GRANT RECIPIENT: Mark Schroeder, MD

PROJECT: First Use Baricitinib in Humans for Preventing GVHD (Graft Versus Host Disease) Clinical Trial

Project Details: Blood cancers remain a significant public health problem (~10% of new cancer diagnoses). These patients can often be cured by blood or marrow transplants. However, in about 50% of cases the donated immune system sometimes attacks the patient’s skin, intestines, and liver. This very debilitating and sometimes fatal condition (~25% of victims) is known as Graft versus Host Disease (GvHD). In our first-in-human phase I clinical trial we will explore whether blood cancer patients who receive blood or marrow transplants experience less GvHD when given baricitinib. In studies in mice, baricitinib was shown to prevent GVHD while allowing the immune cells to retain their ability to attack the cancer cells. Our hope is that this simple approach will improve transplant outcomes by decreasing a major side effect after transplant, result in cures of blood, bone marrow, and lymph node cancers, and provide a significant step forward in the field.