**Introduction**

- Despite the unprecedented efficiency of checkpoint blockade (CPB) therapy in making even seemingly hopeless cases respond to these interventional treatments, recent data indicate that the combination of CPB and vaccines may provide a means of moving those patients still failing to respond to these interventional treatments. While the combination of CPB and vaccines may provide a means of moving those patients still failing to respond to these interventional treatments.

**Methods: The ATLAS™ Platform**

- **MHC class II presentation to CD4+ T cells**
  - Direct MHC class II presentation by CD4+ T cells co-stimulated with the complexity of patients lacking immunogenic epitope candidates.

- **White blood cell (WBC) processing**
  - Epitope expression was quantified using ATLAS™ technology workflow.

- **PD-L1 expression**
  - PD-L1 expression was quantified using ATLAS™ technology workflow.

**Figure 1. Listeriolysin O (LLO) facilitates MHC class I presentation by MDDC**

- **Table 1. Mutations identified as neoantigens based on IFN-γ and TNF-α responses**

**Figure 2. ATLAS™ technology workflow**

- **Figure 5. Multiple neoantigens were identified through CD4+ T cell responses per post-checkpoint blockade therapy**

**Figure 6. Increased breadth of CD4+ T cell IFN-γ responses to potential neoantigens post-checkpoint blockade therapy**

**Results**

- **Figure 7. Limited overlap between CD94+Specific T cell neoantigens identified by ATLAS™ and epitope prediction algorithms**

- **Figure 8. Epitope predictions had a high false positive rate and missed relevant and inhibitory antigens**

**Acknowledgments**

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**References**