Introduction/Background Most (70%) epithelial ovarian cancers (EOCs) are diagnosed late. Non-invasive biomarkers that facilitate early disease detection are needed. The microRNAs (miRNAs) represent a new class of biomarkers whose expression is aberrant in various human cancers and miRNA-125B has been shown to be overexpressed in EOC. This study was conducted to investigate plasma miRNA 125b as a diagnostic biomarker in EOC.

Methodology A pre-surgical venous blood sample of all patients with clinically diagnosed ovarian tumors and likely to undergo surgery was drawn. After histopathological confirmation of benign or malignant epithelial ovarian tumor of surgical resected specimen, patients were enrolled into the study. Patients with epithelial ovarian cancer on histopathological examination were defined as cases and those with benign pathology report served as controls. Commercial kit were used to isolate RNA including miRNA from serum samples. The RNA were then be reverse-transcribed into cDNA using cDNA synthesis kit as per the manufacturer protocol. The Ct values of housekeeping U6 snRNA and test cDNA using cDNA synthesis kit were used to calculate the delta Ct (ΔCt) values between controls and cases. Delta delta Ct (ΔΔCt) values between controls and cases were based on difference in ΔCt values between the two sets. This was used to calculate the exponential difference based on 2- ΔΔCt. The values were normalized and expressed in terms of fold expression relative to controls.

Results We enrolled 20 cases of Epithelial ovarian cancer and 20 cases of benign epithelial ovarian tumor. Real time relative quantification analysis showed more than 12 fold increase in serum miR-125b expression among epithelial ovarian cancer patients than the corresponding benign counterparts. Circulating miRNA-125b has the potential to become a novel biomarker for early diagnosis and prognosis prediction of epithelial ovarian cancer.
was 57.17 vs. 30.00 months for PC-1W and PC-3W respectively (p = 0.0075). No differences in toxicity were shown, when comparing PC-1W to PC-3W in elderly except for grade 2 alopecia – 26.21% vs. 65.18% respectively (p<0.0001), and grade 2 neuropathy – 20.19% vs. 36.61% respectively (p=0.0119).

Abstract 2022-RA-209-ESGO Figure 1

Conclusion mOS is reduced in elderly, though better than expected, furthermore toxicity is tolerable in elderly. PC-1W was both more abundant and had better mOS in the elderly population. Therefore PC-1W regimen may offer advantages for elderly in terms of tolerance while retaining efficacy.