Targeted therapies in Epithelial Ovarian Cancer: not only \textit{BRCA}
Disclosure of interest

- I have no personal or financial interests to declare; I received no financial support from an industry source for the current presentation.
Anamnesis and Case Presentation

- Woman 60 years old, ECOG-PS 0

- 06.2014 ➔ High-grade Serous Ovarian Cancer
  *BRCA1* and 2 WT, Stage IIIC FIGO

- Family History ➔ Mother died of ovarian cancer
  Aunts died of breast and pancreatic cancer
  Prostate cancer diagnosis in a maternal uncle

- 07. to 10.2014 ➔ Surgical debulking
  Adjuvant CBDCA + Paclitaxel + Bevacizumab
  Maintenance Bevacizumab
  Negative follow-up until 07.2016
Platinum-sensitive relapsed ovarian cancer

- **Nodal Recurrence:** PET 11.07.2016 (PFI 21 months)

- **1st line therapy:** Metronomic oral cyclophosphamide (refuses iv therapy) from 07.2016 until 04.2018 → nodal PD

- **2nd line therapy:** CBDCA + Paclitaxel → CR
Wait and see or PARP-inhibitors
BRCA and BRCAness

GENETIC COUNSELING → multi-gene panel NGS:
BRCA and BRCAness

GENETIC COUNSELING → multi-gene panel NGS:

“...BRCA1 and BRCA2 wild type...
RAD51D  c.694C>T (p.Arg232) in heterozygosis...”

Homologous Recombination Repair Deficiency
Rohini Roy et al. 2012; Nat Rev Cancer, 12:68–78
BRCA and BRCAness

GENETIC COUNSELING → multi-gene panel NGS:

“...BRCA1 and BRCA2 wild type...
RAD51D c.694C>T (p.Arg232) in heterozygosis...”

Homologous Recombination Repair Deficiency

BRCAness is a phenocopy of BRCA1 or BRCA2 mutations...BRCAness exists when an Homologus Replication Repair (HRR) defect is present in a tumor in the absence of a BRCA1 or BRCA2 mutation [...]

Christopher J. Lord et al. 2016; Nat Rev Cancer, 16:110-120
PARP inhibitors in BRCAness ovarian cancer

Niraparib

200 mg/die (weight 55 kg) from 16.10.2018 - to date

• PET (02.2019) → no evidence of disease
• CA 125 (04.2019) → negative
Some questions...

- In case of recurrence, what could be the best therapeutic strategy? Considering her new PFI (about 6 months to date), do you think that a platinum rechallenge could be a good choice?

- Which kind of patients a multigene panel sequencing should be offered?

- How often should we update the databases of VUS found in our patients?