

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 phenotype¹
- ▶ Tumors hijack the IDO pathway, a normal part of the immune system, to facilitate immune escape²
- ▶ 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.

² Johnson TS. *Immunol Invest*. 2012;41(6-7):765-797.

Targeting the IDO Pathway

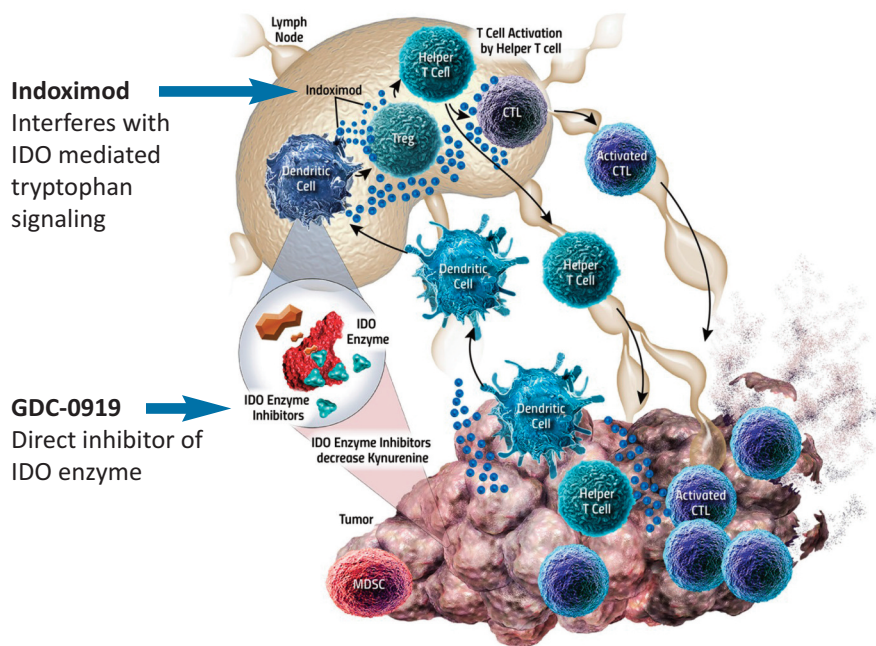
Two Strategies for Inhibition

- ▶ 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 approaches³

¹ Mautino, M. AACR 2013. Abstract 491.

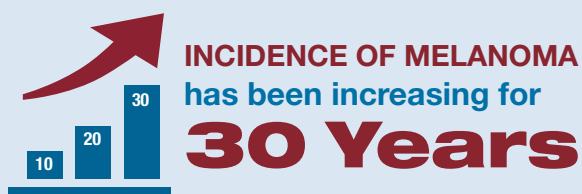
² Jochems, C. *Oncotarget*. 2016;7(25):37762-37772.

³ Mautino, M. AACR 2013. Abstract 5023.



Melanoma

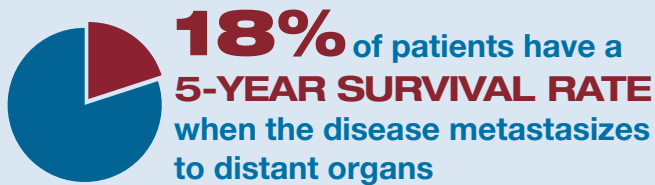
METASTATIC OR ADVANCED MELANOMA IS THE DEADLIEST FORM OF THE DISEASE



In 2017, an estimated
87,110
NEW MELANOMA CASES
will be diagnosed in the U.S.

In 2017, an estimated

9,730 people
WILL DIE OF MELANOMA



Source: American Cancer Society. *Cancer Facts & Figures*. 2017