3. PIN-2 demonstrates a novel strategy to promote innate immune signaling-

Methods & Results - in vivo & in vitro

Enriched GO Biological Processes of PIN-2 activity in human monocytes

Overview of NGS

Objectives

1. Demonstrate antitumor activity of PIN-2 in the metastatic 4T1 model of mammary carcinoma.
2. Demonstrate longitudinal temporal administration of PIN-2 impacts tumor progression and increases survival.
3. Demonstrate a novel strategy to promote innate immune signaling.

Conclusions

- Potentiating innate immunity is a promising strategy to overcome cancer-mediated immunosuppression.

- PIN-2 is a immunomodulatory agent that enhances innate immunity & subsequent activation APCs via cellular penetration & reprogramming of transcription in monocytes.

- Dendritic cells are professional APC's providing the essential link between innate & adaptive immunity-

- Demonstrated synergy with other immune-targeting agents- Enhanced tumor growth inhibition in combination with immune modulatory therapy- Potentiating immune response & promoting CD8+ T cell infiltration into tumors as an indicator of an enhanced endogenous adaptive effect in T-cell responses.

- PIN-2 activity results in synergistic immunotherapeutic response genes that promote anti-PD-L1 & anti-PD-1 antibodies.

- The immunodysregulatory effects of PIN-2 activity expose molecular mechanisms & pathways that underpin innate & adaptive immune signaling-opportunity to identify novel immune-based biomarkers & provide complete system to other immune targeting agents.

- These data support clinical investigation of PIN-2 as a novel immunomodulatory agent.