SUPPLEMENTARY DATA:

**Supplementary Table 1**: Clinical definitions of end-organ lupus manifestations

|  |  |
| --- | --- |
| Manifestation | Definition |
| Renal |  |
| Lupus nephritis | Biopsy-confirmed class II-VI lupus nephritis by ISN/RPS classification criteria or persistent proteinuria >0.5 grams per 24 hours or >3+ protein on dipstick (1,2). |
| Hematologic |  |
| Immune thrombocytopenic purpura | Platelet count <100,000/mm3 in the absence of infectious or drug-related etiologies. |
| Autoimmune hemolytic anemia | Anemia with a positive DAT and evidence of hemolysis. |
| Thrombotic thrombocytopenic purpura | Microangiopathic hemolytic anemia, thrombocytopenia, with or without end-organ dysfunction and low ADAMTS13 activity. |
| Neurologic |  |
| Seizure | Abnormal paroxysmal neuronal discharge in the brain causing abnormal function, which can be generalized or partial, isolated or recurrent (3). |
| Stroke | Neurologic deficits due to arterial insufficiency or occlusion, venous thrombosis, or hemorrhage (3). |
| Peripheral or cranial neuropathy | Disturbed function of one or more peripheral or cranial nerves resulting in motor weakness or sensory dysfunction (3). |
| Mononeuritis multiplex | Subset of peripheral neuropathy involving two or more noncontiguous nerves simultaneously or sequentially (3). |
| Myelitis | Disorder of the spinal cord characterized by weakness or sensory loss, with a demonstrable motor or sensory cord level or sphincter involvement (3). |
| Cardiovascular  |  |
| Heart failure | Cardiopulmonary symptoms resulting from structural or functional cardiac disorder impairing ability of the ventricle to fill or eject blood. |
| Myocardial ischemia/infarction | Clinical symptoms of angina and electrocardiographic, laboratory, or angiographic evidence of myocardial ischemia.  |
| Cardiac arrhythmia | Abnormal electrocardiographic findings associated with cardiopulmonary symptoms. |
| Libman-Sacks endocarditis | Noninfectious valvular vegetations associated with valvular dysfunction and/or thromboembolic phenomena. |
| Pulmonary |  |
| Interstitial lung disease | Respiratory symptoms and interstitial fibrosis by imaging or lung biopsy in the absence of clear offending etiology.  |
| Pulmonary hypertension | Cardiopulmonary symptoms and elevated pulmonary artery pressure as assessed by right heart catheterization or echocardiogram. |

ISN/RPS, International Society of Nephrology/Renal Pathology Society. DAT, direct antiglobulin test.

**References**:

1. Tan EM, Cohen AS, Fries JF, Masi AT, McShane DJ, Rothfield NF, et al. The 1982 revised criteria for the classification of systemic lupus erythematosus. *Arthritis Rheum* 1982;25:1271–1277.

2. Weening JJ, D’Agati VD, Schwartz MM, Seshan SV, Alpers CE, Appel GB, et al. The classification of glomerulonephritis in systemic lupus erythematosus revisited. *J Am Soc Nephrol* 2004;15:241–250.

3. ACR Ad Hoc Committee on Neuropsychiatric Lupus Nomenclature. The American College of Rheumatology nomenclature and case definitions for neuropsychiatric lupus syndromes. *Arthritis Rheum* 1999;42:599–608.