Targeting novel kinases in hematological malignancies

Statement of the Problem: Despite meaningful advancements in the treatment of many hematological malignancy indications, significant unmet needs persist. Drug resistance and poor overall survival remain a substantial challenge that will require the development and evaluation of novel therapeutic agents. Tolero is focused on developing small molecule therapeutics with a strong focus in the hematological space. These agents target important signaling pathways, including AXL, PIM, and ALK2 kinases.

Methodology & Theoretical Orientation: Preclinical and clinical data will be summarized demonstrating the promise of Tolero’s pipeline of targeted agents.

Findings: TP-0903 is an AXL kinase inhibitor in clinical development. TP-0903 reverses the mesenchymal phenotype associated with aggressive and drug resistant cancer. TP-3654 is a PIM kinase inhibitor which demonstrates profound preclinical activity in models of leukemia and myeloproliferative disorders. Finally, TP-0184 targets a kinase receptor involved in regulating a liver peptide hormone, called hepcidin. Hepcidin is a master regulator of bioavailable iron. TP-0184 shows significant promise in treating anemia commonly associated with hematological conditions, such as myelodysplastic syndrome and myelofibrosis.

Conclusion & Significance: Tolero has a strong commitment to bringing novel therapeutic agents forward that have the opportunity to make a meaningful difference in the treatment of hematological malignancies.

Biography

Steven L Warner specializes in small molecule drug discovery, new screening platforms in drug discovery, and translational research focusing on cancer therapeutics. He is an expert in the discovery of novel cancer agents and has played integral roles in moving multiple compounds into clinical trials. He completed his graduate degree in Pharmaceutical Sciences at University of Arizona and; Post-doctoral fellowship at Translational Genomics Research Institute (TGen). He is currently the Vice President of Drug Discovery and Development at Tolero Pharmaceuticals.

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