Many patients with rare, fast-growing neuroendocrine tumors respond well to a common immunotherapy drug combination, according to the first peer-reviewed publication out of DART, short for Dual Anti-CTLA-4 and Anti-PD-1 Blockade in Rare Tumors, a unique rare cancer clinical trial. Credit: SWOG Cancer Research Network

DART offers the immunotherapy combination of ipilimumab and nivolumab to patients with 53 classes of rare cancers through an innovative "basket" design, which allows a single drug or drug combination to be tested in a variety of tumor types. The trial has rapidly expanded the opportunities for immunotherapy drug development in rare cancers, which make up almost a quarter of all cancers diagnosed worldwide.

DART is managed by SWOG Cancer Research Network, a clinical trials group that is part of the National Cancer Institute’s (NCI) National Clinical Trials Network (NCTN), the oldest and largest publicly-funded cancer research network in the U.S.

The study results appear in Clinical Cancer Research. When presented in March 2019 at the annual meeting of the American Association of Cancer Research, initial findings were met with excitement. That’s because patients with high-grade, or fast-growing, neuroendocrine carcinoma have few treatment options.

"We’re very encouraged by these results," said Sandip Pravin Patel, MD, the DART clinical study chair, an associate professor of medicine at the University of California at San Diego School of Medicine, and a medical oncologist with Moores Cancer Center at UC San Diego Health. "Based on the response, we opened another study enrolling only patients with high-grade neuroendocrine carcinoma to see if we can replicate our results. We’re eager to share those findings later this year.”

Patel’s fellow DART chairs are Razelle Kurzrock, MD, of UCSD Moores Cancer Center and Young Kwang Chae, MD, Ph.D., of Northwestern University.

For this neuroendocrine cohort, 32 eligible patients received the ipilimumab and nivolumab combination. Of the 32, 18 had high-grade cancer, with tumors most commonly appearing in the lungs or gastrointestinal tract. Regardless of where their tumors appeared, eight out of 18 high-grade patients—or 44 percent—saw them shrink partially or completely. By contrast, patients with intermediate or low-grade tumors saw no response.

Since its 2017 launch, physicians at 823 cancer centers, academic medical centers, and community clinics and hospitals have opened DART. As of February 13, 715 patients have enrolled out of a
goal of 818—beating all expectations. Historically, rare cancer trials struggle to find patients, leading many investigators to abandon rare cancer research.


Provided by SWOG


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