**Abstract # 296**

**Dose ranging study of monalizumab (IPH2201) in patients with gynecologic malignancies: A trial of the Canadian Cancer Trials Group (CCTG): IND221**


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**BACKGROUND**

- HLA-E is a non-classical major histocompatibility complex class I molecule
- HLA-E is over expressed in several malignancies, including ovarian cancers
- HLA-E expression is associated with a poor prognosis in ovarian cancers, abrogating the positive effects of CD8 expression
- HLA-E is a ligand for CD94/NKG2A
- CD94/NKG2A is a checkpoint receptor on a subset of NK and T-cells
- Monalizumab (IPH2201) is a humanized (IgG4s241P) version of mouse anti-human NKG2A mAb that targets the CD94/NKG2A receptor with high affinity
- Targeting the CD94 and HLA-E interaction could impact cancer outcomes

**Objectives**

- **Primary**: Dose ranging study to confirm the RP2D of single agent monalizumab in patients with advanced/metastatic/recurrent gynecologic malignancies
- **Secondary**:
  - To assess the safety, toxicity, and pharmacokinetics
  - To assess pharmacodynamics
  - To assess correlation of tumour and stromal biomarkers with outcomes (TIL (CD8, Nkp46), HLA-E, PD-1 and CD94)
- To explore the efficacy of monalizumab in gynecologic malignancies

**METHODS**

- **Key Eligibility Criteria**:
  - Advanced, metastatic, or recurrent high grade serous ovarian cancer, epithelial endometrial cancer or squamous cervical cancer
  - Plasma or serum CD94/NKG2A expression
  - Platinum sensitive or platinum resistant at study entry
  - At least one prior regimen of platinum-based cytotoxic therapy
  - HLA-E expression (tumour, lymphocytes, endothelium)
  - CD94/NKG2A expression
  - HLA-E is over expressed in several malignancies, including ovarian cancers

**RESULTS**

- **Primary Efficacy Endpoints**:
  - RECIST response
  - Short term disease stabilization observed in 41% of evaluable patients in these heavily pretreated cohorts

**Tables**

- Table 1. Baseline Patient Characteristics
- Table 2. Treatment Delivered
- Table 3. Related Adverse Events (%)
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- Table 7. Pharmacokinetic Analysis
- Table 8. Pharmacokinetic Analysis

**CONCLUSIONS**

- The RP2D of monalizumab is 10 mg/kg IV every 2 weeks
- Monalizumab as a single agent is well tolerated with no reported DLTs or SAEs
- Short term disease stabilization observed in 41% of evaluable patients in these heavily pretreated cohorts
- Trend in stromal CD8 expression and SD

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