

# Breast Cancer treatments in young women- case history based discussion

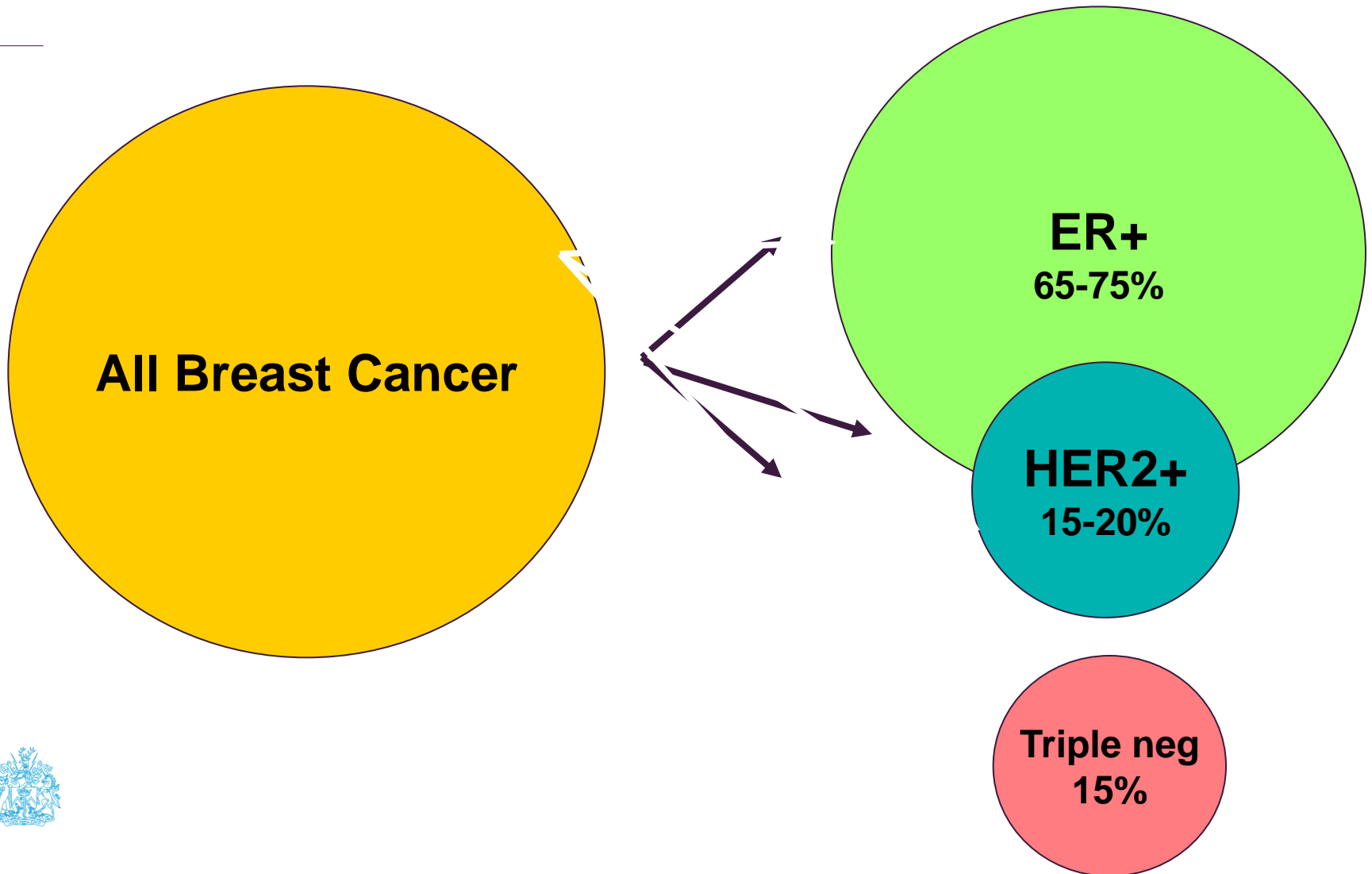
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# Overview

- Breast cancer phenotypes and systemic treatments
- Use of ovarian manipulation as a treatment
- Considerations for younger women
  - Fertility
  - Menopausal symptoms
- Case histories
- Questions



# Clinical Breast Cancer Subsets



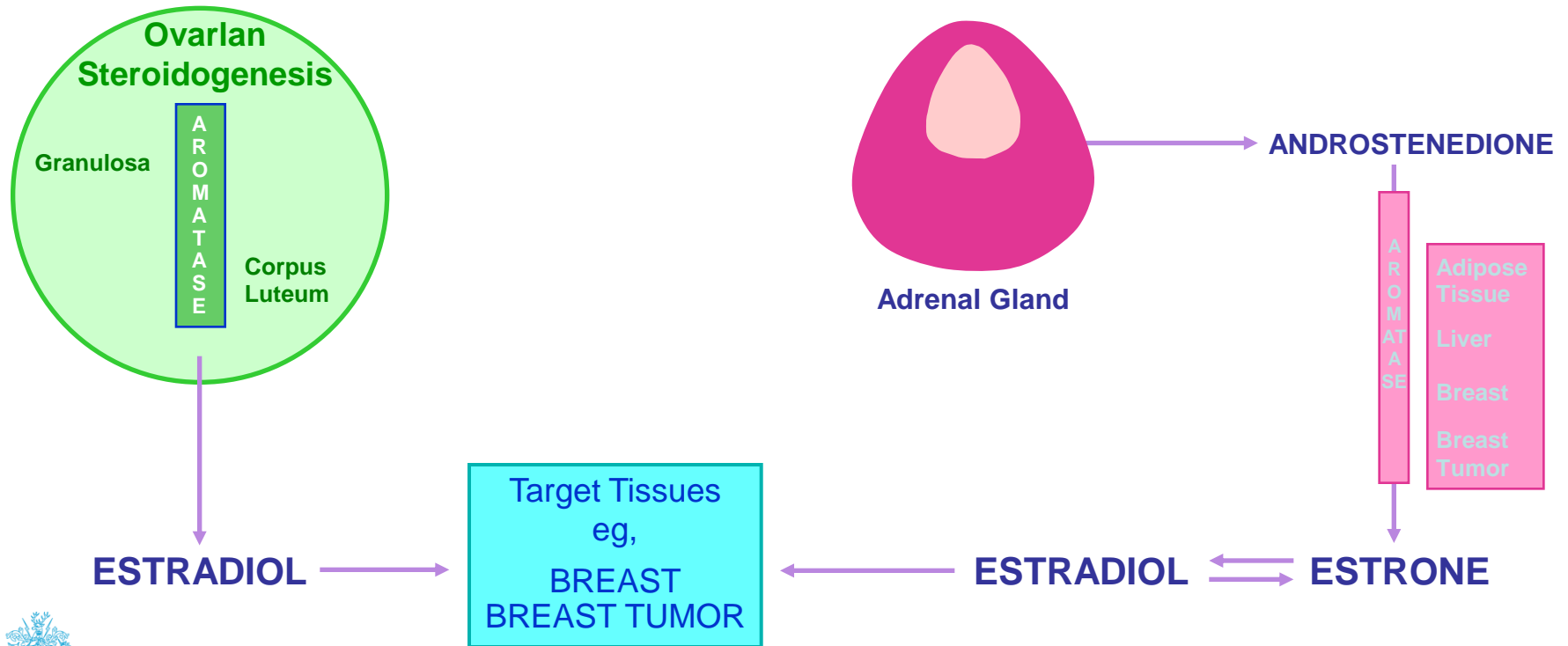
# The Basics of Systemic Therapy

	<b>Endocrine sensitive (ER+/Her2-)</b>	<b>Triple negative breast cancer</b>	<b>HER2-positive breast cancer</b>
<b>Neoadjuvant</b>	Endocrine Therapy Chemotherapy	Chemotherapy	Chemotherapy Her2-directed therapy
<b>Adjuvant</b>	Endocrine Therapy Chemotherapy	Chemotherapy	Chemotherapy/ Her2-directed therapy
<b>Metastatic</b>	Endocrine Therapy Chemotherapy Biologics	Chemotherapy	Chemotherapy Her2-directed therapy

# Estrogen Stimulation of Target Tissues

PRE-menopausal Women

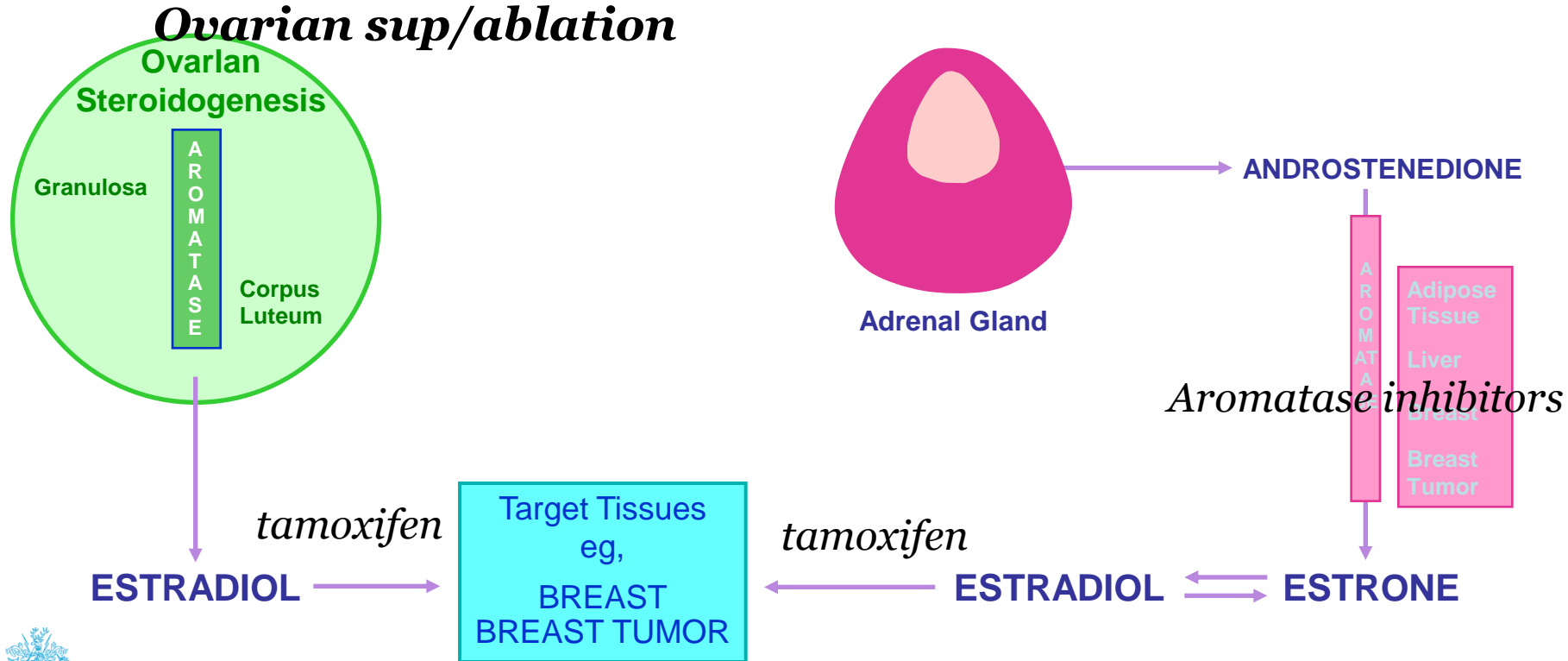
POST-menopausal Women



# Estrogen Stimulation of Target Tissues

PRE-menopausal Women

POST-menopausal Women



# ovarian suppression

- GnRH analogues
  - License is monthly
  - Goserelin 28days sc
- Surgical, radiation

## Pros of GnRH OS

- Risk reduction (SOFT/TEXT) esp in younger women
- Reversible (may take months) – allows for change of heart or change of data!

## Cons of OS

- True gain for mod risk women
- Menopausal symptoms
- CVS, bone, cognition effects, sexual health/libido



# Case History 1

- 32yrs old
- Right breast cancer
- Surgery upfront mast + axillary clearance
  
- 50mm G2 IDC (+in situ 90mm) 3/5 l nodes
- ER 8/8 PgR 8/8 HER2neg





- Staging NAD
- No Germline BRCA mutation (full panel due to FHx)
- 3<sup>rd</sup> gen chemo
  - 6-8 cycles
- Endocrine Rx
  - Tamoxifen.... 10yrs
  - SOFT/TEXT
    - tamoxifen + OS 5yrs
    - Or OS+ AI for 5yrs
- Radiotherapy



# Ovarian function and fertility

- Risk of POF on 3<sup>rd</sup> gen chemo
  - EC+Taxane
- IVF (has partner)
- Zoladex during chemotherapy
  - but ER pos tumour and does it work?
- Chance-
  - Real risk of subfertility
  - Duration of tamoxifen use



- IVF
  - ?risk

7 embryos

6 months of chemotherapy (no zoladex)

RT

Tamoxifen + OS

menopausal symptoms

No switch to AI

DEXA



- 2014
- 2years later
  
- Tamoxifen wash out
- OS washout
  
- Spontaneous pregnancy



- Aug 2015
- Baby daughter
- Breast fed 3 months
- Resumed Tamoxifen + OS (planned 5 yrs+ tamoxifen 5yrs)
- Planning next child after further 1 yr of therapy



# Discussions to be had beforehand ...

- Risk of recurrence
- Risk of the pregnancy /interruption of therapy (POSITIVE)
- Waiting at least 2yrs
- Planning-
  - wash out of drugs
  - Assessment of level of fertility
  - How long can we wait off therapy
  - Risk of delayed IVF
  - Complications during pregnancy
- Worst case scenario



# Case History 2

- 2008 aged 29yrs old
- Left BC
  - 4cm G2 IDC node Positive
  - ER 8/8 PgR 7/8 HER2neg
- Staging NAD
- No germline BRCA negative, p53 negative



- 3<sup>rd</sup> gen chemo given *neoadjuvantly*
- Tumour size reduction
- Surgery; WLE + clearance
- Residual 11mm G2 IDC 1/19 nodes





- RT to breast and SCF
- Tamoxifen + OS 2yrs (previous data)
- Tamoxifen for further 3 years.
  
- Tamoxifen for 5 years. Now 35
- Return of menses when OS stopped
- Wishes to have children
- The Discussion
- Proceeds to planned pregnancy with a view to resuming tamoxifen for further 5 years (ATTom and ATLAS data)



# The worst case scenario

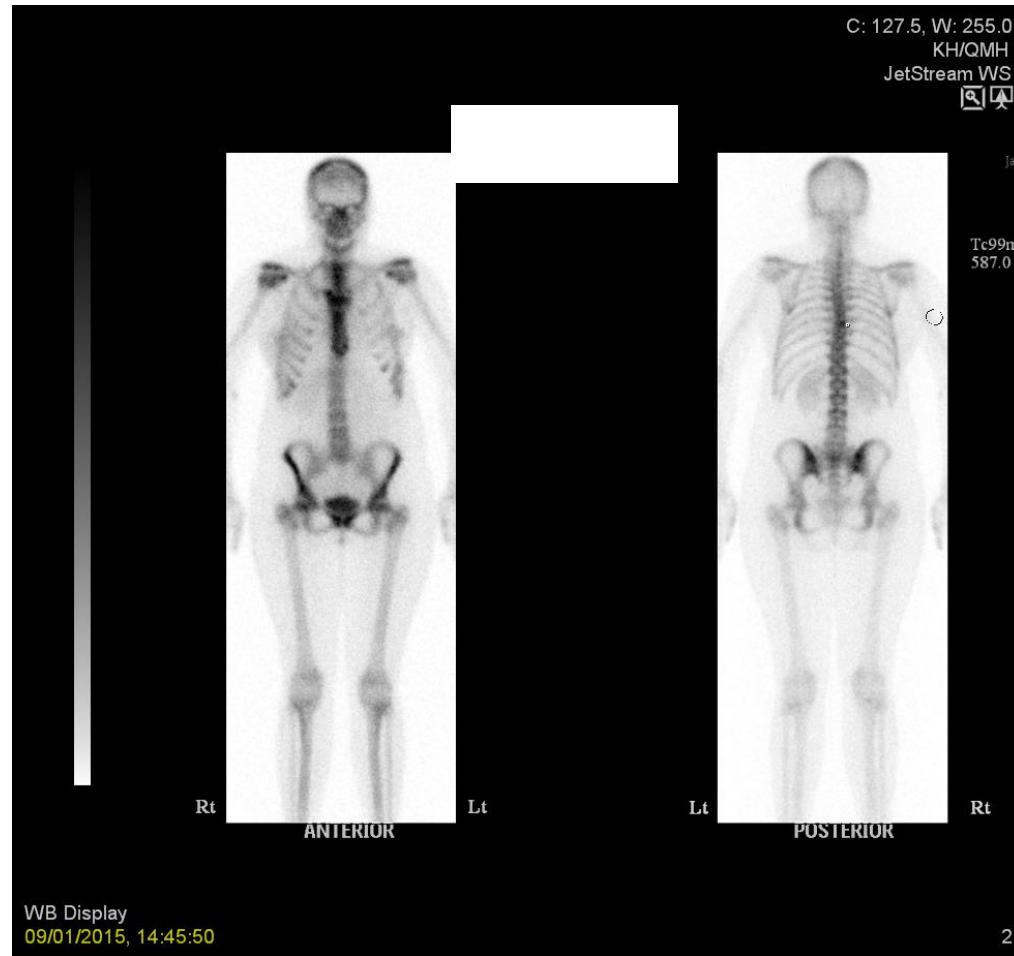
- 18/40 recurrent breast cancer in left breast
- Same phenotype
- Limited staging
  
- 2<sup>nd</sup> trimester options;
  - Breast and axillary surgery or chemotherapy
  - Termination discussed



- Neoadj chemotherapy
  - Caution with heart (EC re-challenge, RBH)
  - Caution with baby- links at KHT mat services
- Response to Rx. 2 cycles EC + 7 weeks of taxol (to continue after delivery)
- Delivered C section after failed induction at term
- Full staging CT and bone scan post partum



# New and suspicious T8 lesion





- Oligometastatic disease-current opinion
  
- Continue with radical/curative intent
  - Monitor distant disease
  
- At end of chemotherapy
  - Final surgery planning
  - Mastectomy required (rec disease)
  - Recon implant v DIEP reconstruction



# Dilemma of radical therapy in presence of distant disease

- Bone biopsy
  - No evidence of active malignancy

- Proceed with full radical Rx

- DIEP recon

- radical RT

- OS + AI



- No stereo RT to bone, but bisphosphonate given (dual benefit)

# Take homes

## Breast cancer in younger women

- endocrine treatments
- greater use of OS (and consequences)
- longer duration of therapy (10yrs) based on risk
- fertility preservation options- NHS limitations, delays in therapy, theoretical risks, likely use of embryos
  
- pregnancy in women who have had breast cancer
  
- Survivorship
- QoL on therapy
- co morbidities as a result of therapy





Thank you for  
your attention

The Breast Unit at The Royal Marsden  
Sutton, Chelsea and Kingston satellite