Table 1 The EULAR Sjögren's Syndrome Disease Activity Index (ESSDAI): domain and item definitions and scores

Domain	Activity level	Description
Constitutional *Exclusion of fever of infectious origin and voluntary weight loss*	No=0 Low=3 Moderate=6	Absence of the following symptoms Mild or intermittent fever (37.5°–38.5°C)/night sweats and/or involuntary weight loss of 5–10% of body weight Severe fever (>38.5°C) / night sweats and/or involuntary weight loss of >10% of body weight
Lymphadenopathy *Exclusion of infection*	No=0 Low=4 Moderate=8 High=12	Absence of the following features Lymphadenopathy ≥1 cm in any nodal region or ≥2 cm in inguinal region Lymphadenopathy ≥2 cm in any nodal region or ≥3 cm in inguinal region, and/or splenomegaly (clinically palpable or assessed by imaging) Current malignant B-cell proliferative disorder*
Glandular *Exclusion of stone or infection*	No=0 Low=2 Moderate=4	Absence of glandular swelling Small glandular swelling with enlarged parotid (≤3 cm), or limited submandibular or lachrymal swelling Major glandular swelling with enlarged parotid (>3 cm), or important submandibular or lachrymal swelling
Articular *Exclusion of osteoarthritis*	No=0 Low=2 Moderate=4 High=6	Absence of currently active articular involvement Arthralgias in hands, wrists, ankles and feet accompanied by morning stiffness (>30 min) 1–5 (of 28 total count) synovitis ≥6 (of 28 total count) synovitis
Cutaneous *Rate as 'No activity' stable long-lasting features related to damage*	No=0 Low=3 Moderate=6 High=9	Absence of currently active cutaneous involvement Erythema multiforma Limited cutaneous vasculitis, including urticarial vasculitis, or purpura limited to feet and ankle, or subacute cutaneous lupus Diffuse cutaneous vasculitis, including urticarial vasculitis, or diffuse purpura, or ulcers related to vasculitis
Pulmonary *Rate as 'No activity' stable long-lasting features related to damage, or respiratory involvement not related to the disease (tobacco use, etc.)*	No=0 Low=5 Moderate=10 High=15	Absence of currently active pulmonary involvement Persistent cough or bronchial involvement with no radiographic abnormalities on radiography Or radiological or HRCT evidence of interstitial lung disease with: No breathlessness and normal lung function test. Moderately active pulmonary involvement, such as interstitial lung disease shown by HRCT with shortness of breath on exercise (NHYA II) or abnormal lung function tests restricted to: 70%>DL_{CO}≥40% or 80%>FVC≥60% Highly active pulmonary involvement, such as interstitial lung disease shown by HRCT with shortness of breath at rest (NHYA III, IV) or with abnormal lung function tests: DL_{CO}<40% or FVC<60%
Renal *Rate as 'No activity' stable long-lasting features related to damage, and renal involvement not related to the disease. If biopsy has been performed, please rate activity based on histological features first*	No=0 Low=5 Moderate=10 High=15	Absence of currently active renal involvement with proteinuria <0.5 g/day, no haematuria, no leucocyturia, no acidosis, or long-lasting stable proteinuria due to damage Evidence of mild active renal involvement, limited to tubular acidosis without renal failure or glomerular involvement with proteinuria (between 0.5 and 1 g/day) and without haematuria or renal failure (GFR ≥60 mL/min) Moderately active renal involvement, such as tubular acidosis with renal failure (GFR <60 mL/min) or glomerular involvement with proteinuria between 1 and 1.5 g/day and without haematuria or renal failure (GFR ≥60 mL/min) or histological evidence of extra-membranous glomerulonephritis or important interstitial lymphoid infiltrate Highly active renal involvement, such as glomerular involvement with proteinuria >1.5 g/day or haematuria or renal failure (GFR <60 mL/min), or histological evidence of proliferative glomerulonephritis or cryoglobulinemia related renal involvement
Muscular *Exclusion of weakness due to corticosteroids*	No=0 Low=6 Moderate=12 High=18	Absence of currently active muscular involvement Mild active myositis shown by abnormal EMG or biopsy with no weakness and creatine kinase (N<CK≤2N) Moderately active myositis proven by abnormal EMG or biopsy with weakness (maximal deficit of 4/5), or elevated creatine kinase (2N <CK ≤4N), Highly active myositis shown by abnormal EMG or biopsy with weakness (deficit ≤3/5) or elevated creatine kinase (>4N)

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Table 1 Continued

Domain	Activity level	Description
PNS *Rate as 'No activity' stable long-lasting features related to damage or PNS involvement not related to the disease*	No=0	Absence of currently active PNS involvement
	Low=5	Mild active peripheral nervous system involvement, such as pure sensory axonal polyneuropathy shown by NCS or trigeminal (V) neuralgia
	Moderate=10	Moderately active peripheral nervous system involvement shown by NCS, such as axonal sensory-motor neuropathy with maximal motor deficit of 4/5, pure sensory neuropathy with presence of cryoglobulinemic vasculitis, ganglionopathy with symptoms restricted to mild/moderate ataxia, inflammatory demyelinating polyneuropathy (CIDP) with mild functional impairment (maximal motor deficit of 4/5or mild ataxia), Or cranial nerve involvement of peripheral origin (except trigeminal (V) neuralgia)
	High=15	Highly active PNS involvement shown by NCS, such as axonal sensory-motor neuropathy with motor deficit ≤3/5, peripheral nerve involvement due to vasculitis (mononeuritis multiplex, etc), severe ataxia due to ganglionopathy, inflammatory demyelinating polyneuropathy (CIDP) with severe functional impairment: motor deficit ≤3/5 or severe ataxia
CNS *Rate as 'No activity' stable long-lasting features related to damage or CNS involvement not related to the disease*	No=0	Absence of currently active CNS involvement
	Moderate=10	Moderately active CNS features, such as cranial nerve involvement of central origin, optic neuritis or multiple sclerosis-like syndrome with symptoms restricted to pure sensory impairment or proven cognitive impairment
	High=15	Highly active CNS features, such as cerebral vasculitis with cerebrovascular accident or transient ischaemic attack, seizures, transverse myelitis, lymphocytic meningitis, multiple sclerosis-like syndrome with motor deficit.
Haematological *For anaemia, neutropenia, and thrombopenia, only autoimmune cytopenia must be considered* *Exclusion of vitamin or iron deficiency, drug-induced cytopenia*	No=0	Absence of autoimmune cytopenia
	Low=2	Cytopenia of autoimmune origin with neutropenia (1000<neutrophils<1500/mm^3), and/or anaemia (10<haemoglobin<12 g/dL), and/or thrombocytopenia (100 000<platelets<150 000/mm^3) Or lymphopenia (500<lymphocytes<1000/mm^3)
	Moderate=4	Cytopenia of autoimmune origin with neutropenia (500≤neutrophils≤1000/mm^3), and/or anaemia (8≤haemoglobin≤10 g/dL), and/or thrombocytopenia (50 000≤platelets≤100 000/mm^3) Or lymphopenia (≤500/mm^3)
	High=6	Cytopenia of autoimmune origin with neutropenia (neutrophils <500/mm^3), and/or or anaemia (haemoglobin <8 g/dL) and/or thrombocytopenia (platelets <50 000/mm^3)
Biological	No=0	Absence of any of the following biological features
	Low=1	Clonal component and/or hypocomplementemia (low C4 or C3 or CH50) and/or hypergammaglobulinemia or high IgG level between 16 and 20 g/L
	Moderate=2	Presence of cryoglobulinemia and/or hypergammaglobulinemia or high IgG level >20 g/L, and/or recent onset hypogammaglobulinemia or recent decrease of IgG level (<5 g/L)

*Defined as indolent not treated lymphoma or currently treated lymphoma or myeloma (or treatment ended from less than 6 months). Do not rate past treated lymphoma or myeloma in complete remission.
CIDP, chronic inflammatory demyelinating polyneuropathy; CK, creatine kinase; CNS, central nervous system; DLCO, diffusing CO capacity; EMG, electromyogram; FVC, forced vital capacity; GFR, glomerular filtration rate; Hb, haemoglobin; HRCT, high-resolution CT; IgG, immunoglobulin G; NCS, nerve conduction studies; NHYA, New York Heart Association Classification; Plt, platelet; PNS, peripheral nervous system.

- For physician measures: inter-rater reliability was assessed between the scoring of two physicians that assessed independently the same patient on the same day.
- For patient measures: intrarater reliability was assessed between two scoring of the same score by the same patients performed 2 days apart, without any therapeutic modification.

ICC values vary from 0 (totally unreliable) to 1 (perfectly reproducible); an ICC ≥ 0.75 is considered excellent.[11] ICC CIs were estimated with bootstrapping methods, with 1000 replications.[12]

Evaluation of sensitivity to change and accuracy in detection of change

The sensitivity to change was assessed between the baseline and the 6-month visits. Since no therapeutic intervention was systematically applied to the study population, the disease activity, or patient's symptoms, might improve, worsen or stay the same. Therefore, to evaluate accuracy of the patient's and physician's indexes to detect change, sensitivity to change was evaluated in each subgroup of patients considered as (1) improved, (2) stable, or (3) worsened. Evaluation of change (improvement, worsening or stability), used as external anchor, was assessed by patients for patient scores, and by physicians for disease activity measures. Sensitivity to change was assessed with the standardised response mean (SRM), which is the mean change in score between two visits divided by the SD of the change in score.[13] If indexes correctly detected changes, sensitivity-to-change scores should be (1) <0 for patients with improved condition, (2) around 0 for patients with stable condition and (3) >0 for patients with worsened condition. Therefore, the larger the SRM for improved/worsened disease activity, the greater the sensitivity to change of the instrument. SRM values can be considered large (>0.8), moderate (0.5–0.8) or small (<0.5).[14–16] An SRM closer to zero, when disease activity is unchanged, indicates that the assessment of stability is more accurate.