

Systemic Lupus Erythematosus (SLE) Drug Target and Biomarker Discovery



The complex nature of SLE poses significant challenges to diagnosis, prognosis, and effective management of what is a poorly understood condition. Our broad SLE program is building a comprehensive clinicogenomic dataset from participants across the spectrum of SLE, including lupus nephritis. This will allow whole genome sequence and multi-omic comparisons of SLE cases across clinical subtypes, and to controls. Our goal is to accelerate understanding of disease pathology and discovery of novel drug targets and prognostic biomarkers that predict progression to the more severe subtypes of SLE.

Disease Dataset



Systemic Lupus Erythematosus
(including Lupus Nephritis) Participants



3X Population Controls

Longitudinal Disease Characterization

Genomic Analysis

Whole Genome Sequencing
(incl. CNV and indels)

Multi-omic Analysis

(Source: PBMCs, serum*)

- RNASeq
- DNA Methylation
- Proteomics

Disease Features

- Lupus subtypes and clinical features across body systems
- Disease activity score (e.g. SLEDAI)
- Renal disorders, including biopsy results
- SLE-associated laboratory tests
- Diagnostic history
- Comorbidities
- Medication history

* Available only for a subset

Target & Biomarker Discovery

Unlock the deepest insights of this clinical omics dataset by leveraging our tools and in-house expertise

