# Spotlight: Ticiana Leal and the Lung Cancer Disease Oriented Working Group

Dr. Ticiana Leal, UW Carbone Cancer Center oncologist and lung cancer researcher

Clinical studies at the University of Wisconsin Carbone Cancer Center require a team of individuals who are passionate for the research they pursue and the cause for which they fight. The Lung Cancer Disease-Oriented Working Group (DOWG) is one of 17 research groups designed to better patient care through collaboration. It includes a team of doctors, nurses and research assistants who enroll patients in studies – all in an effort to beat the number one cause of cancer-related deaths in Wisconsin.

Ticiana Leal, MD, one member of the team, says her passion for treating lung cancer is fueled by the relationships formed with patients.

"Fighting cancer is a daily endeavor, so every patient I treat is unique," says Leal. "When it comes to this disease, it always requires a personalized approach."

Leal received her medical degree in Brazil and completed her medical oncology fellowship at the University of Wisconsin Hospital and Clinics. She is board certified in Internal Medicine, Geriatrics, Medical oncology and Palliative care medicine. In addition to providing cancer care to patients, Leal also focuses on clinical trial development in lung cancer through the Lung Cancer DOWG to study alternatives to traditional chemotherapy.

"Since no two types of lung cancer are exactly the same," says Leal, "developing new ways to treat the disease is complex."

While it can be effective in destroying cancerous cells, traditional chemotherapy can also impact healthy cells, which may lead to undesirable side effects.

One focus of Leal's research is the use of immunotherapy to treat lung cancer. This new approach differs from traditional chemotherapy by stimulating the body's immune response to recognize the cancer and therefore attack the cancerous cells. Leal and the DOWG team are examining several novel treatments involving antibodies that block immune check points, which allow the body's immune system to recognize and destroy cancer cells.

"While these treatments are still experimental, earlier studies have shown promising results and may potentially cause fewer side effects," says Leal.

The Lung Cancer DOWG is also in the midst of launching a study in another frontier of care: development of molecular markers to individualize treatment of lung cancer. In the upcoming weeks, the team envisions enrolling patients in a project entitled "Molecular Markers to Individualize Treatment Options." Using a gene sequencer, this study will test patients for potential mutations in their genetic makeup then match up patients with trials testing the efficacy of drugs tailored to each specific mutation.

"This way, we'll improve results for patients and speed up the process of discovery," says Leal.

Despite her enthusiasm for the science of lung cancer research, meeting with patients is still the main source of her inspiration.

"Our patients want someone who truly cares about them. We dedicate efforts to improve cancer care and the lives of our patients."