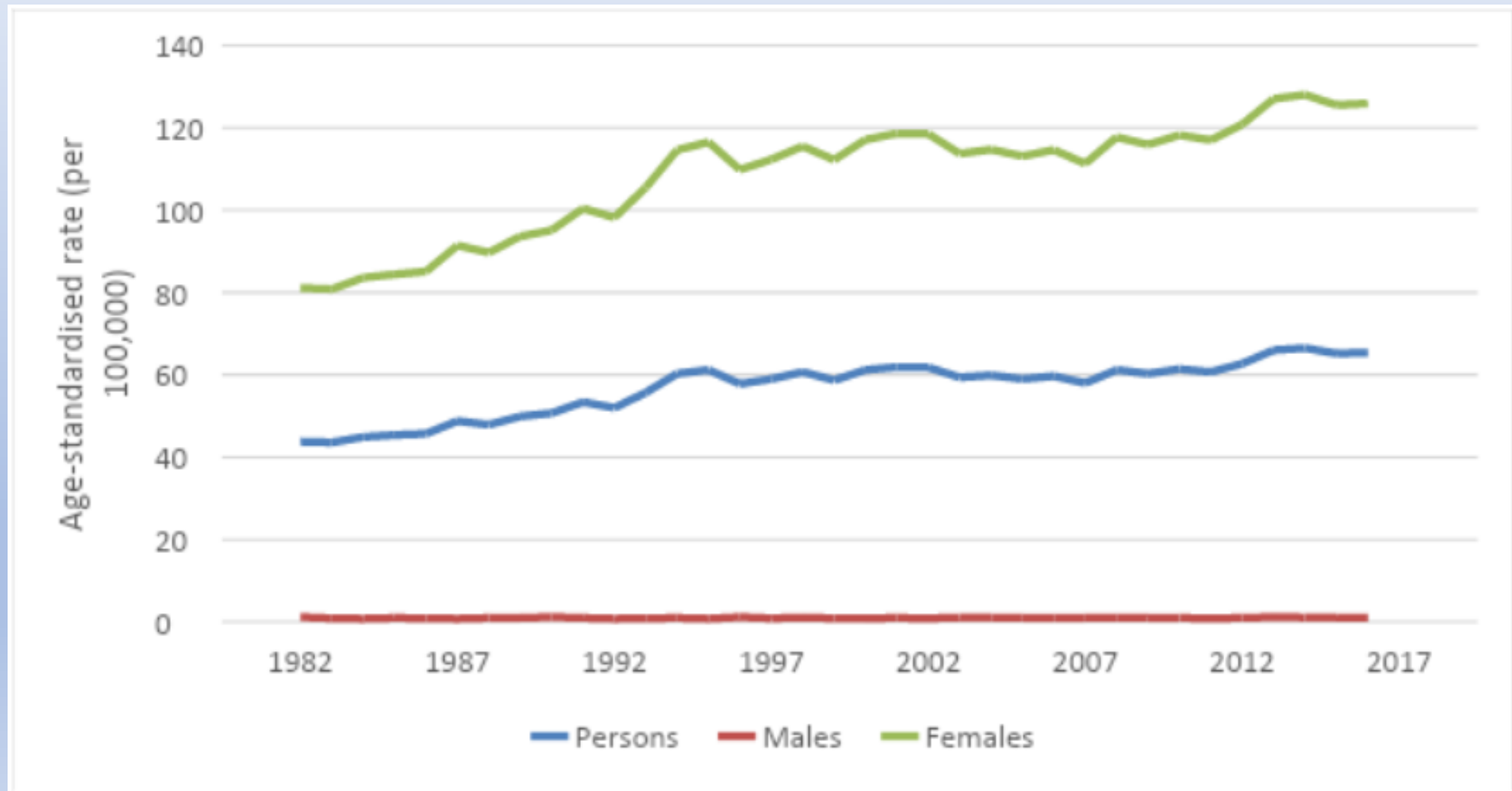
Calvary and Lyell McEwin Hospitals

Breast Lump Ddx

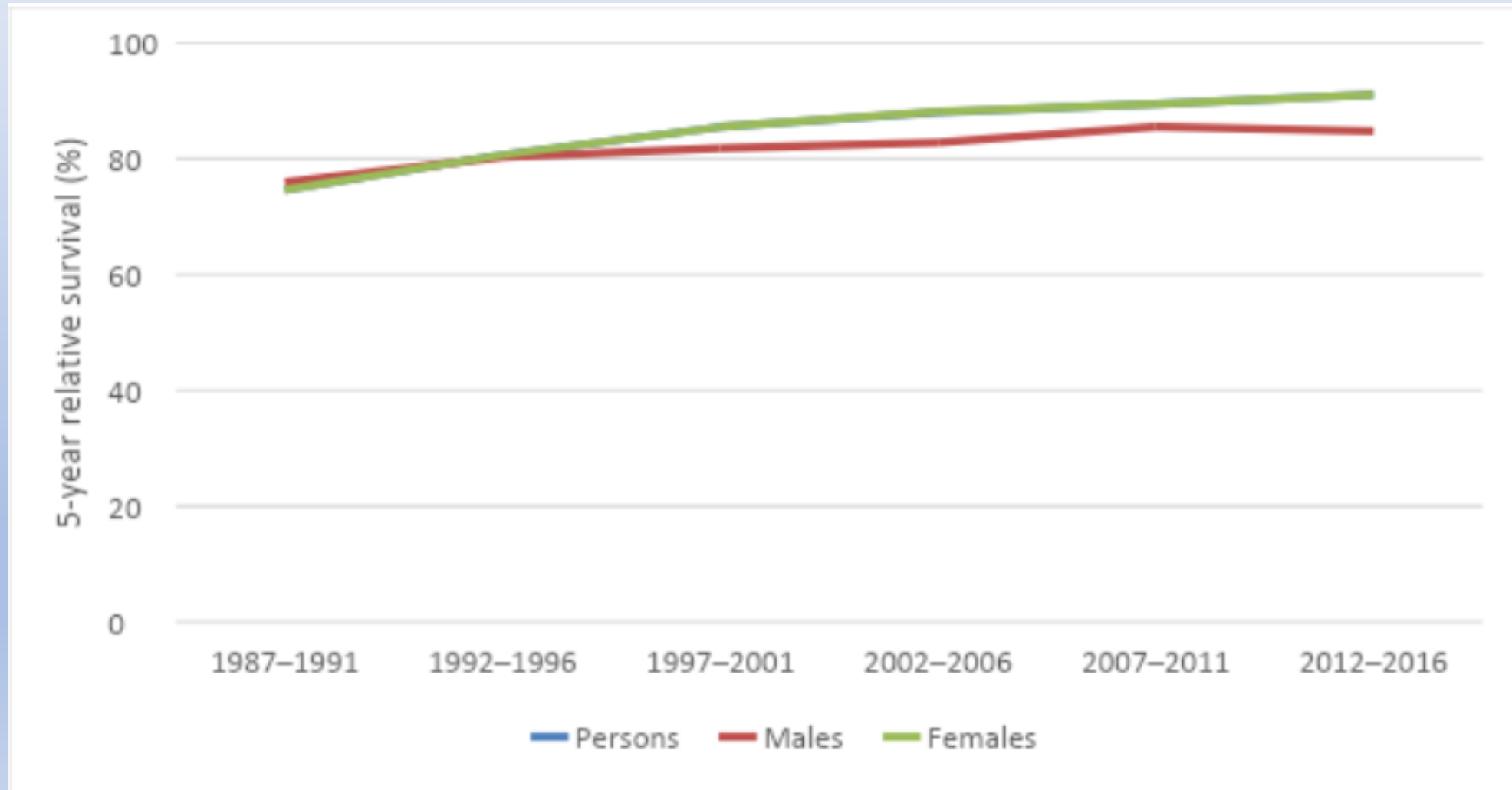
- Superficial tissues
 - Sebaceous cyst, keloid
- Malignancy
- Benign
 - FA (fibroadenoma)
 - Trauma (fat necrosis, haematoma)
 - Cyst



Breast cancer incidence rate



Survival rates



How is survival improving?

- Early detection
 - Screening BSSA and community awareness RR 0.67 for age 60-69
 - 55% participation
 - Screening high risk patients
 - imaging and genetic testing increasing
 - Risk reducing surgery and hormone blockade
- Chemotherapy and Targeted therapies advances
- Radiotherapy

Triple test is key

- History and Exam
 - New lump, swelling, nipple discharge
 - Risk factors – FHx of genetic mutations BRCA1&2, 2 family members on same side of family with
- Radiology – both screening and focussed. MMG and US remain the basics.
- Histopath – **core** is always preferable to FNA. Subtypes, receptor status

Risk factors

- Family history
- Past breast pathology
 - Benign
 - malignant
- Oestrogen exposure
 - Age menopause
 - HRT

High risk (20% lifetime risk)

- (i) Three or more first or second degree relatives on the same side of the family with breast or ovarian cancer;
- (ii) Two or more first or second degree relatives on the same side of the family with breast or ovarian cancer, if one of the relatives has:
 - (A) bilateral breast cancer;
 - (B) onset of breast cancer before the age of 40 years;
 - (C) onset of ovarian cancer before the age of 50 years;
 - (D) breast and ovarian cancer at the same or at different times;
 - (E) has Ashkenazi Jewish ancestry;
 - (F) a male who has been diagnosed with breast cancer or prostate cancer <50;
- (iii) One first or second degree relative diagnosed with breast cancer at age < 45 years, plus another first or second degree relative on the same side of the family with bone or soft tissue sarcoma at age 45 years or younger; or
- iv) that genetic testing has identified the presence of a high risk breast cancer gene mutation.

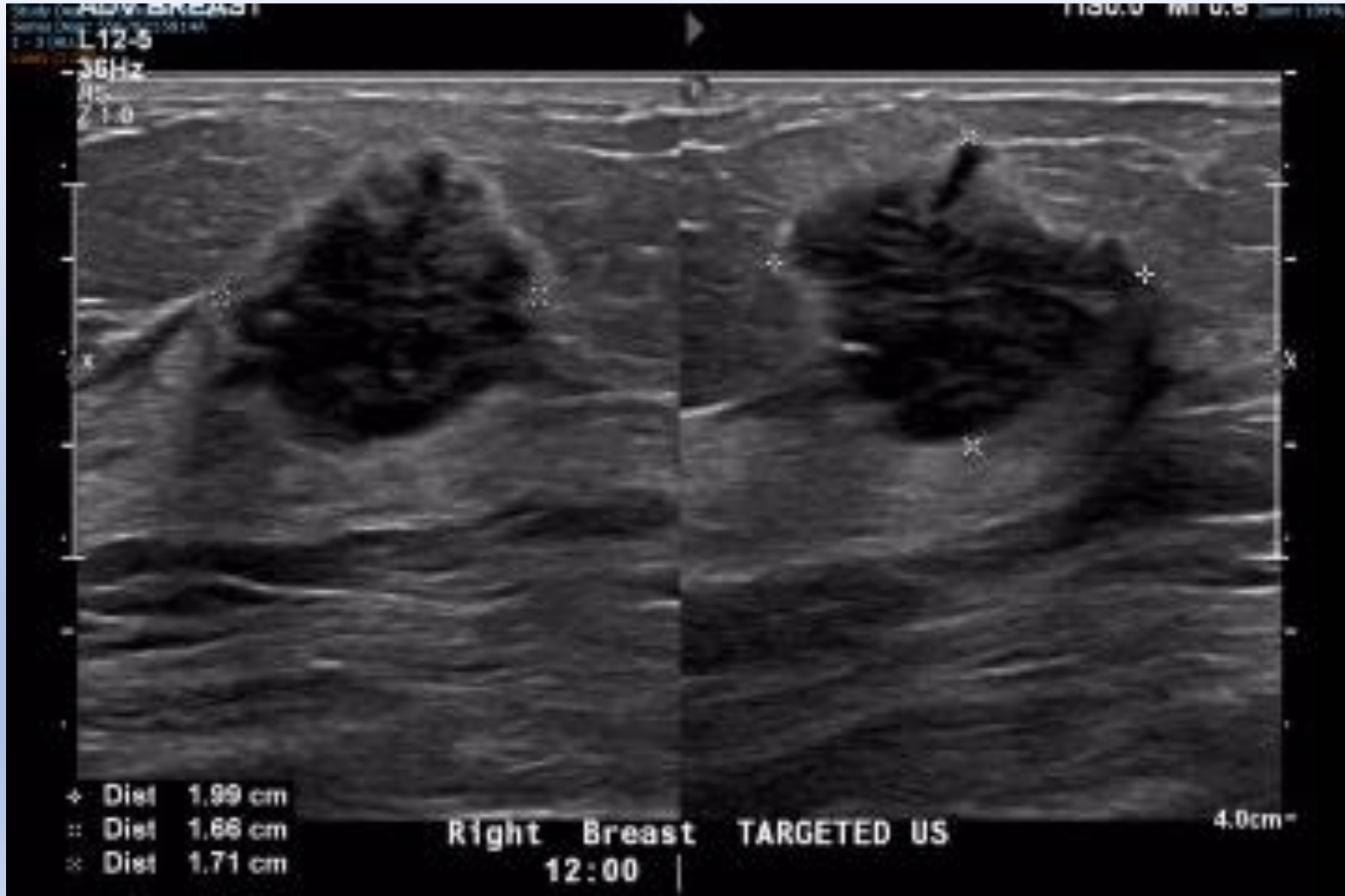
Inherited <5%

- Hereditary breast and ovarian cancer syndrome BRCA 1&2
 - 70% breast cancer risk, 40% ovarian cancer risk
- PALB2 is also now part of the standard testing
- Li–Fraumeni syndrome (sarcoma, p53 mutation)
- Cowden syndrome (PTEN)
- Peutz–Jeghers syndrome
- Hereditary diffuse gastric cancer syndrome (CDH1)

Radiology

- MMG for screening
- MMG and US are baseline for investigation

- Increasing role of MRI
 - High risk patients (>20% lifetime risk)
 - Birads C/D on MMG
 - Clinical/Radiological mismatch
 - Lobular and multifocal cancer



Intro

Survival

Triple Test: History

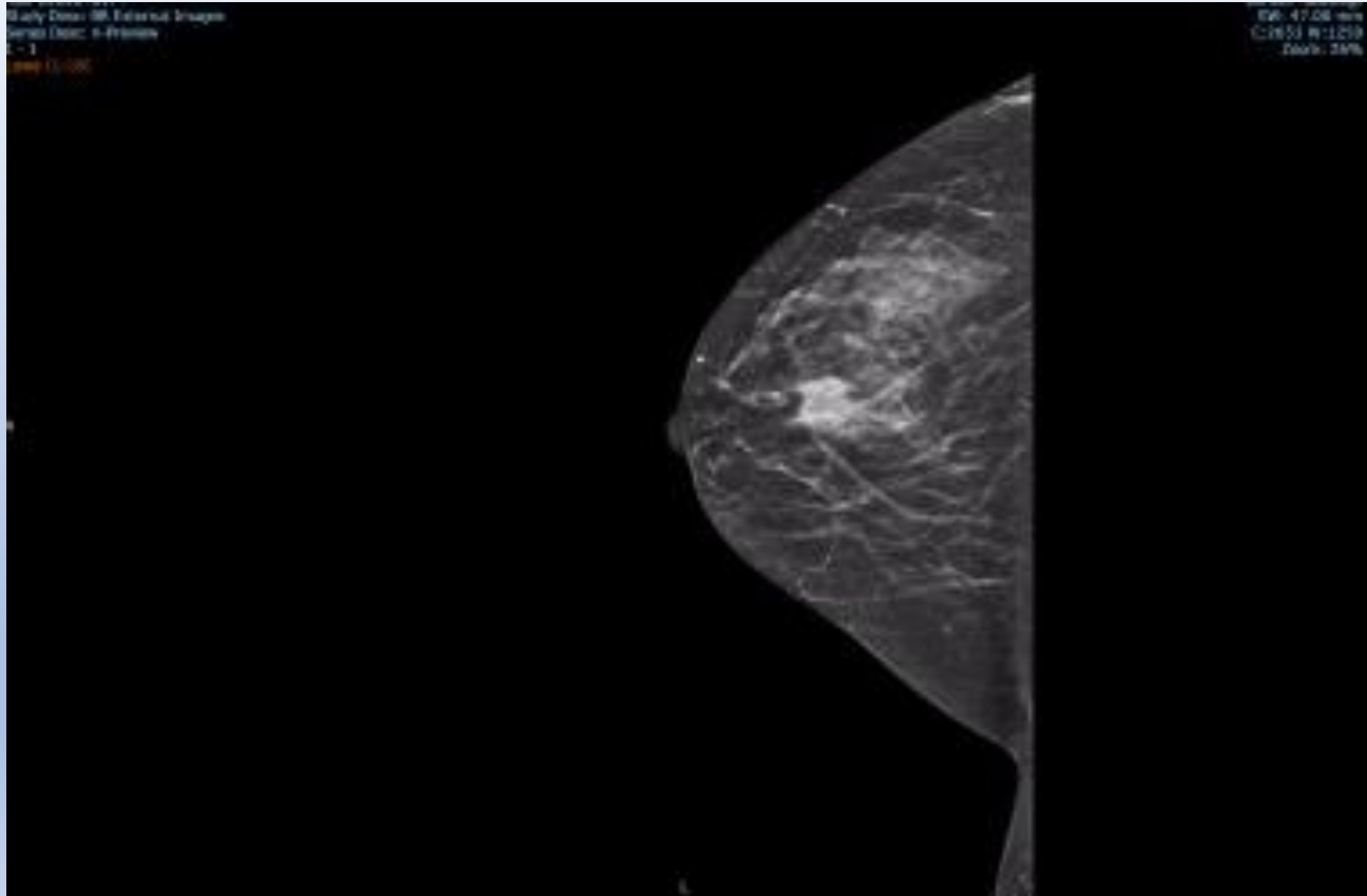
**Triple Test:
Radiology**

Triple Test:
Histopathology

Treatment:
Surgery

Treatment:
Adjuvant Therapy

Question Time



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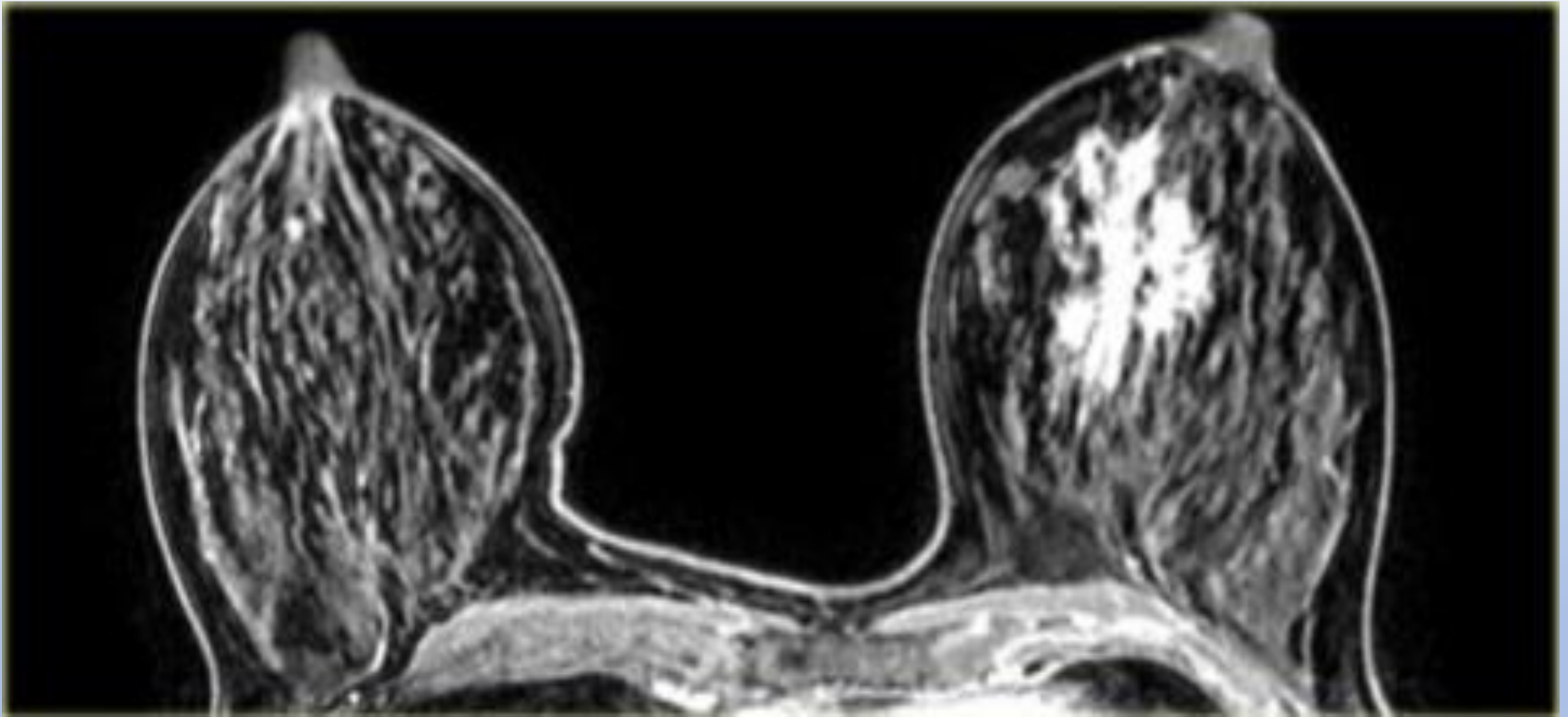
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Spectrum from
ADH/ALH



DCIS/LCIS



Invasive cancer

Subtypes

- Ductal 80%
- Lobular 15%
- Rest 5%
 - Medullary, basal etc
- Receptors
 - ER, PR
 - HER 2

Cancer diagnosis

- Staging
 - CT chest/abdo/pelvis.
 - PET is now replacing WBBS.
- Support through BCN and family/friends

Treatment by stage

- Early (often screen detected)
 - Surgery, then adjuvant Rx
- LABC and high grade (Grade 3)
 - Neoadjuvant Rx, then ideally conserving surgery, then...
- Metastatic
 - Systemic +/- local therapy

Early breast cancer

Surgery

RT + block

LABC or G3

Neoadjuvant

Surgery

Metastatic

Adjuvant

+/- surgery

Surgery now oncoplastic

- Who doesn't need it?
 - Age/comorbidities, ?metastatic, patient choice
- Breast
 - WLE + RT
 - Mastectomy – aim to avoid this if possible
 - Oncoplastic 30% cases
 - Therapeutic mammoplasty with WLE
 - Reconstruction ideally immediately with skin sparing mastectomy
- Axilla
 - SNB (potentially reducing role in early breast cancers too)
 - AND – a reducing role → less lymphoedema
 - In part due to RT

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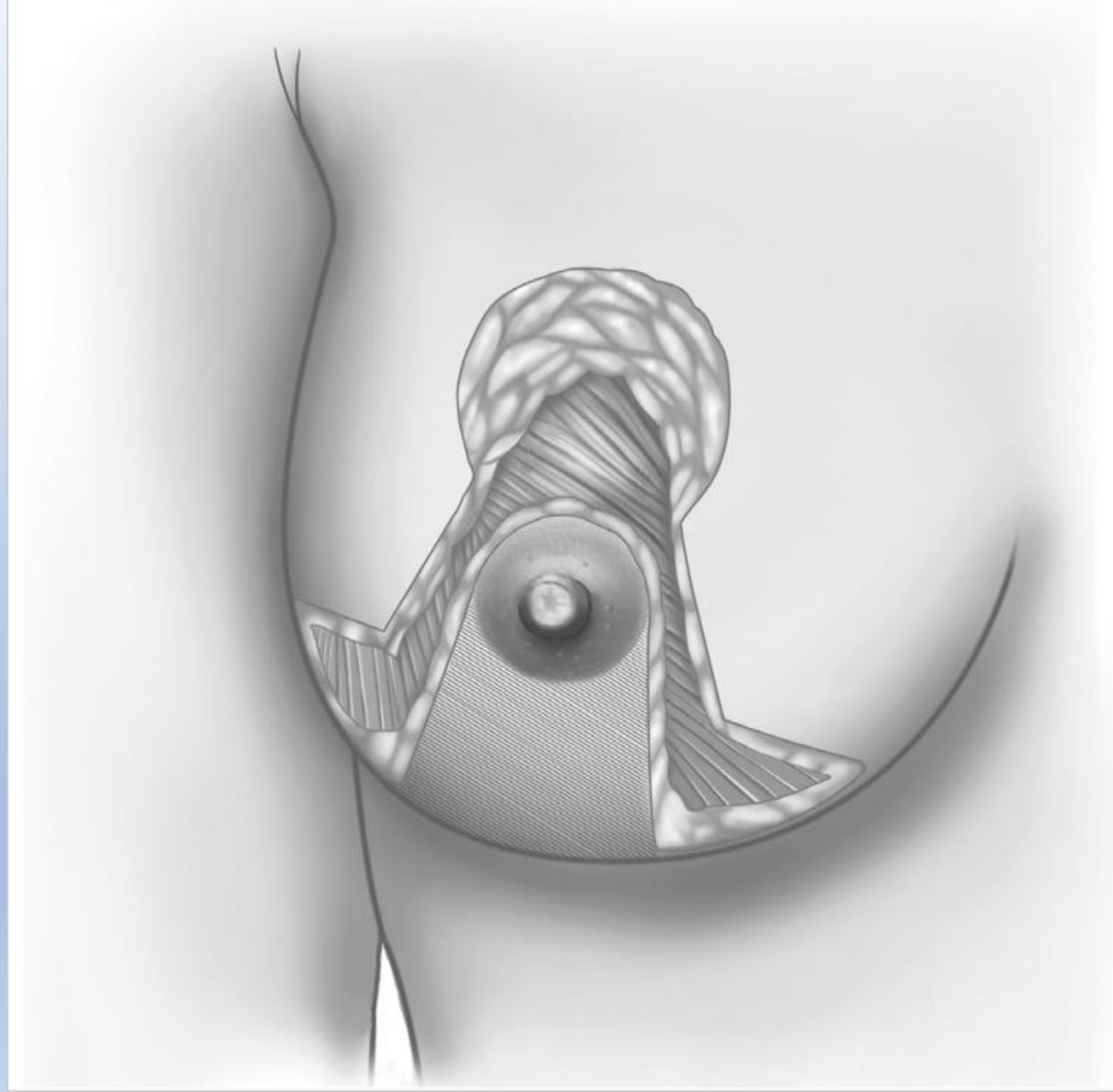
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Adjuvant therapy

- Radiotherapy
 - Primary vs secondary sites
 - Age factors
- Hormone manipulation
 - SERM vs AI
 - Zoladex

Adjuvant therapy

- Chemotherapy
- Targeted therapy
 - Herceptin etc

Followup

- Clinical
 - No evidence for specialist over generalist followup
- Radiological
 - Annual imaging
 - MMG if Birads A/B density
 - Supplemented by US
 - MRI in dense breasts, especially when primary was MMG occult
- When cured?
 - 5 years+

Question time

- AIHW Cancer Data
- BSA annual report