IDO Pathway and Cancer

Key Immuno-Oncology Target

- IDO (indoleamine 2,3-dioxygenase) is an intracellular enzyme that regulates immune responses and when the pathway is active, results in an immuno-suppressive phenotype rather than an activated anti-tumor phenotype\(^1\)
- Tumors hijack the IDO pathway, a normal part of the immune system, to facilitate immune escape\(^2\)
- Used in combination with other cancer therapies, IDO pathway inhibitors are being evaluated in multiple tumor types to potentially improve outcomes for patients with cancer

\(^1\) Mertz, R. Oncoimmunology. 2012;1(9):1460-1468.

Targeting the IDO Pathway

Two Strategies for Inhibition

- Indoximod
  - Acts directly on immune cells to reverse IDO pathway mediated suppression
- GDC-0919
  - Direct IDO enzymatic inhibitors, block tryptophan metabolism\(^1\)\(^2\)
  - Available data indicate similar activity with both approaches\(^3\)

\(^1\) Mautino, M. ACR 2013. Abstract 491.
\(^3\) Mautino, M. ACR 2013. Abstract 5023.

Melanoma

METASTATIC OR ADVANCED MELANOMA IS THE DEADLIEST FORM OF THE DISEASE

In 2017, an estimated 9,730 people will die of melanoma

In 2017, an estimated 87,110 new melanoma cases will be diagnosed in the U.S.

18% of patients have a 5-year survival rate when the disease metastasizes to distant organs

Source: American Cancer Society, Cancer Facts & Figures, 2017