

# What has been “learned” in 2014 for metastatic breast cancer ?

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- Answer:
  - » Put the evidence into practice
  - » Provide access
  - » Evaluate ALL aspects of a patient's need
  - » Research the priorities
  - » Fund the priorities

# Components to improving outcome in metastatic breast cancer?

Drug therapy

Biology of cancer

- What drives the cell to grow?
- Are there targets on the cancer cell which a drug can be effective against?
- “Translational” research is needed

Optimise standard care

Supportive care is an integral

Benefits of non-drug clinical trial

- High quality & relevant research
- Disseminate results
- Put into clinical practice



## Breast Cancer Research Centre-WA

Unique: Clinician-founded, Clinician-driven  
Conduct large international trials  
Design patient-relevant research  
Educate, Support, Multidisciplinary

# General principles

- Applicable to early & metastatic breast cancer
- What is currently done?
  - Here in WA & beyond
  - Globally
- How do we make a difference for patients now & future?
- What can you do?

# 1. Drug therapy

- Steps
  - » Identify the drug
  - » Cancer cells petrie dish -> Animal studies
  - » First in human studies [Phase I]
  - » Large randomised trials  $\pm$  placebo-control
  - » If proven effective -> Registration -> Reimbursed
- Process not altered by those outside pharmaceutical companies
- Access through clinical trial provides potential earlier benefits

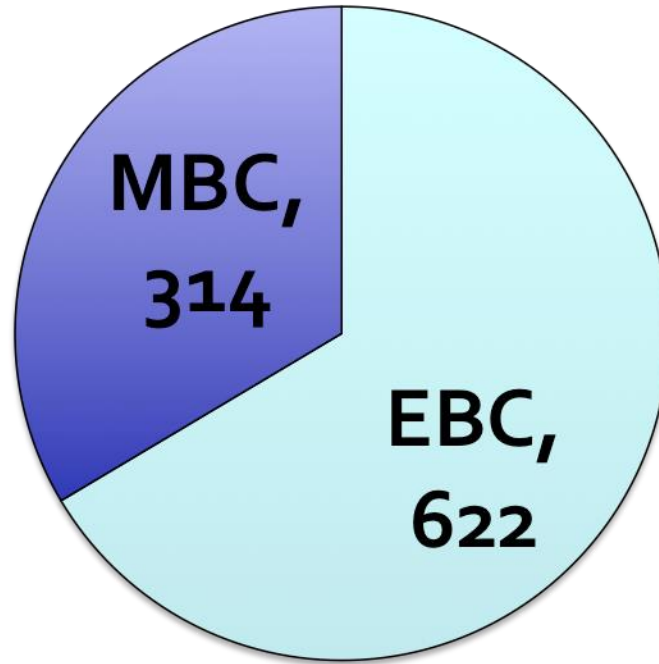
## 2. Clinical trial

- Pros:
  - » Usually “blinded” but assured 1:2 or 2:3
  - » Provided free
  - » Most up-to-date management
  - » Potentially increases survival
  - » Contribute to the future care of others
- Cons:
  - » Visits are less flexible
  - » May experience new side effects

# BCRC-WA: what are we doing?

- Since 2000,
  - » 936 pts entered into 57 trials here in BCTU
  - » Access to new drugs
  - » Funding for tests
  - » Increase contact staff for follow-up

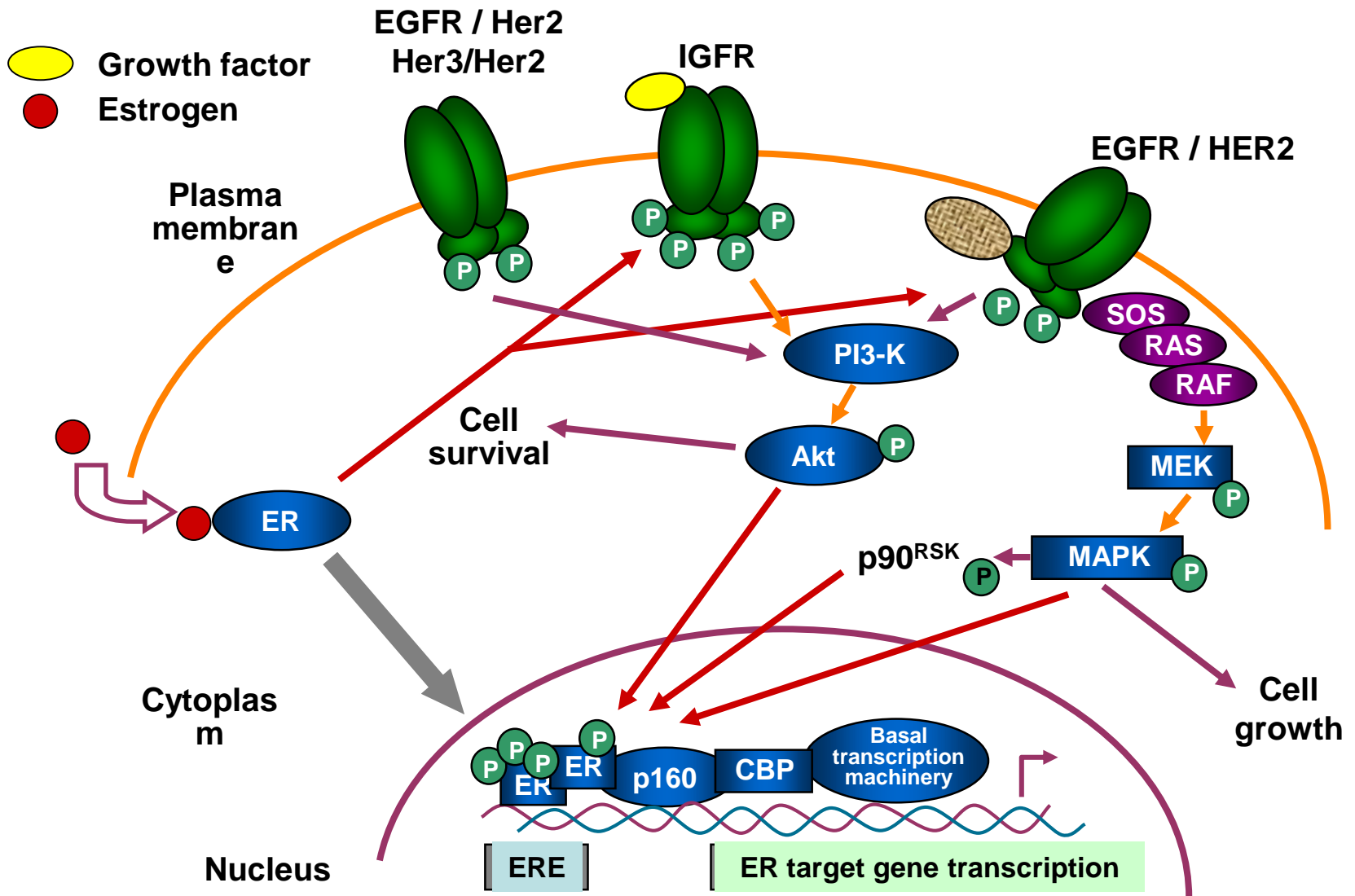




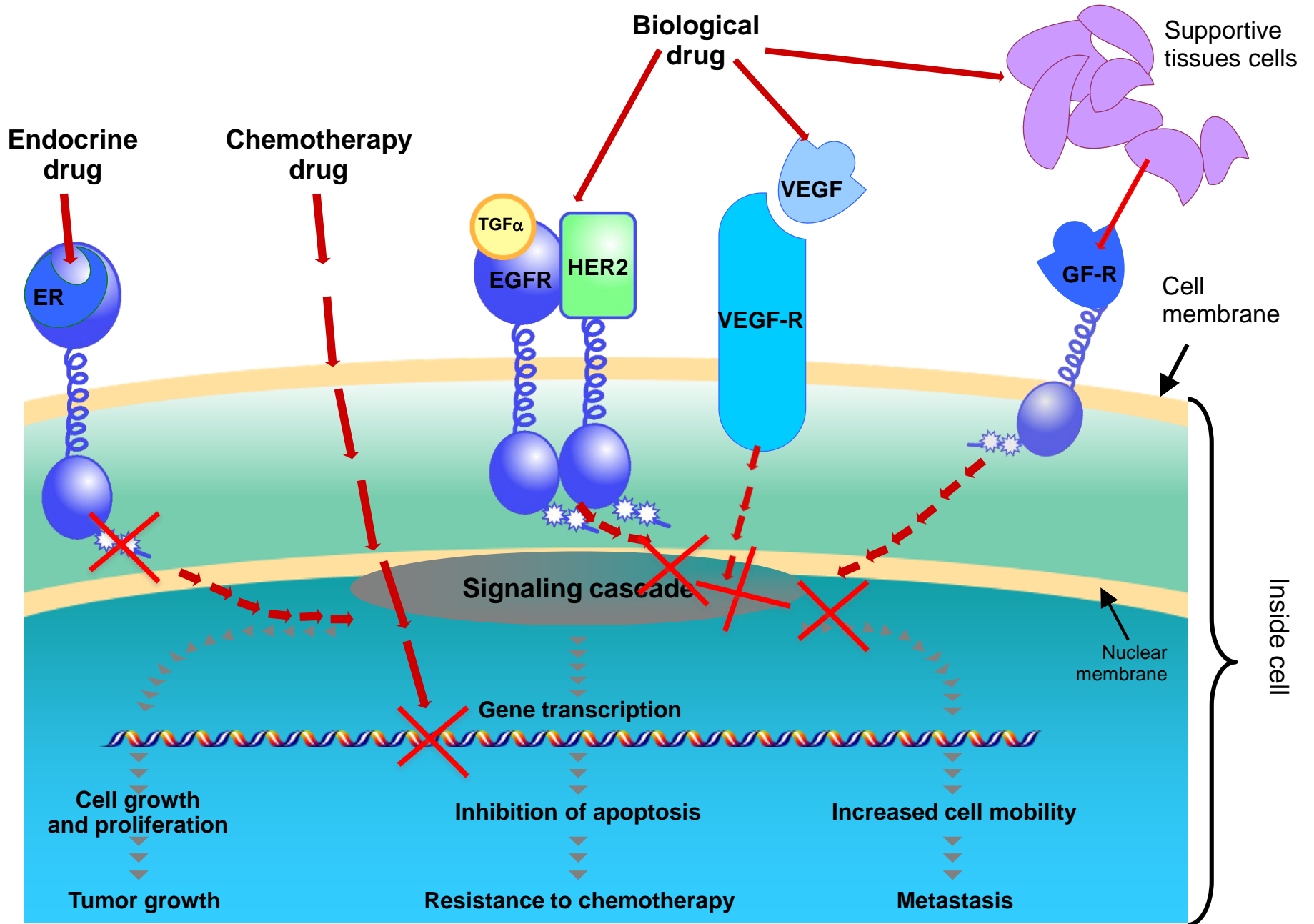
- Trials which became standard of care (SOC)  
163 patients: >50% received higher chance of cure
- Highest recruitment globally  
435 patients in 12 trials accessed new drugs

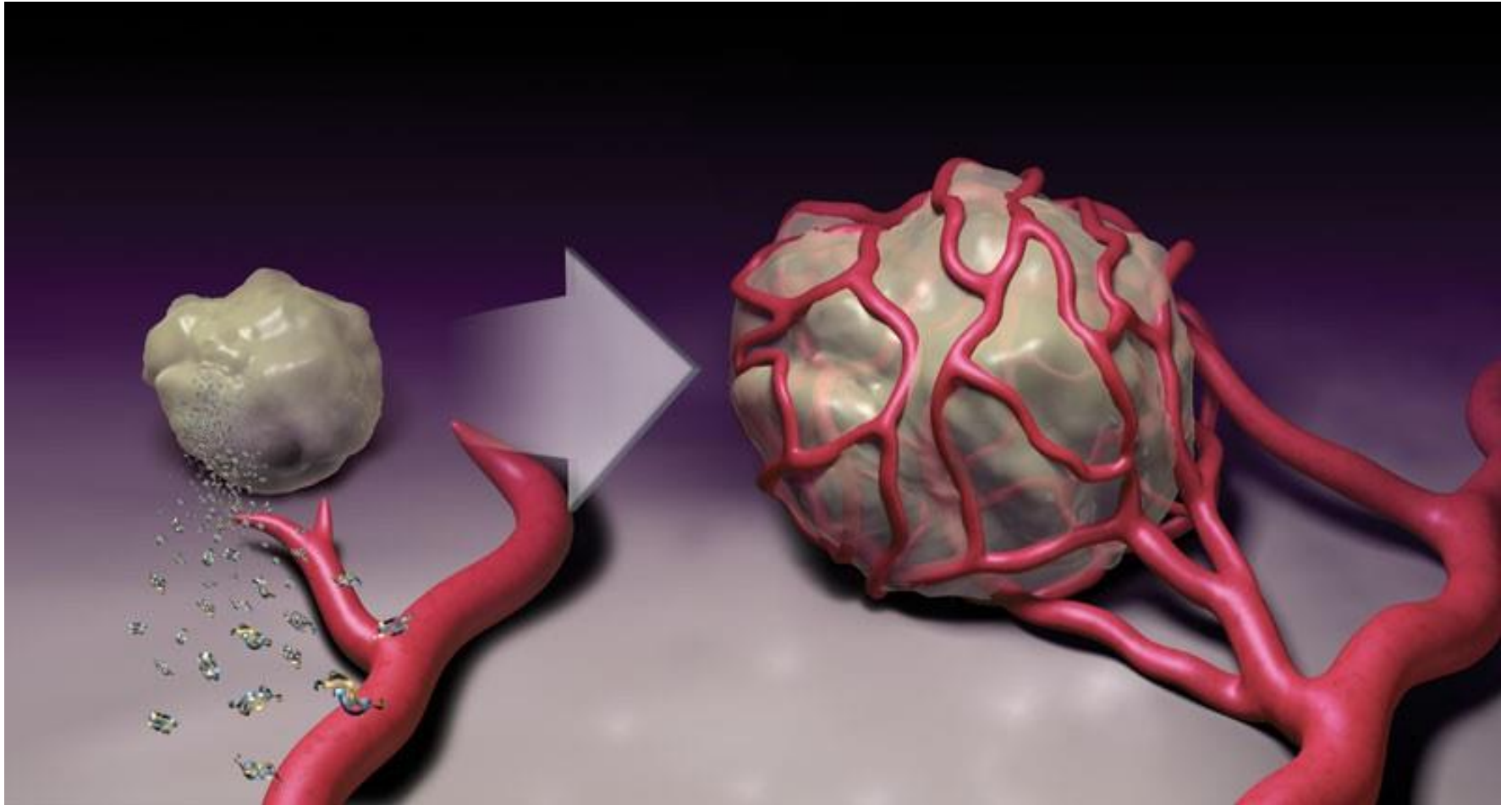
# 3. Biology of breast cancer

- What drives the cancer?
- Are there 'targets' on the cancer cell we can block



Adapted from Johnston S. *Clin Cancer Res.* 2005;11:889S-899S.





# BCRC-WA: what are we doing?

## #BCRC107\*

- Does breast cancer cells change when they recur as metastases?
  - » Studied 157 pts – showed 99% concordance in HER2

## #BCRC106

- DNA repair is abnormal in triple negative breast cancer – can chemotherapy cause further damage?
  - » Study of 317 pts to analyse the genetic makeup of TN

## #BCRC111

- Do immune cells in the breast help or hinder cancer cell growth?

## 4. Optimise standard care

- Apply evidence from clinical trial in routine clinical practice
  - » Fact: Survival benefits from adjuvant chemotherapy requires >85% drug delivery
  - » USA study: 3707 pts - 56% pts received <85%
  - » European study: 444 pts – 21% pts received <85%
  - » UK study: 442 pts – 17% pts received <85%

# BCRC-WA: what are we doing?

#BCRC103\*

- Can careful monitoring after 1<sup>st</sup> cycle chemotherapy be used to give selected pts immune support?
  - » Studied 1655 pts -> using standard approach allowed between 91% - 96% pts to receive >85%
  - » Average dose delivered was 98%



# 5. Non-Drug clinical research

- What are common side effects?
  - » Fatigue
  - » Sore joints
  - » Weepy eyes
- Identify ways of delivering treatment more safely
  - » How much can GP's help?
  - » How common are emotional and employment problems after BrC diagnosis?

# BCRC-WA: what are we doing?

## #BCRC110

- AREA – 2-phase exercise trial to improve fatigue in metastatic breast cancer

## #BCRC102

- JUST (Joints under study)
  - » Study of 75 pts using topical emu oil vs. placebo

## #BCRC108\*

- How common is tearing with chemotherapy and is it due to blocked tear duct?
  - » Study of 100 pts – no need to stent the duct and its reversible

# BCRC-WA: what are we doing?

## #BCRC105

- PATIPSA – Evaluating how many ‘unplanned’ visits pts have during chemotherapy and how often is their GP involved

## #BCRC114

- PPSS - Physical and Psychosocial Survivorship Study
  - » Identifying prevalence and nature of physical and psychosocial symptoms in breast cancer survivors

# 6. Supportive care is essential

- Hair loss is a major concern with chemotherapy – do cold caps work and is it safe?
- Propose #BCRC113 Cold cap study
  - » Include women with metastatic breast cancer
  - » Long term follow-up
  - » Is there a difference between chemotherapy drugs?

# What can you do?

- Participate in clinical trial if offered
- Seek evidence-based information
- Share evidence-based information
- Form practical partnership with BCRC-WA
- Funding
  - » General
  - » Education: Newsletter, GP education, Trainees
  - » Project-specific:
    - Survivorship study
    - Cold caps study