

**FROM ZERO TO HERO: Scaling Up Your Implementation**

**Workshop program**

*Monday 18<sup>th</sup> February – Westmead Institute for Medical Research*

# **INTEGRATION OF GENOMIC PATHOLOGY INTO MULTIDISCIPLINARY CARE**

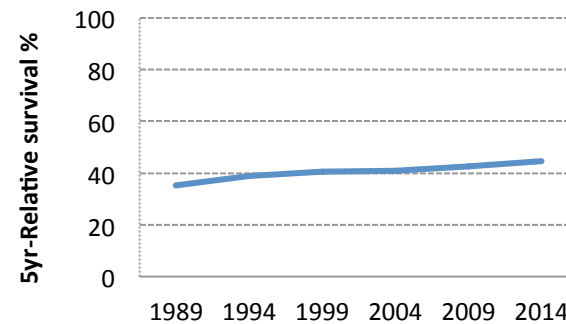
## **CASE STUDY**

Anna deFazio



## Context - epithelial ovarian cancer

- Survival is slowly increasing, but 5-year survival remains <45%
- Most often advanced, widespread disease at diagnosis
- Treatment is largely the same (surgery + carboplatin/paclitaxel chemotherapy)

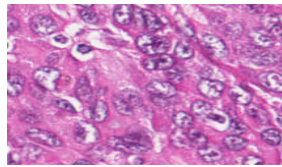


Source: AIHW & NBOCC Ovarian Cancer in Australia 2014

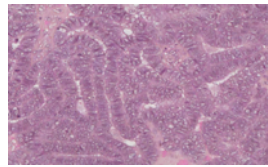
# Ovarian cancer subtypes



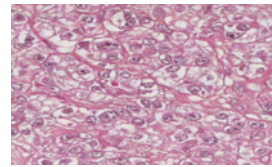
Histology



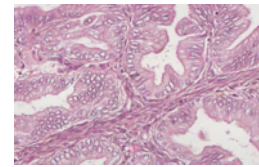
Serous  
70%



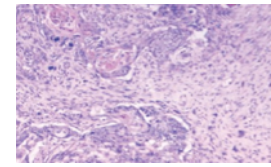
Endometrioid  
10%



Clear Cell  
7%



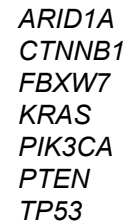
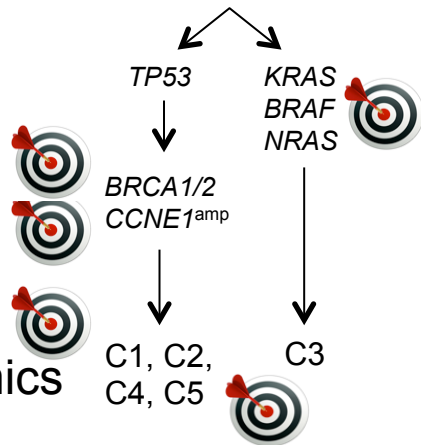
Mucinous  
4%



Carcinosarcoma  
3%

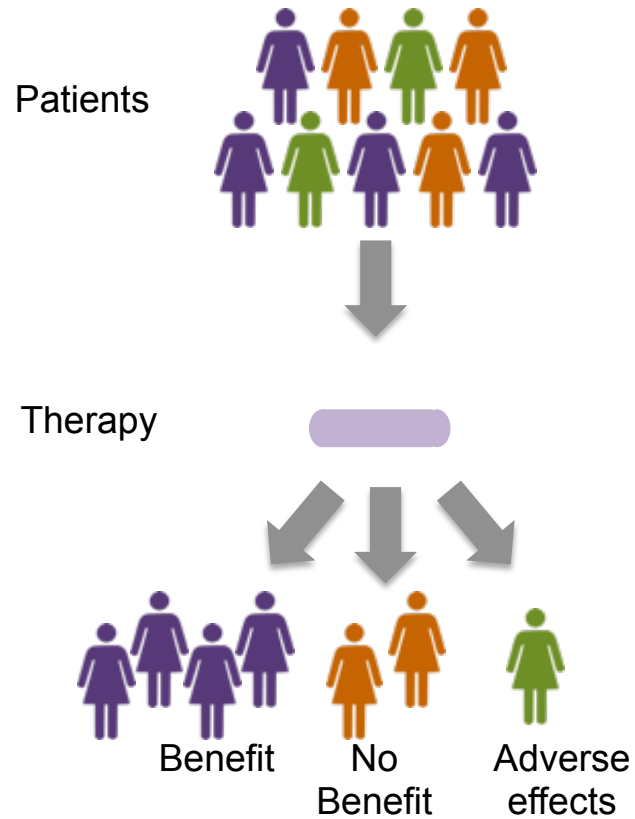


Mutations

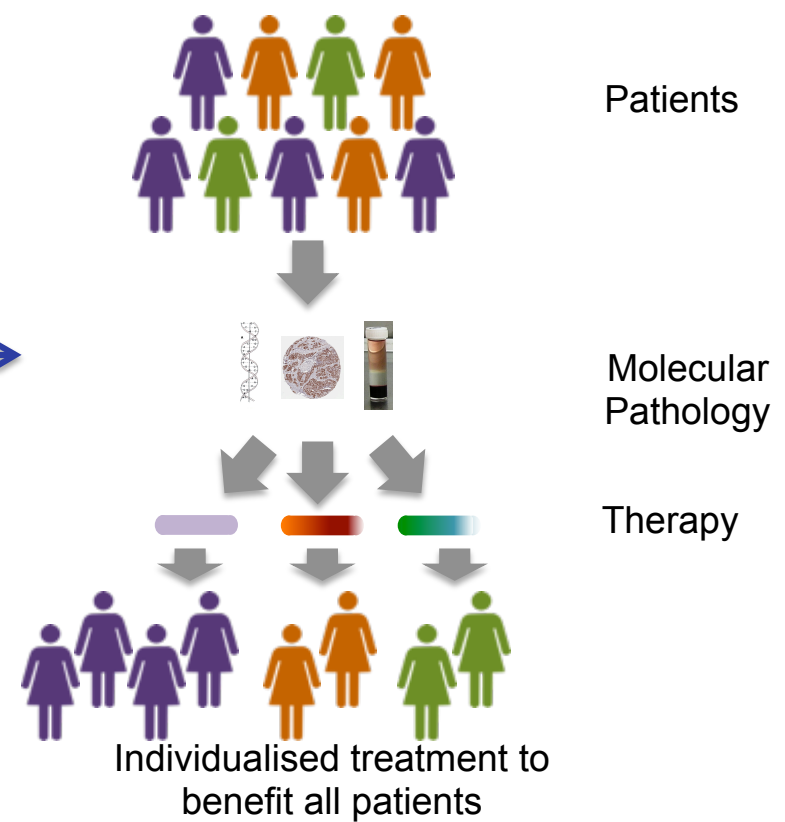


Transcriptomics

## Conventional care



## Precision medicine

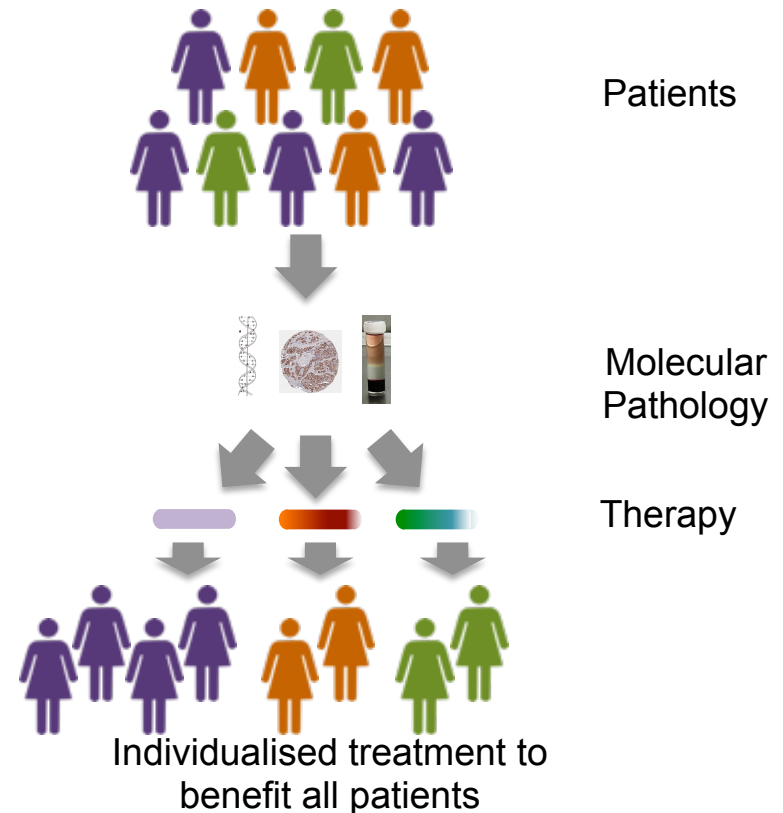




## Challenges

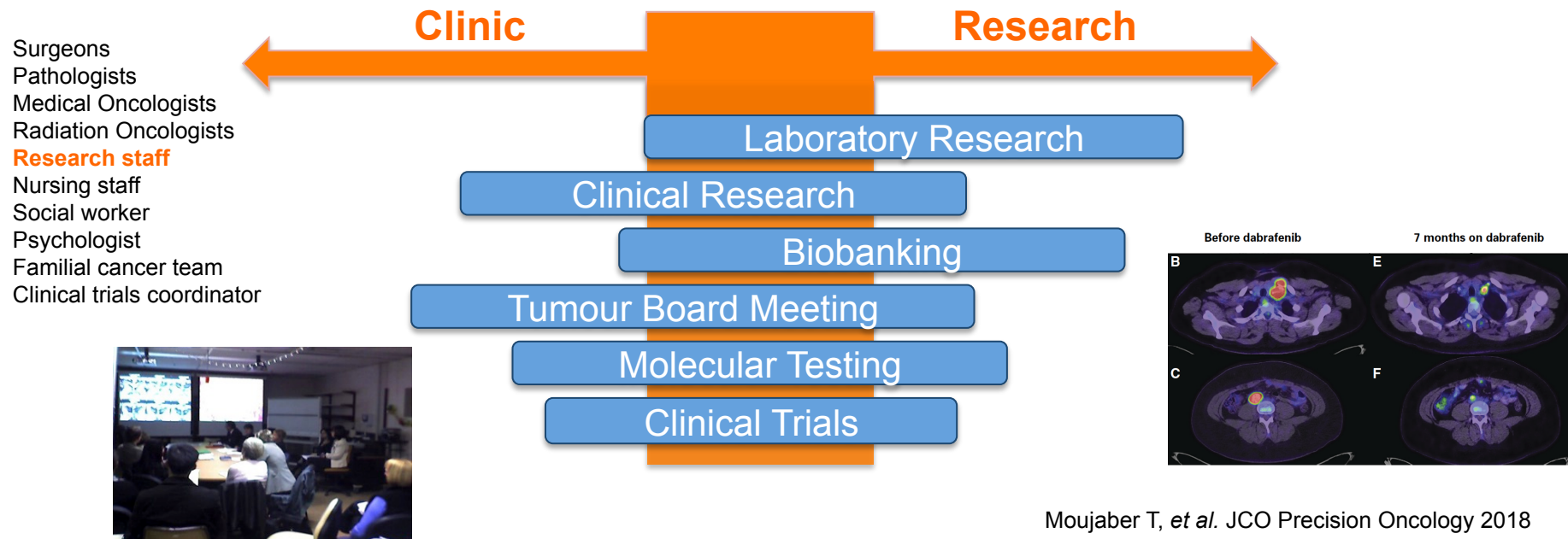
- Test, methods, interpretation
- Availability of treatments
- Do treatments targeted to the same alteration work in different tumor types?
- Need to screen a large number of patients to identify small number that are eligible
- Patient disappointment and time wasted for the patient if not eligible

## Precision medicine



# Case Study: Integration of molecular testing of tumour samples into clinical care

- *At a local level - tumour program, embedding research as a discipline in multi-disciplinary care*



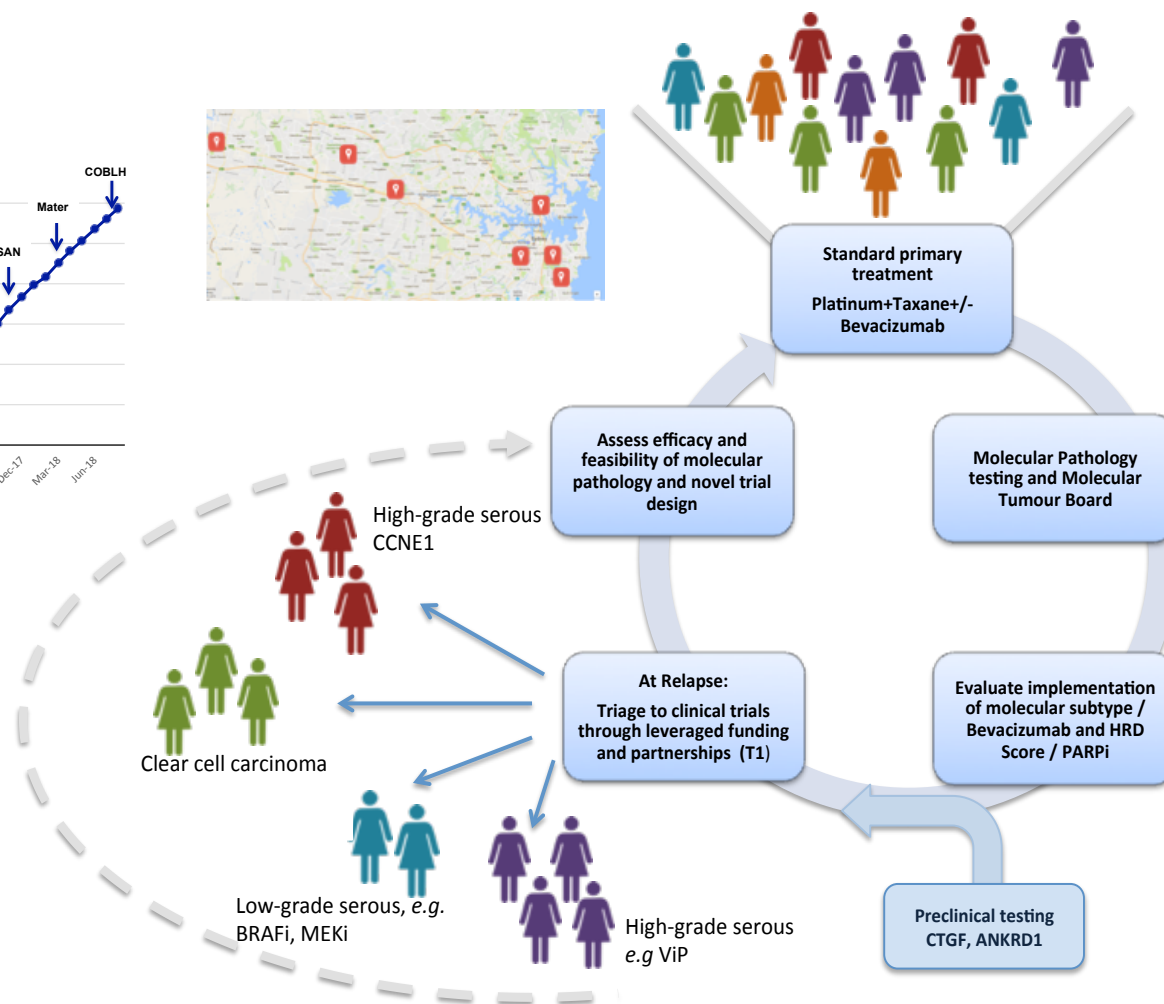
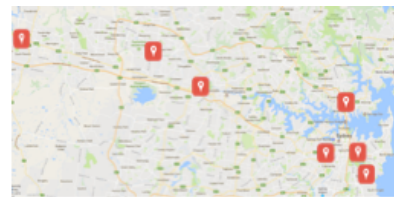
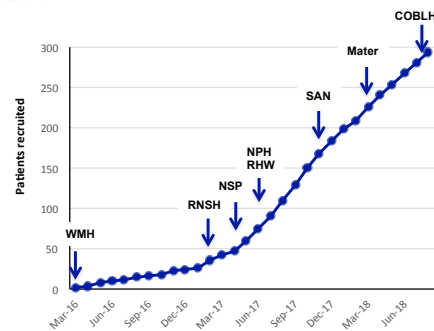
Moujaber T, et al. JCO Precision Oncology 2018

# INOVATe

Individualised Ovarian Cancer Treatment through Integration of Genomic Pathology into Multidisciplinary Care

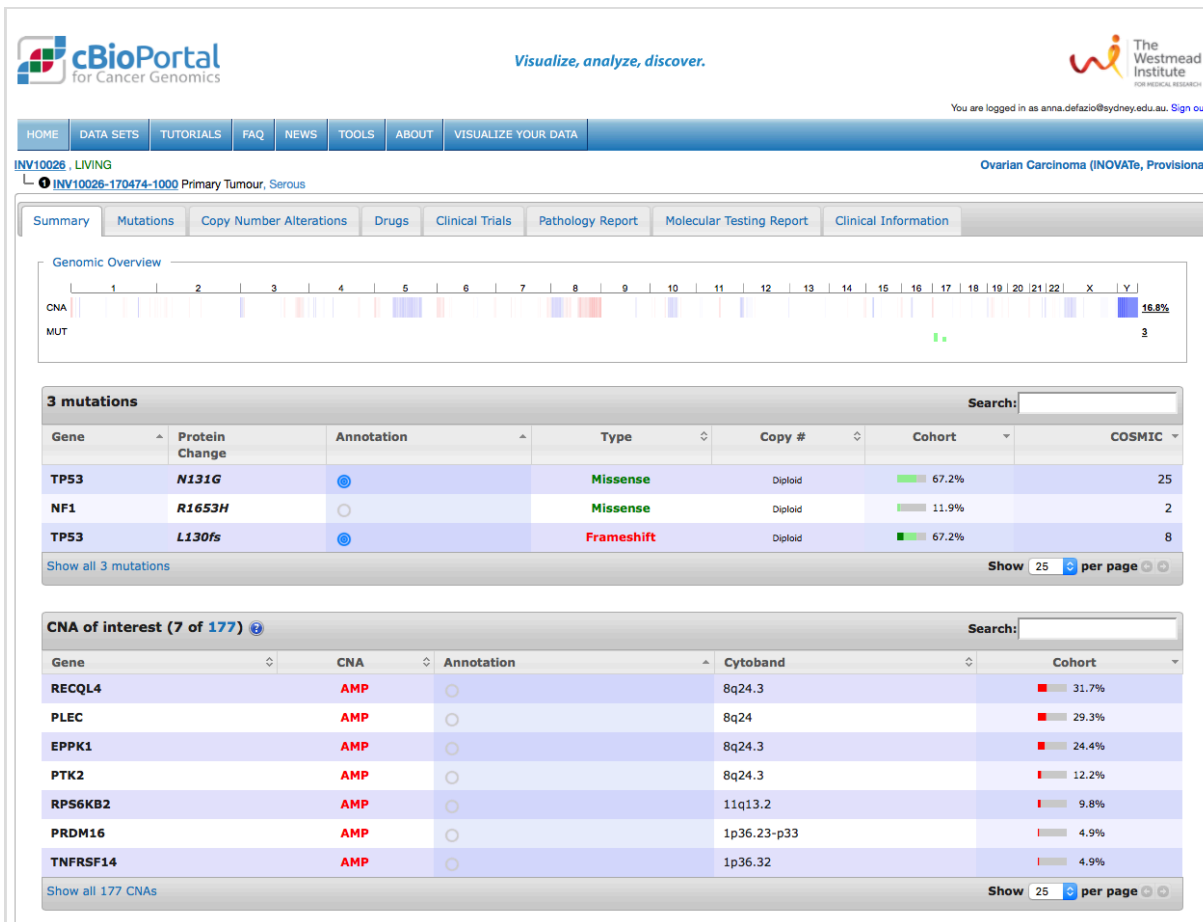
As of Jan 2019

- 12 sites open
- > 350 eligible patients consented
- Next-gen sequencing, gene copy number, gene and protein expression
- Patients identified for marker-driven clinical trials



Proudly supported by  
Cancer Institute NSW

# cBioPortal - INOVATe

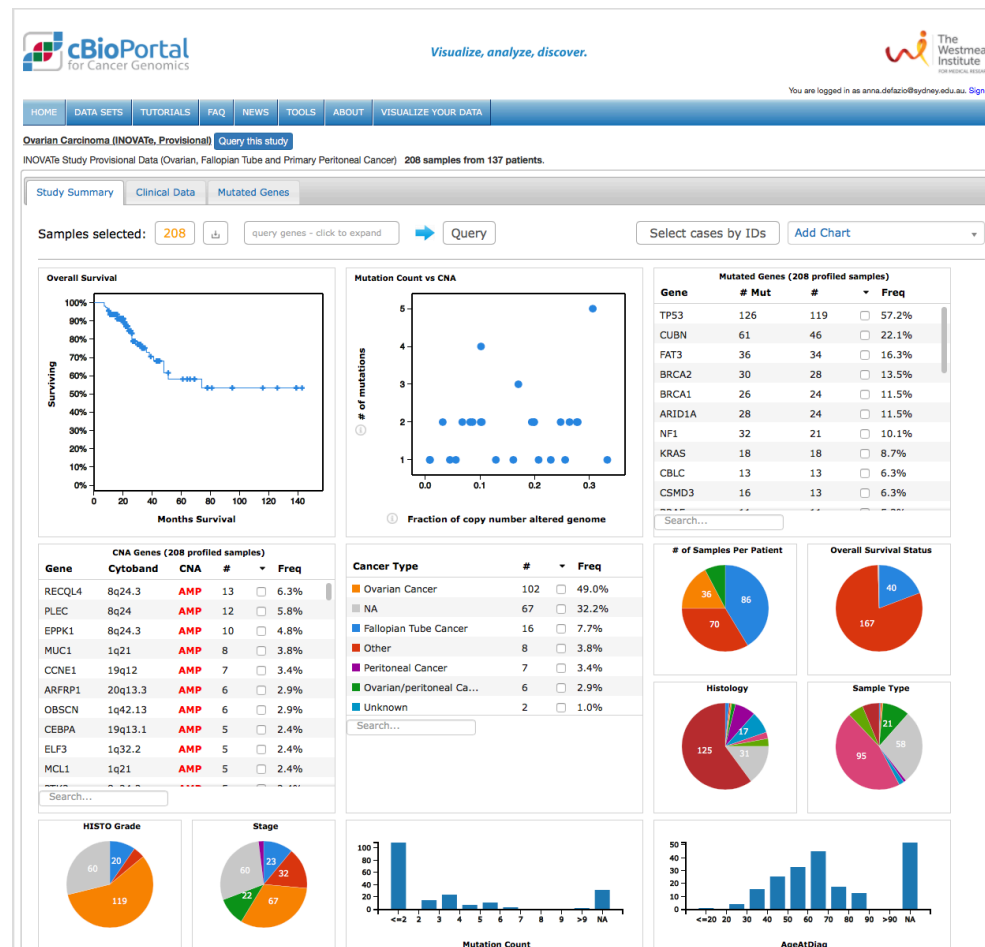


Sydney Health Data Coalition

Data Science in Health & Medicine  
at Westmead



# cBioPortal - INOVATe



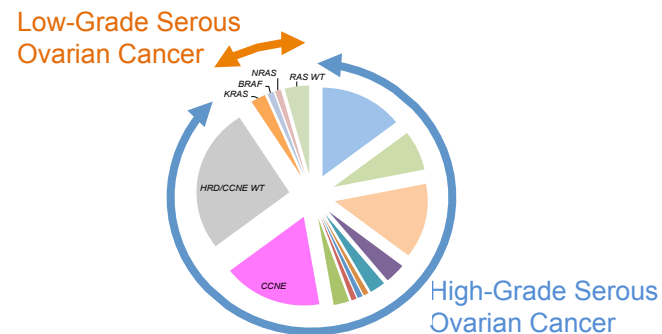
Sydney Health Data Coalition

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INTERSECT

# Conclusions

- Beginning of the end of a one-size-fits-all approach to cancer treatment
- The journey has started, but there is still a long way to go
- INOVATe has been embraced by patients and clinicians
- The study will hopefully contribute to implementation of precision treatment and ultimately improved patient outcome



# Acknowledgements

## INOVA Te Investigators

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### Consumer Representatives

Alison Harris, Sapna Lazarus, Shweta Sengupta

