

Supplementary_S1.

Check-list of favouring factors (including SLE-specific risk factors recognized by EULAR recommendations and those arbitrarily defined by the expert panel), deemed as potentially related to each NP event.

Central Nervous System pictures (according to 1999 ACR classification)	SLE-specific risk factors (as listed by 2010 EULAR recommendations (citazione))	Reference	Favouring Factors (deemed as relevant by the expert panel)	Evidence	Notes
CVD	<ul style="list-style-type: none"> SLE disease activity aPL antibodies¹ Heart valve disease² Previous CVD Age 	(1) (2)(3)(4)(5)(6)(7)(8)(9)(10) (11)(5)(12) (13)(3) (14)(15)(16)	<ul style="list-style-type: none"> Age < 50 years 	(EP)	SLEDAI > 6 Libman-Sack endocarditis (aPL+)
Seizure disorder	<ul style="list-style-type: none"> SLE disease activity SLE damage aPL antibodies¹ Past or concurrent Major NPSLE³ Anti-Sm antibodies 	(17)(13)(18)(19)(20)(21) (21) (22)(17)(13)(23)(19)(21) (2)(17)(13)(3)(20)(21) (21)(24)	<ul style="list-style-type: none"> No familiar history Abnormal neuroimaging 	(EP) (EP) (EP)	SLEDAI > 6 SDI > 1.5 Seizure disorder, CVD, psychosis MRI or SPECT
Cognitive dysfunction	<ul style="list-style-type: none"> SLE disease activity SLE damage Past or concurrent Major NPSLE³ aPL antibodies¹ Heart valve disease² Education level Age 	(2)(25)(26)(27)(28) (29)(30) (22)(31)(32)(33)(34)(35) (22)(30)(36)(37)(38) (11)(39) (40)(37)(41) (40)(2)(42)(30)(41)(43)	<ul style="list-style-type: none"> Age < 50 years Response to IS or GC Rx Abnormal neuroimaging 	(EP) (EP) (EP) (EP)	SLEDAI ≥ 16 SDI ≥ 1.0 Libman sacks endocarditis (aPL+) At least secondary school MRI or SPECT
Movement disorders	<ul style="list-style-type: none"> aPL antibodies¹ 	(22) (44)(45)(46)(47)	<ul style="list-style-type: none"> Response to IS or GC Rx 	(EP)	

			<ul style="list-style-type: none"> Abnormal neuroimaging High SLE disease activity 	(EP) (EP)	MRI or SPECT SLEDAI > 6
Acute confusional state	<ul style="list-style-type: none"> SLE disease activity Past or concurrent Major NPSLE³ 	(11)(3) (48)	<ul style="list-style-type: none"> Abnormal neuroimaging Response to IS or GC Rx 	(EP) (EP)	MRI or SPECT
Psychiatric disorders	<ul style="list-style-type: none"> SLE disease activity Past or concurrent Major NPSLE³ Anti-ENA 	(2)(49)(50)(51)(52)(53) (32)(54)(55) (24)(56)(57) (58)(59)(60)(61)(62)(63)	<ul style="list-style-type: none"> Anti-ribosomal-p antibodies No familiar history Abnormal neuroimaging 	(EP) (EP) (EP)	SLEDAI ≥16 Anti-Sm, anti-RNP, anti-Ro MRI or SPECT
Myelopathy	<ul style="list-style-type: none"> aPL antibodies¹ 	(64)(65)(66)(67)	<ul style="list-style-type: none"> Response to IS or GC Rx High SLE disease activity 	(EP) (EP)	SLEDAI > 6
MS-like syndrome			<ul style="list-style-type: none"> aPL antibodies CSF < 4 OCB High SLE disease activity 	(EP) (EP)	Persistently medium-high titres SLEDAI > 6
Aseptic Meningitis			<ul style="list-style-type: none"> Response to IS or GC Rx High SLE disease activity 	(EP) (EP)	SLEDAI > 6
Mood abnormalities			<ul style="list-style-type: none"> Anti-rib-P antibodies Abnormal neuroimaging High SLE disease activity 	(EP) (EP) (EP)	MRI or SPECT SLEDAI > 6
Anxiety			<ul style="list-style-type: none"> Abnormal neuroimaging High SLE disease activity 	(EP) (EP)	MRI or SPECT SLEDAI > 6
Headache			<ul style="list-style-type: none"> No familiar history Abnormal neuroimaging aPL antibodies (^) Response to IS or GC Rx High SLE disease activity High SLE disease activity 	(EP) (EP) (EP) (EP) (EP) (EP)	MRI or SPECT Persistently medium-high titres SLEDAI > 6

Peripheral Nervous System pictures (according to 1999 ACR classification)	SLE-specific Risk factors (as listed by 2010 EULAR recommendations) cit	Reference	Favouring Factors (deemed as relevant by the expert panel)	Evidence	Notes
Cranial neuropathy	• aPL antibodies ¹	(22)(2)	• High SLE disease activity	(EP)	SLEDAI > 6
Peripheral neuropathy	• Anti-ENA	(2)(68)(24)	• High SLE disease activity	(EP)	anti-dsDNA, anti-Sm, anti-RNP
	• Anti-DNA • Past or concurrent Major NPSLE ³	(2) (17)(69)(3)	• High SLE disease activity	(EP)	SLE-related Seizure SLEDAI > 6
Mononeuritis			• Vasculitis • High SLE disease activity	(EP) (EP)	SLEDAI > 6
Myasthenia Gravis			• Response to IS or GC Rx • High SLE disease activity	(EP) (EP)	SLEDAI > 6
Autonomic Neuropathy			• Response to IS or GC Rx • High SLE disease activity	(EP) (EP)	SLEDAI > 6
Acute Demyelinating Poliradiculopathy			• High SLE disease activity	(EP)	SLEDAI > 6
Plexopathy			• High SLE disease activity	(EP)	SLEDAI > 6

CVD, cerebrovascular disease, SLEDAI, SLE disease activity index, aPL, antiphospholipid antibodies (including lupus anticoagulant), SDI, SLE International Collaborating Clinics Damage Index, MRI: Magnetic resonance imaging, SPECT: Single-photon emission computed tomography, CSF: Cerebrospinal fluid, anti rib-P antibodies, anti ribosomal-P antibodies. OCB, oligo-clonal bands, IS (immunosuppressant), GC (glucocorticosteroids),

^ relevant in case of migraine.

(EP) correspond to the shared opinion of the Expert Panel.

The Expert Panel unanimously assumed that high SLE disease activity should be considered as a generic additional potential favoring factor also for those NP events where evidence is not established yet.

¹ Persistently positive, moderate-to-high titers of aPL antibodies

² Not septic Libman Sacks endocarditis

³ Refers to past or concurrent major NPSLE syndrome

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