

Research Partnership Launches with Breakthrough Uveal Melanoma Study

Sylvester Comprehensive Cancer Center and Bascom Palmer Eye Institute at the University of Miami Miller School of Medicine are working together in a unique partnership to find innovative therapies for patients with the deadly eye cancer uveal melanoma.



From left, J. William Harbour, M.D., with Nicolas Acquavella, M.D.

J. William Harbour, M.D., associate director for basic research at Sylvester, the Mark J. Daily Chair and vice chairman for translational research at the Bascom Palmer Eye Institute, and a world-renowned specialist in the care of patients with uveal melanoma, discovered that the histone deacetylase inhibitor vorinostat, clinically approved by the FDA to treat a rare form of lymphoma, may be repurposed to also treat uveal melanoma. In the laboratory, vorinostat was able to transform aggressive uveal melanoma cells into more normal-appearing cells.

“It’s like bringing corrupted tumor cells back in time towards a more differentiated state resembling that of healthy normal cells,” said Nicolas Acquavella, M.D., assistant professor of clinical medicine, and a melanoma specialist and principal investigator of the study at Sylvester.

Acquavella and Harbour will now seek to evaluate the biologic effect of vorinostat in patients. They will enroll 10 patients with aggressive “class 2” uveal melanoma, treat them for two weeks with vorinostat, and then evaluate whether the same transformative phenomenon that was observed in the laboratory occurs in patients.

This alliance is the first of many bench-to-bedside collaborations by Miller School/UHealth units planned for the future.

“Our goal is to develop novel therapies for an underrepresented and neglected population of patients with a rare but deadly eye cancer for which there are no FDA approved therapies,” Acquavella said. “This study is the first of its kind in the world and paves the way for future studies to fast track the discovery of effective therapies for uveal melanoma.”

The Bascom Palmer Ocular Oncology Service, directed by Harbour, sees a large number of patients with uveal melanoma from around the world as a major academic referral center, making a trial of this nature possible.

“We’ve built a novel interdisciplinary bench-to-bedside research framework around this unique opportunity,” said Harbour.

Acquavella added, “We are partnering with our patients in this exciting research strategy to speed the identification of effective therapies for uveal melanoma using fewer resources.”