DEVELOPING INFRASTRUCTURE FOR MOLECULAR PROFILING FOR ALL IN OVARIAN CANCER (DEMO)

Introduction/Background The lack of patient engagement and biopsy quality could both reduce the number of successful molecular tests performed after the diagnosis of ovarian cancer. DEMO is a multi-centre quality improvement study that aims to improve the uptake and success rates of tumoural and germline molecular testing in ovarian cancer. The two lead sites have vastly different patient demographics. One in 7 (15%) women diagnosed in Birmingham are non-Caucasian with high number of patients requiring interpreters for their consultations, whilst patients diagnosed in Cambridge are mostly Caucasian and fluent in English.

Methodology The three components of DEMO include:

1) the establishment of a patient advisory group to co-produce a multimedia, multilingual patient information package to support informed decision making
2) the use of improvement methodology to analyse existing diagnostic pathways
3) the development of a multidisciplinary consensus guideline to improve the current biopsy pathways for molecular profiling.

Results Our initial retrospective audit (n=75; January-August 2021) demonstrated high tumoural (BRCA or Homologous Repair Deficiency) testing failure rates of 25% (3/12) and 2021) demonstrated high tumoural (BRCA or Homologous Repair Deficiency) testing failure rates of 25% (3/12) and 35% (11/31) of samples from image-guided biopsies and post-chemotherapy resections, respectively. A prospective audit pathway has been agreed to inform future practice. In addition, the first patients advisory group discussion in June 2022 has provided a qualitative narrative on patients’ perceptions on molecular testing and explore how patients would like such complex information conveyed to support patient information package development.

Primary objective

To improve the proportion of eligible women diagnosed with ovarian cancer successfully tested for tumoural BRCA mutations or Homologous Recombination Deficiency (HRD) and germline BRCA mutations.

Table:<br>
| Primary objective | Co-produced patient information (multilingual + multimedia) | Prospective audit cycle using novel QI technique | Multisite Multidisciplinary consensus + CPI opportunity |

Abstract 2022-RA-1058-ESGO Figure 1

Conclusion Supporting informed decision making for all and establish auditable biopsy pathways are crucial for the implementation of molecular profiling to improve ovarian cancer care.
Conclusion In addition to the nephroprotective benefit, ST also appears to be associated with better cytoreduction results. Hyperhydration does not provide any additional benefit.

Abstract 2022-RA-1063-ESGO Figure 1

Metabolomics showed LSR promoted lipid metabolism in EOC

HFD mouse. Partial Least Squares-Discriminant Analysis

**Conclusion**

Metabolomics showed the activation of lipid metabolism in HFD mouse and suggested that LSR contributed tumor growth via lipid metabolism.