

Subjects who **were diagnosed with SCTDs and had ANA test, 2001-2016**  
(n = 52,934)

Subjects who had  **$\geq 2$  diagnoses at lease 30 days apart within 365 days**  
(n = 26,738)

Subjects who had **immunomarker measurements** for the first diagnosis  
(n = 23,313)

Subjects who were diagnosed with **merely one of the following diseases – RA, SLE, and SS** (n = 11,923)

for  
clustering  
analysis

**RA**

n = 5,696

**SLE**

n = 2,686

**SS**

n = 3,541

Subjects had followed-up **for at least 3 years**  
(n = 7,738)

for  
clinical  
implications  
analysis

**RA**

n = 3,808

**SLE**

n = 1,887

**SS**

n = 2,043