

THIRD EDITION

DISEASE ACTIVITY SCORE

DAS

Quick reference guide

for healthcare professionals



nras

National Rheumatoid
Arthritis Society



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Quick reference guide for healthcare professionals

As part of a drive to increase patient empowerment and reinforce self-management in rheumatoid arthritis (RA), the “Know your DAS28” campaign has been extended; encouraging patients to “stay one step ahead of their RA”. The updated patient booklets, which are available via NRAS, encourage patients to track their RA symptoms so that, when it comes to a consultation, these patients can give you, their clinician/health professional, the best possible picture of their disease.

DAS28 is an important part of this and patients are being encouraged to engage with their clinician/health professional about their DAS28. In some cases, and only among those who you feel are informed enough to do so, encouraging and helping patients to monitor their level of disease activity and calculate their derived DAS28 score between consultations – with a primary focus on patient assessed joint count – could be an advantage in a busy clinic.¹

The following information is designed to help you ensure your patients “stay one step ahead of their RA.”



Why should you use DAS28?

- DAS28 is a core part of all major RA guidelines and it's recommended that in established disease, DAS28 is measured ideally at least every six months, and in those with recent onset, active RA, DAS28 is measured monthly until the RA is brought under control^{1,2}
- DAS28 is the most effective routine tool available for RA measurement
- DAS28 is a valuable patient outcome measure. With the constant challenge of demonstrating patient outcomes in the current NHS climate, DAS28 is an easily calculated, widely accepted quality indicator for demonstrating the value of RA treatment
- Setting a DAS28 goal with your patient increases patient engagement, improves adherence to treatment and encourages better disease self-management



NICE guidelines

DAS28 is the NICE standard to determine eligibility to commence biologic therapy. NICE recommends the option of biologic therapy for patients with the following characteristics:¹

- Active and progressive rheumatoid arthritis as measured by DAS28 >5.1 confirmed on at least two occasions, one month apart
- Have undergone trials of two disease-modifying anti-rheumatic drugs (DMARDs), including methotrexate (unless contraindicated)

Treatment should then be monitored, with assessment of DAS28, at 6-12 monthly intervals to ensure an adequate response to the treatment (defined as an improvement in DAS28 of 1.2 points or more).¹

1. National Institute for Health and Clinical Excellence. CG79 The management of rheumatoid arthritis in adults. February 2009. <http://www.nice.org.uk/nicemedialive/12131/43327/43327.pdf> [accessed April 2015]



BSR guidelines

The BSR biologics group (BSRBG) recommendations on the use of DAS28 in RA measurement are largely consistent with that of NICE.¹ They do, however, differ in two key areas:¹

- Biologic therapies are recommended for patients with active and progressive RA, as measured by DAS28 >3.2 with three or more tender and three or more swollen joints despite trials of therapy with at least two DMARDs
- An adequate response to biologic therapy is defined as a good or moderate EULAR response (see table 1)

Change in DAS28	DAS28 achieved on treatment		
	>5.1	≤5.1 and >3.2	≤3.2
>1.2	Moderate	Moderate	Good
>0.6 and ≤1.2	None	Moderate	Moderate
≤0.6	None	None	None

Table 1: The EULAR response criteria

1. British Society of Rheumatology guidelines. BSR and BHRP rheumatoid arthritis guidelines on eligibility criteria for the first biological therapy. March 2010. http://www.rheumatology.org.uk/includes/documents/cm_docs/2010/02_ra_guidelines_on_eligibility_criteria_for_the_first_biological_therapy.pdf [accessed April 2015]



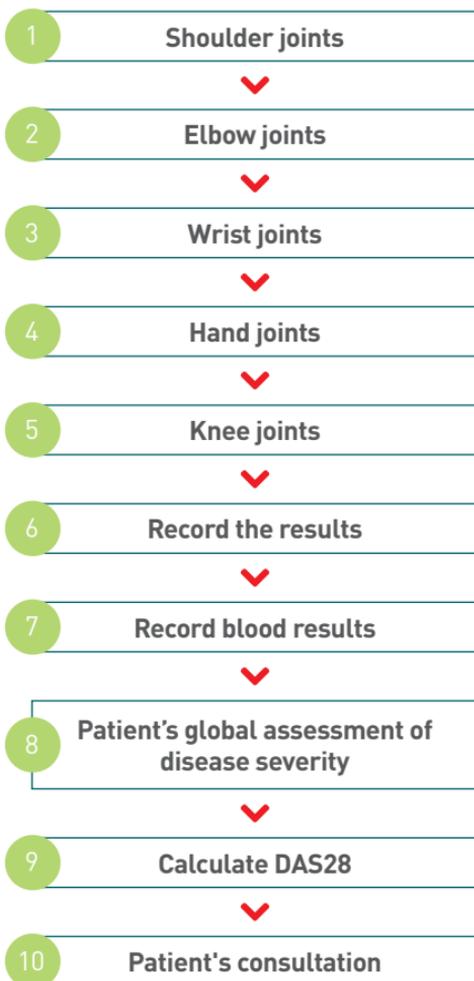
DAS28 CAVEATS

Although DAS28 is regarded as the most effective routine tool for RA measurement, it is important to consider certain caveats:

1. The DAS28 calculation includes measures perceived entirely by the patient, and as such, a DAS28 score may be influenced by variables that do not reflect objective disease activity (e.g. fibromyalgia, degenerative disease)
2. DAS28 does not include measurement of the feet and ankles, however these may be the areas that are most affected by RA for your patient so ensure you make note of their concerns about their feet and ankles
3. DAS28 was initially designed as a research tool and does not take account of wider issues such as extra-articular manifestations, psychological and lifestyle impacts

As such, in certain patients the DAS28 score may not give an accurate reflection of disease activity. In this situation, the DAS28 score can be quoted with a disclaimer, for example, "DAS28 4.6 but patient in remission, DAS28 chiefly driven by degenerative disease." This should help manage patient and clinician treatment expectations.

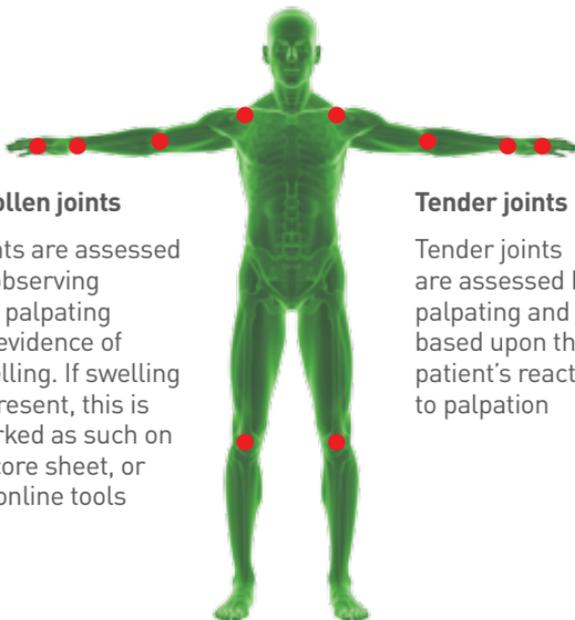
The DAS28 examination – ten key stages





The DAS28 examination

The DAS28 examination involves the assessment of 28 joints including the shoulders, elbows, wrists, knees and joints in the hand.



Swollen joints

Joints are assessed by observing and palpating for evidence of swelling. If swelling is present, this is marked as such on a score sheet, or via online tools

Tender joints

Tender joints are assessed by palpating and are based upon the patient's reaction to palpation



Quick Tips!

- Compare the joint being examined with the same joint on the other side of the body to assess for differences
- View joints from all angles, including front, back and sides
- Review joints in motion (active and passive). Note the range of movements and restrictions
- Palpate joints to assess for swelling and tenderness. Look for patient reactions to indicate areas of tenderness

1. Shoulder joints:

Grip the shoulder joint between your thumb and fingers with the patient's arm slightly flexed and initiate passive movement of shoulder from 0 through to 50 degrees in coronal plane. Observe and ask the patient if the movement has caused any pain or tenderness. Palpate and observe carefully for swelling or fluid in the joint.



2. Elbow joints:

Flex the patient's elbow between 70 and 80 degrees and examine using both your hands. Place your thumb between the olecranon and lateral epicondyle and place your index fingers in the ante-cubital fossa. Palpate on the epicondyles either side and observe for swelling.



3. Wrist joints:

Use both your hands to examine the dorsal surface of the patient's wrist in a neutral position, palpating along the joint margin with your thumbs, feeling for pain and tenderness.



4. Hand joints:

Two examination methods that can be adopted for joints in the hand: 1) Patient's hand is examined in a flexed position, at approximately a 50 degree angle 2) Patient's hand is examined resting flat on a surface.



Metacarpophalangeal joints: Palpate either side of the joint margins using both your thumbs. Continue until all joints have been examined.



Proximal interphalangeal joints: Use your thumb and index finger on both hands to palpate all sides of the joint, feeling the lateral and medial joint margins and exerting pressure alternatively on the palmar and dorsal aspect of the joint. Continue until all joints have been examined.



5. Knee joints:

With the patient in a supine position, bend the knee and position the foot flat on the surface. Palpate either side of the knee joint using both thumbs. Assess for pain and tenderness.



6. Record the results:

During the examination ensure that all tender and swollen joint counts are recorded on the score sheet.

DEPARTMENT OF RHEUMATOLOGY

Comment:
Date:
ESR:
DAS:

Name:
EAS No:
REF No:

Swollen Joints

Tender Joints

Total No.

Total No.

Total Score 0 10 20 30 40 50 60 70 80

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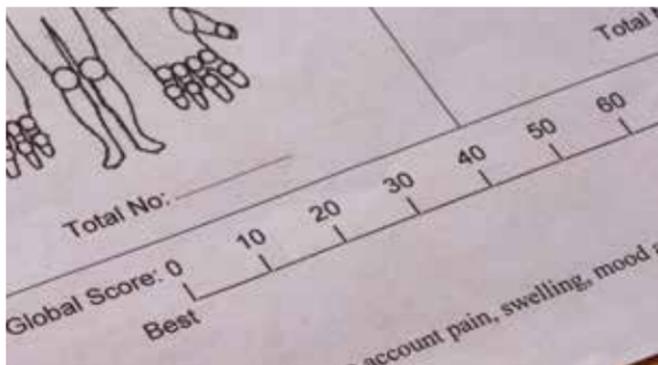
7. Review blood results:

Review and discuss your patient's most recent ESR or CRP results.



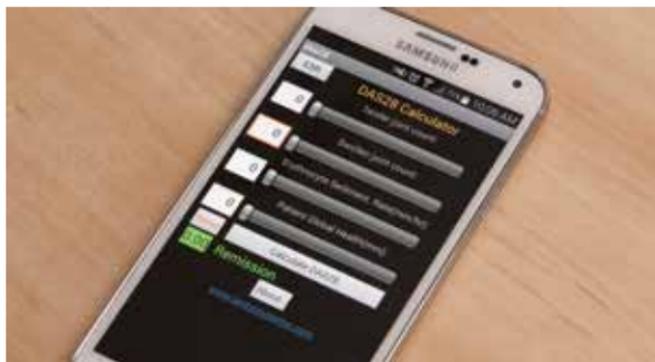
8. Patient's global assessment of disease severity:

Ask your patient to mark on the Visual Analogue Scale their level of pain and discomfort either on the day of their assessment or up to seven days prior.



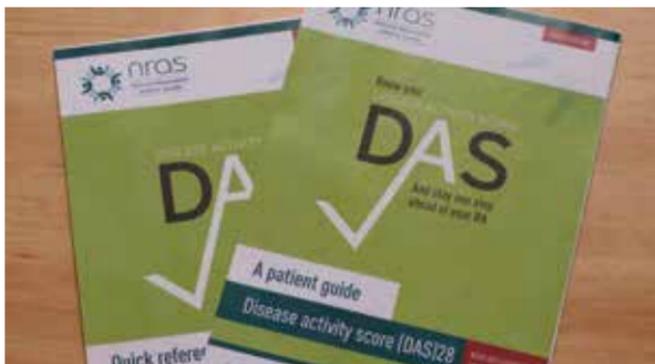
9. Calculate DAS28:

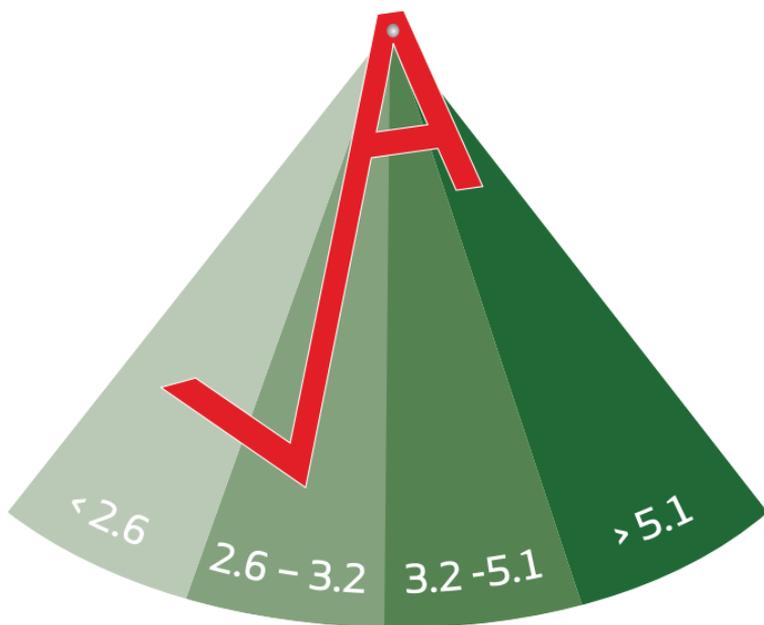
Enter all results of examinations into a DAS28 calculator, found online at: www.das-score.nl.



10. Patient's consultation

Discuss the disease activity score with your patient and compare it against the previous result. Discuss what next steps (if any) need to be taken. Encourage your patient to keep a note of their score in their "Know your DAS28" booklet.





DISEASE ACTIVITY SCORE

-  Disease remission¹
-  Low disease activity¹
-  Moderate disease activity¹
-  High disease activity¹

As a rheumatology health care professional you can join NRAS for free, it is an ideal way of keeping up to date with developments in the treating RA. You will receive the NRAS magazine three times a year and regular news bulletins.

Join free of charge today by visiting www.nras.org.uk, calling **0845 458 3969** or emailing membership@nras.org.uk. You can also get further copies of this booklet by calling the phone number or visiting <http://www.nras.org.uk/healthcare-professionals>

There is a "Know your DAS28" patient booklet and you can watch the video of how to measure DAS online at <http://www.nras.org.uk/patients> or download it from the NRAS website.

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