SELENA-SLEDAI*

A Tool to Assess Disease Activity in Patients with SLE

What is it?

The SELENA-SLEDAI tool is a cumulative and weighted index used to assess disease activity across 24 different disease descriptors in patients with SLE.^{1,2}

What exams and laboratory tests are required?

For a complete assessment using SELENA-SLEDAI, the following are required³:

- Spot urine for protein to creatinine ratio or 24-hour urine protein assessment
- Urinalysis to include hematuria, pyuria, and urinary casts
- Blood specimens for anti-dsDNA, complement, white blood cells, and platelets
- Physical examination, including assessment for visual disturbances

How could it be used in clinical practice?

SELENA-SLEDAI has been shown to be a validated tool for measuring disease activity in patients with SLE. This assessment can be completed to objectively assess the patient's current state of disease. All SLE-related descriptors that are present at the time of the visit or within the previous 10 days should be checked off on the form.^{1,2}

What does it look like?

On the back of this sheet is a SELENA-SLEDAI form.³ It is composed of a checklist of SLE-related descriptors and a place to indicate the total score.

References:

- 1. Castrejon, O, Tani C, Jolly M, et al. Indices to assess patients with systemic lupus erythematosus in clinical trials, long-term observational studies, and clinical care. *Clin Exp Rheumatol*. 2014;32(85):S85-95.
- 2. Petri M. Disease activity assessment in SLE: do we have the right instruments? Ann Rheum Dis. 2007;66(suppl III):iii61-iii64.
- 3. Petri M, Kim MY, Kalunian KC, et al. Combined oral contraceptives in women with systemic lupus erythematosus. *N Engl J Med.* 2005;353 (suppl):2550-2558.



^{*}Safety of Estrogens in Lupus Erythematosus: National Assessment Version of the Systemic Lupus Erythematosus Disease Activity Index.

SELENA-SLEDAI*

SELENA-SLEDAI (Systemic Lupus Erythematosus Disease Activity Index) INSTRUMENT SCORE

Check box: if descriptor is present at the time of visit or in the preceding 10 days.

Check if				
Wt	Present	Descriptor	<u>Definition</u>	
8		Seizure	Recent onset (last 10 days). Exclude metabolic, infectious or drug cause, or seizure due to past irreversible CNS damage.	
8		Psychosis	Altered ability to function in normal activity due to severe disturbance in the perception of reality. Include hallucinations; incoherence; marked loose associations; impoverished thought content; marked illogical thinking; bizarre, disorganized or catatonic behavior. Exclude uremia and drug causes.	
8		Organic brain syndrome	Altered mental function with impaired orientation, memory or other intellectual function, with rapid onset and fluctuating clinical features. Include clouding of consciousness with reduced capacity to focus, and inability to sustain attention to environment, plus at least 2 of the following: perceptual disturbance, incoherent speech, insomnia or daytime drowsiness, or increased or decreased psychomotor activity. Exclude metabolic, infectious or drug causes.	
8		Visual disturbance	Retinal and eye changes of SLE. Include cytoid bodies, retinal hemorrhages, serous exudate or hemorrhages in the choroid, optic neuritis, scleritis or episcleritis. Exclude hypertension, infection or drug causes.	
8		Cranial nerve disorder	New onset of sensory or motor neuropathy involving cranial nerves. Include vertigo due to lupus.	
8		Lupus headache	Severe persistent headache: may be migrainous, but must be nonresponsive to narcotic analgesia.	
8		CVA Vasculitis	New onset of cerebrovascular accident(s). Exclude arteriosclerosis or hypertensive causes. Ulceration, gangrene, tender finger nodules, periungual infarction, splinter hemorrhages, or biopsy or angiogram proof of vasculitis.	
4 4		Arthritis Myositis	More than 2 joints with pain and signs of inflammation (i.e., tenderness, swelling or effusion). Proximal muscle aching/weakness, associated with elevated creatine phosphokinase/aldolase or electromyogram changes or a biopsy showing myositis.	
4 4 4 4 2 2 2 2 2		Urinary casts Hematuria Proteinuria Pyuria Rash Alopecia Mucosal ulcers Pleurisy	Heme-granular or red blood cell casts. >5 red blood cells/high power field. Exclude stone, infection or other cause. New onset or recent increase of more than 0.5 gm/24 hours. >5 white blood cells/high power field. Exclude infection. Ongoing inflammatory lupus rash. Ongoing abnormal, patchy or diffuse loss of hair due to active lupus. Ongoing oral or nasal ulcerations due to active lupus. Classic and severe pleuritic chest pain or pleural rub or effusion or new pleural thickening due to	
2 2 2 1 1		Pericarditis Low complement Increased DNA binding Fever Thrombocytopenia Leukopenia	lupus. Classic and severe pericardial pain or rub or effusion, or electrocardiogram confirmation. Decrease in CH50, C3 or C4 below the lower limit of normal for testing laboratory. >25% binding by Farr assay or above normal range for testing laboratory. >38°C. Exclude infectious cause. <100,000 platelets/mm³. <3,000 white blood cells/mm³. Exclude drug causes.	
	TOTAL SCORE (Sum of weights next to descriptors marked present)			

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A patient's SELENA-SLEDAI total score is the sum of all marked SLErelated descriptors. A total score can fall between 0 and 105, with a higher score representing a more significant degree of disease activity.^{1,2}

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