

Abstract (lay version) of project

Breelyn Wilky, MD, Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine

Correlation of CTNNB1 mutation status with chemotherapy response by MRI in patients with desmoid tumors

The behavior of desmoid tumors is highly unpredictable. While some patients may experience complete disappearance of their tumors with minimal treatment, others may have tumors that regrow quickly and are resistant to medical therapy. Recent evidence suggests that the specific location of the genetic mistake in beta-catenin, the protein that drives abnormal desmoid tumor growth, may help identify patients with more aggressive disease. In this research, we will study tumors from a large set of desmoid tumor patients treated at the University of Miami, MD Anderson Cancer Center, and Mount Sinai School of Medicine with chemotherapy. We will investigate whether patients with aggressive beta-catenin mutations should be treated with chemotherapy rather than gentler anti-hormonal or anti-inflammatory therapy. This research may support the use of mutation testing to help guide the choice of treatment for patients with desmoid tumor, and ensure more intensive treatment is provided earlier to patients likely to benefit.