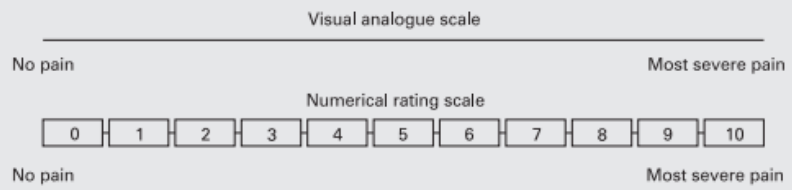


### Box 25 Spinal pain

- ▶ Two questions (on average last week), visual analogue scale (VAS) or numerical rating scale (NRS):
  - How much pain of your spine due to AS do you have?
  - How much pain of your spine due to AS do you have at night?

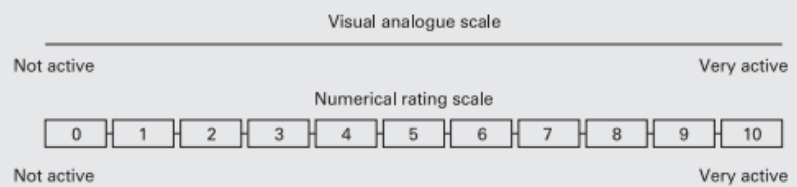
ASAS prefers to use an NRS.



### Box 26 Patient global

- ▶ How active was your spondylitis on average during the last week? (VAS, NRS)

ASAS prefers to use an NRS.



**Box 28 BASDAI on a numerical rating scale<sup>1a</sup> (Adapted with permission from *J Rheumatol.*)**

Alternatively, a VAS between 0 and 100 can be used, except question 6. ASAS prefers to use an NRS. Calculation of BASDAI: compute the mean of questions 5 and 6. Calculate the sum of the values of question 1–4 and add the result to the mean of questions 5 and 6. Divide the result by 5.

**NRS BASDAI**

Please tick the box which represents your answer.  
All questions refer to last week (ie  0).

**Fatigue**

1 How would you describe the overall level of fatigue/tiredness you have experienced?

0  1  2  3  4  5  6  7  8  9  10

None Very severe

**Spinal pain**

2 How would you describe the overall level of AS neck, back or hip pain you have had?

0  1  2  3  4  5  6  7  8  9  10

None Very severe

**Peripheral arthritis**

3 How would you describe the overall level of pain/swelling in joints other than neck, back or hips you have had?

0  1  2  3  4  5  6  7  8  9  10

None Very severe

**Enthesitis**

4 How would you describe the overall level of discomfort you have had from any areas tender to touch or pressure?

0  1  2  3  4  5  6  7  8  9  10

None Very severe

**Intensity of morning stiffness**

5 How would you describe the overall level of morning stiffness you have had from the time you wake up?

0  1  2  3  4  5  6  7  8  9  10

None Very severe

**Duration of morning stiffness**

6 How long does your morning stiffness last from the time you wake up?

0  1  2  3  4  5  6  7  8  9  10

0 h 1 h 2 or more h

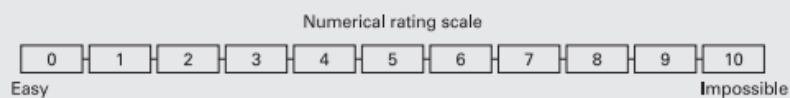
$$\text{BASDAI} = \frac{Q1 + Q2 + Q3 + Q4 + \left(\frac{Q5 + Q6}{2}\right)}{5}$$

### Box 29 Bath Ankylosing Spondylitis Functional Index (BASFI)<sup>19</sup> (Adapted with permission from *J Rheumatol.*)

Items to be scored by the patient:

- ▶ Putting on your socks or tights without help or aids (eg, sock aid).
- ▶ Bending forward from the waist to pick up a pen from the floor without an aid.
- ▶ Reaching up to a high shelf without help or aids (eg, helping hand).
- ▶ Getting up out of an armless dining room chair without using your hands or any other help.
- ▶ Getting up off the floor without help from lying on your back.
- ▶ Standing unsupported for 10 min without discomfort.
- ▶ Climbing 12 to 15 steps without using a handrail or walking aid. One foot at each step.
- ▶ Looking over your shoulder without turning your body.
- ▶ Doing physically demanding activities (eg, physiotherapy, exercises, gardening or sports).
- ▶ Doing a full day's activities, whether it be at home or at work.

The BASFI is the mean of 10 item scores completed on a numerical rating scale.



Alternatively, a VAS between 0 and 100 can be used. ASAS prefers to use an NRS.

### Box 41 Parameters used for the ASDAS<sup>24</sup>

- 1) Total back pain (BASDAI question 2, see Box 28)
- 2) Patient global of disease activity (see Box 26)
- 3) Peripheral pain/swelling (BASDAI question 3, see Box 28)
- 4) Duration of morning stiffness (BASDAI question 6, see Box 28)
- 5) C-reactive protein (CRP) in mg/litre (or erythrocyte sedimentation rate (ESR)).

### Box 42 Calculation of the ASDAS<sup>24</sup>

$ASDAS_{CRP} = 0.121 \times \text{total back pain} + 0.110 \times \text{patient global} + 0.073 \times \text{peripheral pain/swelling} + 0.058 \times \text{duration of morning stiffness} + 0.579 \times \ln(\text{CRP} + 1)$ .

$ASDAS_{ESR} = 0.113 \times \text{patient global} + 0.293 \times \sqrt{\text{ESR}} + 0.086 \times \text{peripheral pain/swelling} + 0.069 \times \text{duration of morning stiffness} + 0.079 \times \text{total back pain}$ .

$ASDAS_{CRP}$  is preferred, but the  $ASDAS_{ESR}$  can be used in case CRP data are not available. CRP in mg/litre; all patient assessments on a 10 cm scale.

#### Box 44 ASAS 20 improvement criteria<sup>25</sup>

- ▶ Four domains:
  - Patient global (see Box 26)
  - Pain (see Box 25)
  - Function (see Box 29)
  - Inflammation (mean of BASDAI questions 5 and 6, see Box 28).
- ▶ Improvement of  $\geq 20\%$  and  $\geq 1$  unit in at least 3 domains on a scale of 10.
- ▶ No worsening of  $\geq 20\%$  and  $\geq 1$  unit in remaining domain on a scale of 10.

#### Box 45 ASAS partial remission criteria<sup>25</sup>

- ▶ Four domains:
  - Patient global (see Box 26)
  - Pain (see Box 25)
  - Function (see Box 29)
  - Inflammation (mean of BASDAI questions 5 and 6, see Box 28).
- ▶ A value not above 2 units in each of the domains on a scale of 10.