Dr. Elana Bernstein

Autoimmune diseases are complex, multisystem diseases without cures. Lung disease, whether due to interstitial lung disease, pulmonary arterial hypertension, or a combination thereof, is a major cause of morbidity and mortality in these diseases. Lung transplantation is a potentially life-saving intervention for adults with autoimmune disease who develop end-stage lung disease, however many transplant specialists are hesitant to transplant these patients due to fear of extra-pulmonary manifestations compromising graft and patient survival. The proposed study has two main goals. The first aim is to compare 30-day, 1-year, and 3-year mortality rates following lung transplantation among adults with autoimmune disease, interstitial lung disease, and pulmonary arterial hypertension by performing a retrospective cohort study of patients with autoimmune disease, interstitial lung disease, and pulmonary arterial hypertension who underwent lung transplantation between May 5, 2005 (the date of implementation of the lung allocation score, an allocation system that prioritizes those in greatest need of transplantation), and December 31, 2014, and were reported to the United Network for Organ Sharing. The second aim is to determine whether the presence of an autoimmune disease is associated with the development of primary graft dysfunction within the first 72 hours following lung transplantation. This aim will be accomplished via a prospective cohort study of adults with autoimmune diseases who undergo lung transplantation at Columbia University Medical Center.