

Advances in Immuno-Oncology: Evaluating a Bispecific, Bifunctional Fusion Protein

EXPERT INTERVIEW

FACULTY INFORMATION

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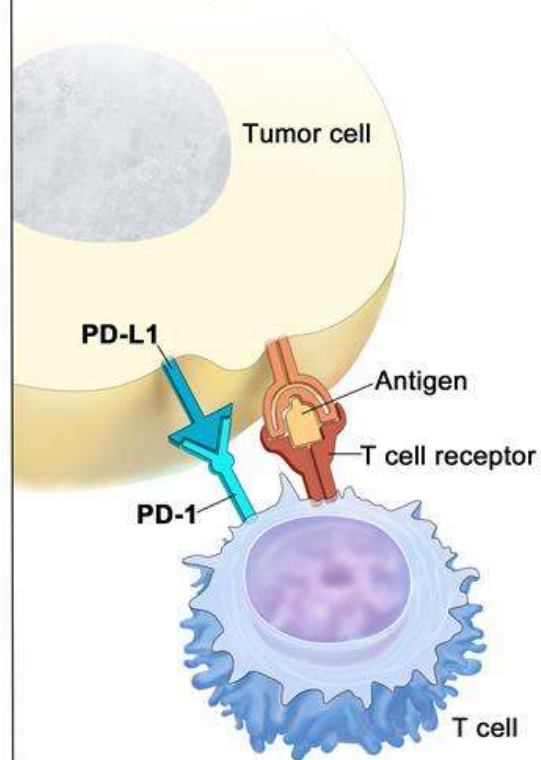
Director, Medical Oncology Service

Center for Cancer Research, NCI, NIH

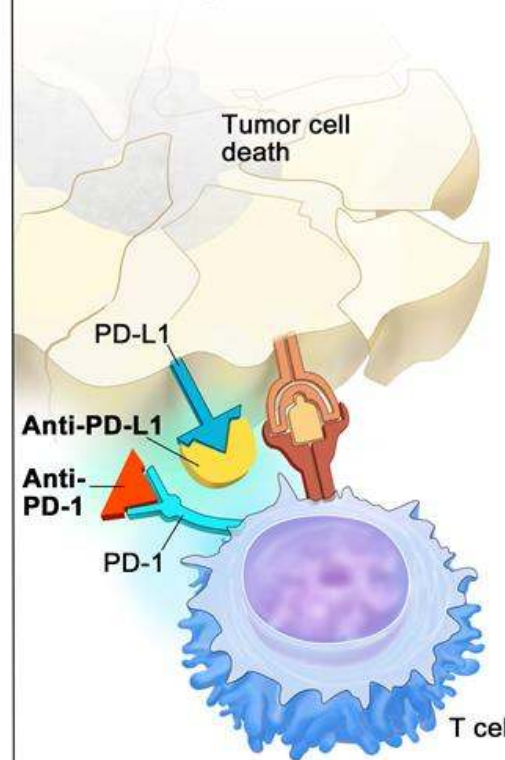
Bethesda, MD

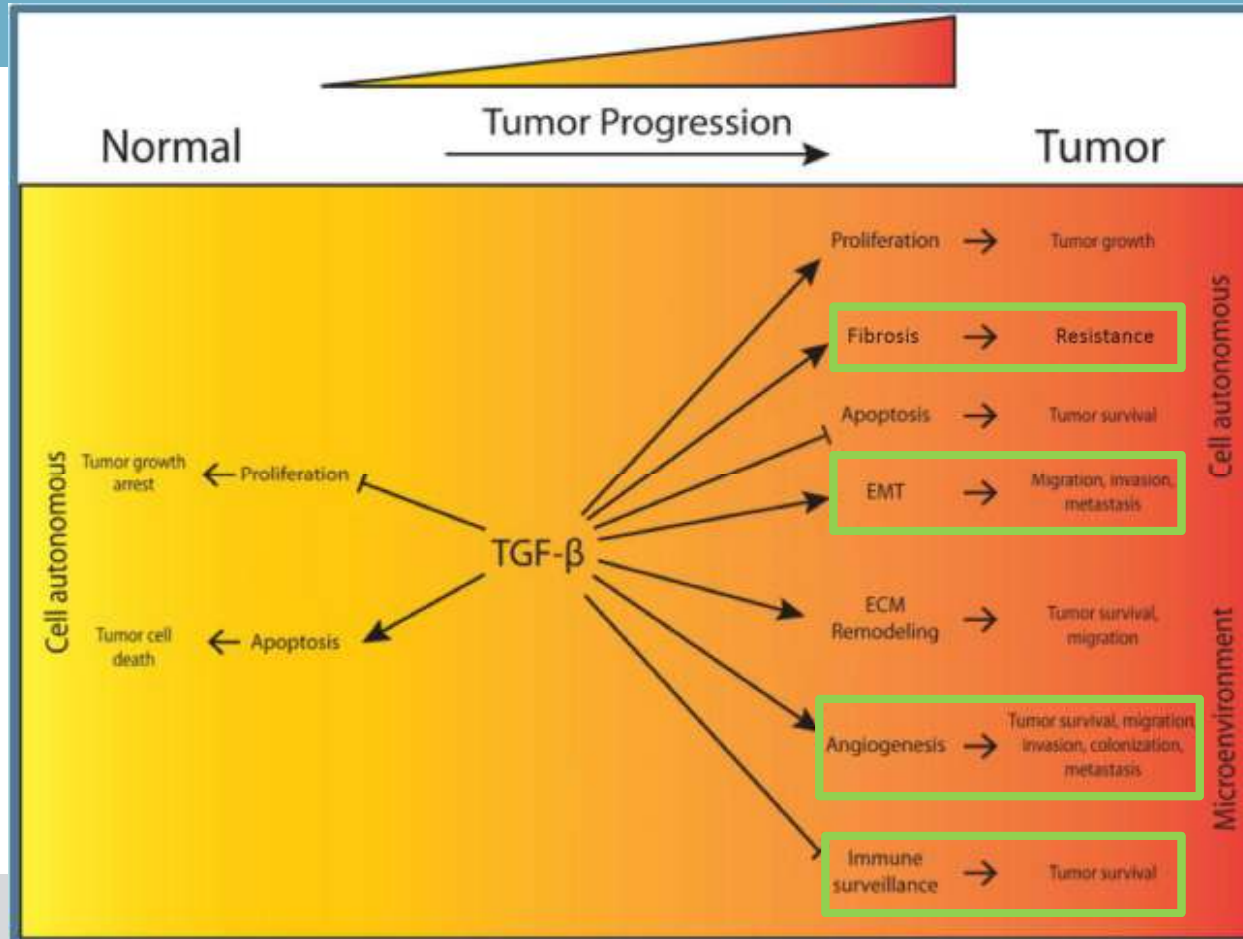
Dr. Gulley has nothing to disclose.

PD-L1 binds to PD-1 and inhibits T cell killing of tumor cell



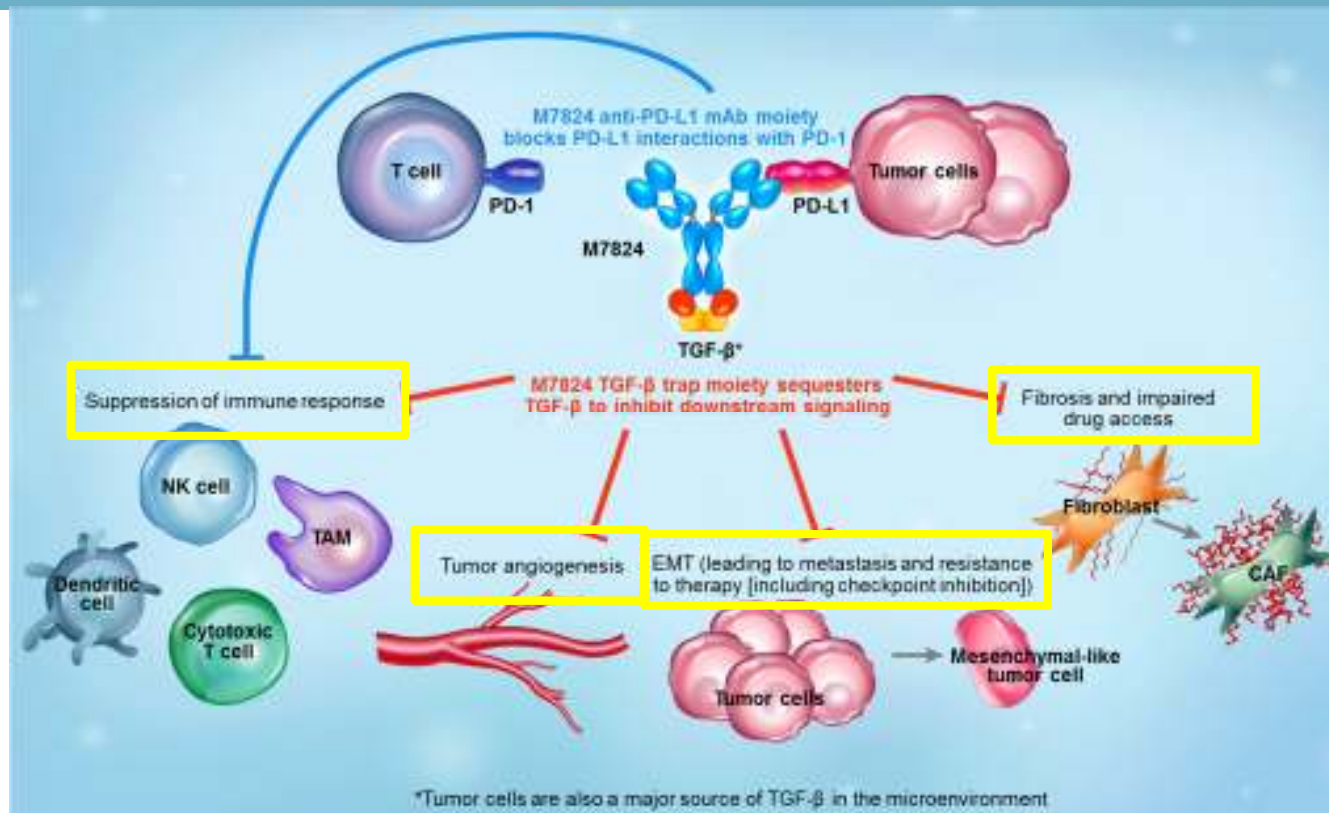
Blocking PD-L1 or PD-1 allows T cell killing of tumor cell





M7824: AN INNOVATIVE FIRST-IN-CLASS BIFUNCTIONAL FUSION PROTEIN

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- 19 heavily pre-treated patients with ECOG 0-1
- Safety
 - Grade ≥ 3 treatment-related AE in 4 patients
 - Skin infection secondary to localized bullous pemphigoid
 - Asymptomatic lipase increase
 - Colitis
 - Gastroparesis

PHASE 1 TRIAL OF M7824

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- 19 heavily pre-treated patients with ECOG 0-1
- Efficacy
 - 1 ongoing confirmed complete response (cervical cancer)
 - 2 durable confirmed partial responses (pancreatic and anal cancer)
 - 1 near partial response (cervical cancer)
 - 2 prolonged stable disease (pancreatic cancer; carcinoid)
 - Sequestered all activated TGF-beta in plasma throughout dosing period

- Lung cancer
 - 40 pts at the 1200mg dose
 - 28% ORR
 - All responders were PDL1 with ~80% response in the hi PDL1+ subgroup

- HPV-associated cancers
 - 17 pts
 - ORR 35%
 - 42% of patients with HPV+ tumors responded

LOOKING FORWARD: IMMUNE CHECKPOINT INHIBITION

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- Combination therapy is key
 - This agent alone works like combination therapy by targeting two different pathways
 - Still room to target additional pathways
- Several ongoing studies combining this agent with other therapeutic options/anti-cancer vaccines
 - The goal is to generate a good immune response in those T-cell-poor tumors and then allow those immune cells to work by blocking TGF-beta and by blocking PD-L1 in the tumor microenvironment

LOOKING FORWARD: IMMUNE CHECKPOINT INHIBITION (CON'T)

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- M7824 will potentially work as a single agent in multiple different indications, not only in the refractory setting where there is resistance, and may lead to improved response rate
- Impacts of M7824 are already seen in lung and HPV-positive cancers