**BACKGROUND**

- HPK1 kinase-inactive knock-in mice show impaired GL261 tumor growth,
- HPK1 is a member of the MAP4K family of protein kinase
- Tissue-specific expression – only in hematopoietic cells
- Negative regulator of T cell-, B cell-, and dendritic cell-mediated immune responses
- Present in multiple immune cell types
- Expression is inducible by TCR activation

**METHODS/RESULTS**

**Methods**

- HPK1 Inhibition
  - Enhances the activity of B cells ex vivo
  - Increases antigen-presenting capacity of DCs
  - Can reverse the suppressive effects of TGFβ

**Results**

- HPK1 inhibition with NDI-101150 was identified as a highly potent and selective hematopoietic kinase inhibitor
- NDI-101150 treatment induces robust tumor growth inhibition and a durable immune memory response in EMT-6 syngeneic mouse model
- Tumor-infiltrating lymphocytes were re-challenged with EM7 cells in the opposite flank and tumor growth was monitored for an additional 28 days (no further treatment was administered)
- NDI-101150 is currently being investigated in a phase I/II clinical trial (NCT05128487) as monotherapy or in combination with pembrolizumab in patients with advanced solid tumors.

**Conclusions**

- The data we present support the use of NDI-101150 in creating a powerful multifunctional anti-tumor immune response alone or in combination with immune checkpoint inhibitor therapies
- NDI-101150 is currently being investigated in a first-in-human multi-center open-label phase 1/2 trial (NCT01224947) as monotherapy or in combination with pembrolizumab in patients with advanced solid tumors.