Studying Unspecified T-Cell Lymphoma

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Dr. Wilcox is an Assistant Professor in the Department of Internal Medicine – Hematology and Oncology. His research attempts to create a better understanding of T-Cell Lymphoma. Approximately 10 percent of all lymphomas affect the T-Cells. Because this form of lymphoma is so uncommon there is an overall poor understanding of the mechanisms that explain what happens in these T-Cells; however, steps are being made across the globe to change this.

Among the few T-Cell lymphomas that have been specified there remains an unspecified group that acts as a “catch-all” for lymphomas not yet understood called Peripheral T-Cell lymphoma, unspecified. Dr. Wilcox focuses on this group of unspecified lymphomas. His research includes determining the noncancerous cells that affect lymphoma growth and what role they play. In the lab, they aim to create links between the cancerous and the noncancerous cells in lymphoma in the hopes of being able to intervene therapeutically with new and improved methods. Their research also includes identifying subsets that can be distinguished within Peripheral T-Cell lymphoma, unspecified.

In a recent breakthrough, Dr. Wilcox has discovered a transcription factor that will allows scientists to identify approximately 40 percent of Peripheral T-Cell lymphomas, unspecified. Named GAta3, it is a protein that is hypothesized to affected cytokines and the overall regulation of non-cancerous cells in lymphoma. The gene is uniquely expressed in Peripheral T-Cells. This is a strong step toward the identification and possible treatments for Peripheral T-Cell Lymphomas.

Dr. Wilcox’s lab works closely with the Vector Core. “The core assists with the transduction of relevant lymphoma cell lines that we provide with viral constructs that enable us to investigate the role of relevant gene products in T-cell lymphomas” he explained. Dr. Wilcox said working with the Core makes life easier for his team. The Vector Core’s assets and assistance allows his lab to perform tasks quickly and more efficiently.