

# How Can Surgeons Help Medical Oncologists?

Karen A Gelmon MD FRCPC  
Clinical Professor Medicine, UBC  
Medical Oncologist, BC Cancer  
Agency

# The Role of the Medical Oncologist

- To assess the systemic risk of the cancer
- To provide recommendations for systemic treatment to the individual patient
- To work with the surgical oncologist and radiation oncologist in a multidisciplinary fashion
- To assess survivorship etc issues for the patient
- To treat relapse

# Decision Making in Adjuvant Therapy

**Tumour characteristics**  
T, N, Grade, ER, PgR,  
HER2, LVI

**Patient Characteristics**  
Age, Comorbidities  
Prior Therapy  
Performance Status

**Patient Preference**  
Work/Family/Self

**Clinical Trials,  
Guidelines  
Recent Reports**

**Toxicity Profile**

**Molecular  
Profile**

# Decision Making by Tumour

- Size
- Grade
- Margins
- Nodal involvement
- Molecular markers
- LVI

# What We need from Surgeons

## Preoperative consult

Where was the tumour

Size of Tumour, Axilla

Recommendations

## Operative report

Was it a full ALND or not

Was extra tissue taken

Deep assessment, fascia

## Plans

Are there plans for more surgery

# What We need From Pathology Reports

- Clear information on size, grade, nodes, margins, LVI, molecular markers
- Core biopsies help get markers sooner and may help planning
- SLN – clear reports
- Number of nodes - does the patient need an ALND

# Nobody Works Alone

- Communication and multidisciplinary care
- Plans may change
- Respect for guidelines and grey areas
- No place for dogma

# Patient Centred

- Anxiety of patient often decreases what they hear
- Working together with written information to avoid confusion
- Review of case
- Avoid long delays

# New Directions

- Tissue!!!
- Studies with collection of tissue and blood for analysis
- Tissue banking
  
- Studies – Phase 0 – window studies
- Studies - Density Study

# Density and Risk of Breast Cancer

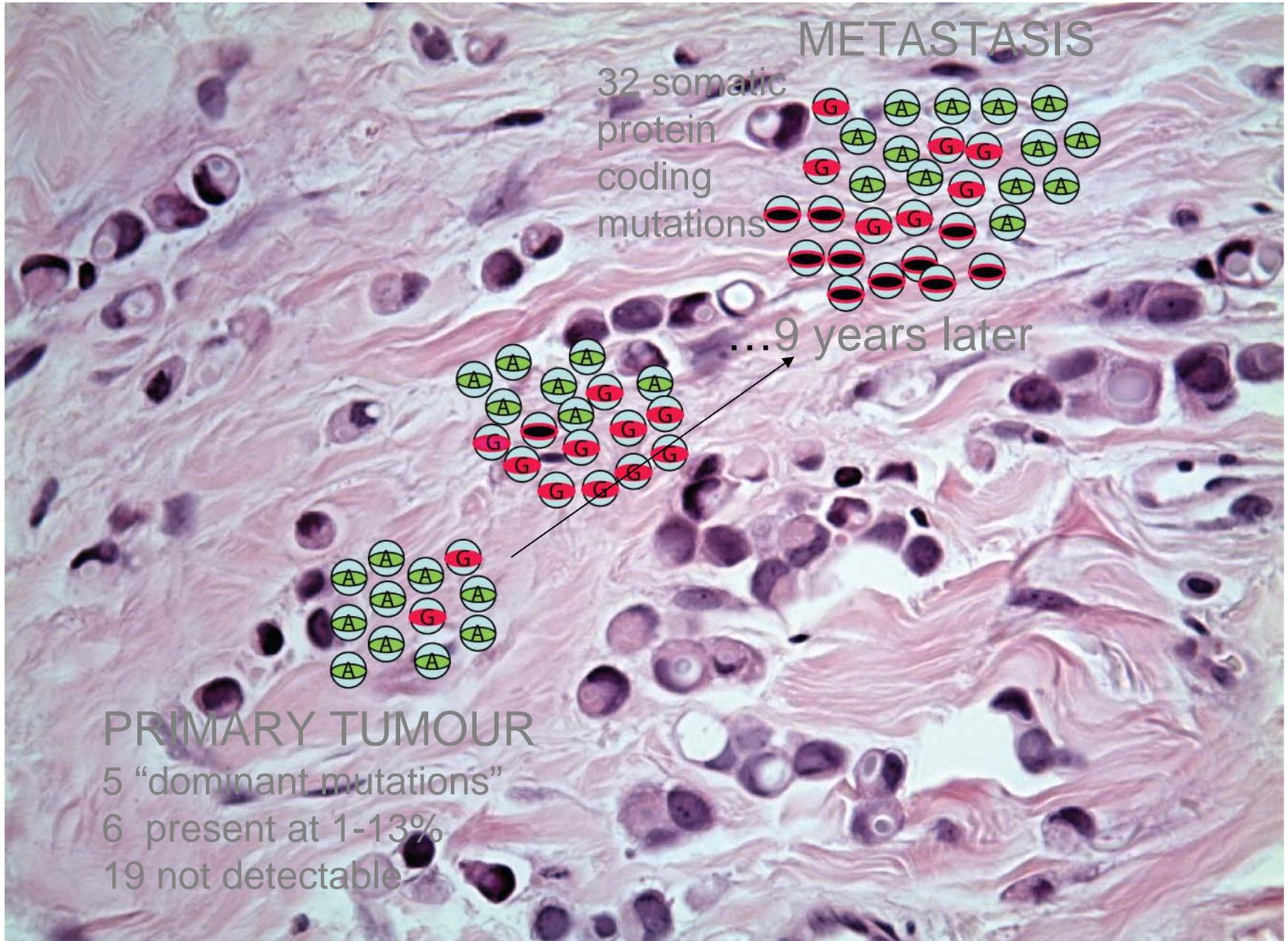
- CBCRA funded – Aparicio, Gelmon, Wilson, Watson, Boyd
- What are the molecular markers to define density?
- What is the role of columnar cells in density?
- Core biopsies tumour, near tumour, opposite quadrant
- Analysis of tissue

# Sequencing a Tumour and the Metastases

Mutational evolution in a lobular breast tumour, profiled at single nucleotide resolution

- Sohrab P Shah, Ryan Morin, Jaswinder Khattra, Leah Prentice, Trevor Pugh, Angela Burleigh, Allen Delaney, Karen Gelmon, Ryan Guliany, Janine Senz, Christian Steidl, Robert A Holt, Steven Jones, Mark Sun, Gillian Leung, Richard Moore, Tesa Severson, Greg Taylor, Andrew E Teschendorff, Kane Tse, Gulisa Turashvili, Richard Varhol, René L Warren, Peter Watson, Yongjun Zhao, Carlos Caldas, David Huntsman.

# EVOLUTION OF MUTATIONS OVER 9 YEARS



# We are all different even with guidelines

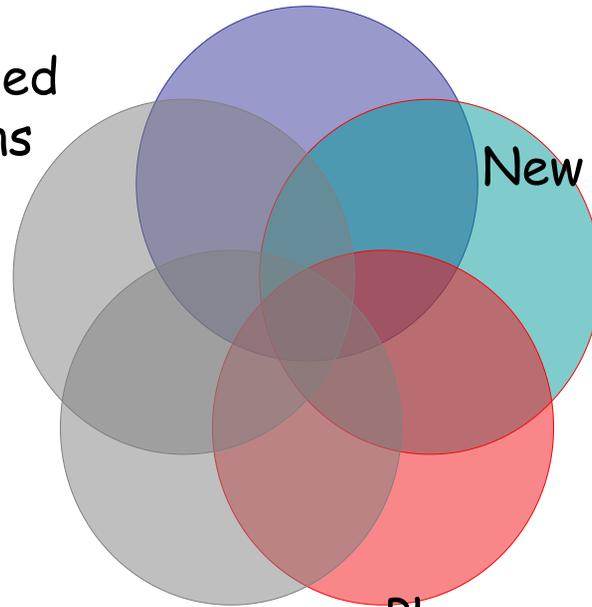
- Differing opinions
- Try to stay with guidelines but these are tempered to the individual
- Respect for different opinions
- Use of conference where a group discussion and opinion can work best

# What We Need to Develop New Strategies in Breast cancer

Tools to assess response  
MEASURES OF TUMOUR AND TARGET

Identified/Enriched  
Patient Populations

New Treatment strategies



Multidisciplinary CARE

Pharmacogenomics screen  
INDIVIDUAL RESPONSE TO THERAPY

