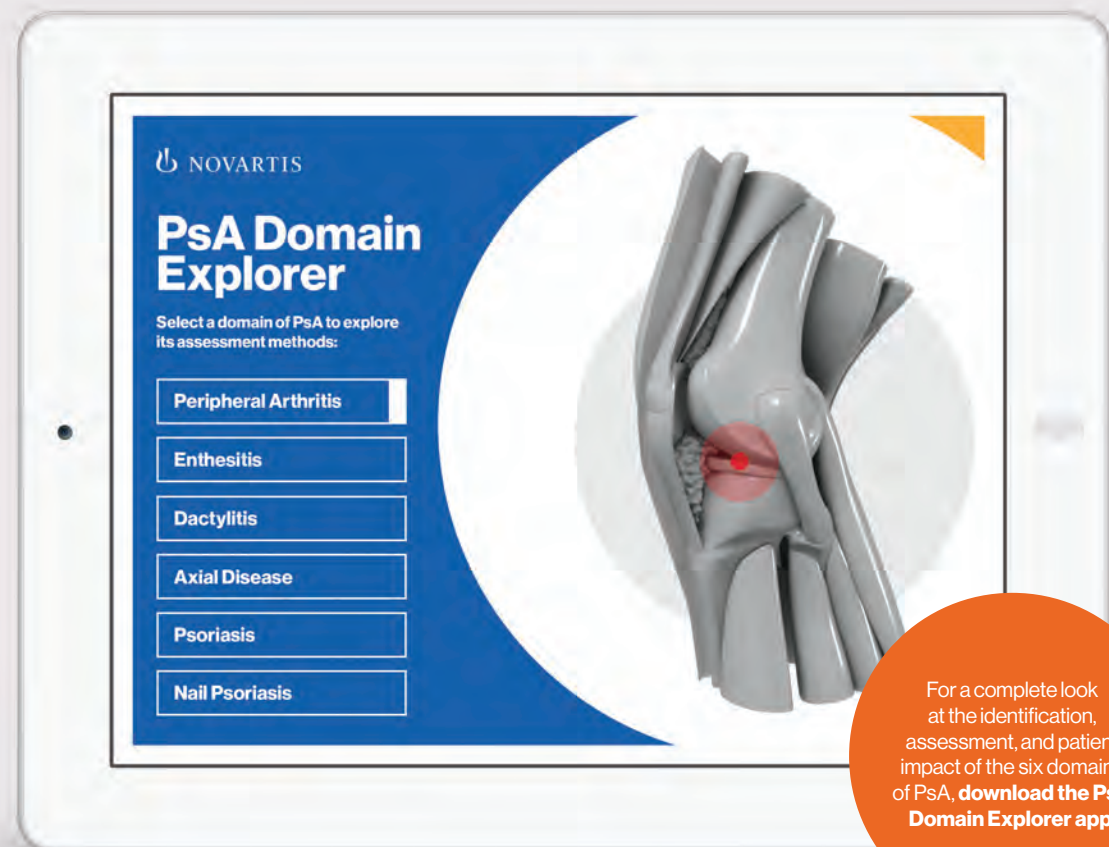


PsA is a complex disease and has a serious impact on patients.
How do you properly evaluate a patient with PsA?



For a complete look at the identification, assessment, and patient impact of the six domains of PsA, download the PsA Domain Explorer app.

Now available on the App Store® and Google Play for smartphones and tablets.

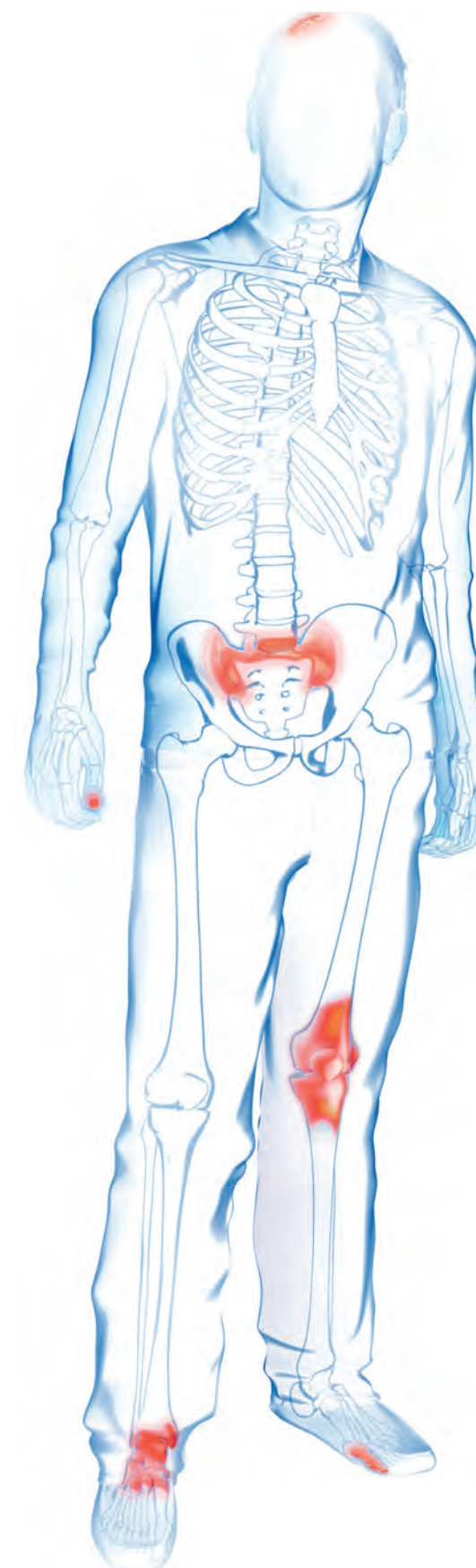
References: 1. Coates LC, Kavanaugh A, Mease PJ, et al. *Arthritis Rheumatol.* 2016;68(5):1060-1071. 2. McHugh NJ, Balachrishnan C, Jones SM. *Rheumatology.* 2003;42(6):778-783. 3. Ritchlin CT, Colbert RA, Gladman DD. *N Engl J Med.* 2017;376(10):957-970. 4. Gladman DD, Mease PJ, Strand V, et al. *J Rheumatol.* 2007;34(5):1167-1170. 5. Wong PCH, Leung Y-Y, Li EK, Tam L-S. *Int J Rheumatol.* 2012;2012:1-10. 6. Kane D, Stafford L, Bresnihan B, FitzGerard O. *Rheumatology.* 2003;42(12):1460-1468. 7. Acosta Felquer ML, FitzGerald O. *Clin Exp Rheumatol.* 2015;33:26-30. 8. Benjamin M, McGonagle D. *J Anat.* 2001;199(Pt 5):503-526. 9. Kaeley GS, Eder L, Aydin SZ, Gutierrez M, Bakewell C. *Semin Arthritis Rheum.* 2018;48(1):35-43. 10. Mease PJ. *Arthritis Care Res.* 2011;63(Suppl. 11):64-85. doi:10.1002/acr.20577. 11. Maksymowych WP, Mallon C, Morrow S, et al. *Ann Rheum Dis.* 2009;68(6):948-953. 12. Healy PJ, Helliwell PS. *Arthritis Care Res.* 2008;59(5):686-691. 13. Heuft-Dorenbosch L, Spooorenberg A, van Tubergen A, et al. *Ann Rheum Dis.* 2003;62(2):127-132. 14. Mease PJ, Karki C, Palmer JB, et al. *Arthritis Care Res.* 2017;69(11):1692-1699. 15. Brockbank JE, Stein M, Schentag CT, Gladman DD. *Ann Rheum Dis.* 2005;64(2):188-190. 16. Assessment of SpondyloArthritis international Society (ASAS) Slide Library. Dactylitis. <http://slides.asas-group.org/app/slides/search?q=dactylitis&submit=>. Accessed July 5, 2019. 17. Rothschild BM, Pingitore C, Eaton M. *Semin Arthritis Rheum.* 1998;28(1):41-47. 18. Bakewell CJ, Olivieri I, Aydin SZ, et al. *J Rheumatol.* 2013;40(12):1951-1957. 19. Helliwell PS, Firth J, Ibrahim GH, Melsom RD, Shah I, Turner DE. *J Rheumatol.* 2005;32(9):1745-1750. 20. Langley RGB, Krueger GG, Griffiths CEM. *Ann Rheum Dis.* 2005;64(Suppl. 2):18-23. 21. American Academy of Dermatology. Can you get psoriasis if you have skin of color? <https://www.aad.org/public/diseases/scaly-skin/psoriasis/who-gets-psoriasis-and-what-causes-it/do-people-of-color-get-psoriasis>. Accessed July 5, 2019. 22. Boehncke W-H, Schön MP. *Lancet (London, England).* 2015;386(9997):983-994. 23. Kaufman BP, Alexis AF. *Am J Clin Dermatol.* 2018;19(3):405-423. 24. Mease PJ, Karki C, Palmer JB, et al. *J Rheumatol.* 2017;44(8):1151-1158. 25. Manhart R, Rich P. *Clin Exp Rheumatol.* 2015;33(5 Suppl 93):S7-13. 26. Jiaravuthisan MM, Sasseville D, Vender RB, Murphy F, Muhn CY. *J Am Acad Dermatol.* 2007;57(1):1-27. 27. Sobolewski P, Walecka I, Dopytalska K. *Reumatologia.* 2017;55(3):131-135. 28. Sandre MK, Rohekar S. *Semin Arthritis Rheum.* 2014;44(2):162-169. 29. Cassell SE, Bieber JD, Rich P, et al. *J Rheumatol.* 2007;34(1):123-129. 30. Rich P, Scher RK. *J Am Acad Dermatol.* 2003;49(2):206-212. 31. Busard CI, Nolte JYC, Pasch MC, Spuls PI. *Br J Dermatol.* 2018;178(3):640-649. 32. Pérez Alaminó R, Maldonado Cocco JA, Citera G, et al. *J Rheumatol.* 2011;38(8):1656-1660. 33. McQueen F, Lassere M, Østergaard M. *Arthritis Res Ther.* 2006;8(2):1-8. 34. Baraliakos X, Coates LC, Braun J. *Clin Exp Rheumatol.* 2015;33(7):31-35. 35. Calin A, Nakache JP, Gueguen A, Zeidler H, Mielants H, Dougados M. *Rheumatology (Oxford).* 1999;38(9):878-882. 36. Fernández-Sueiro JL, Willisch A, Pértega-Díaz S, et al. *Arthritis Care Res.* 2009;61(3):386-392. 37. Mease PJ, Palmer JB, Liu M, et al. *J Rheumatol.* 2018;45(10):1389-1396. 38. Mease P, Van Den Bosch F, Sieper J, et al. *J Rheumatol.* 2017;44(5):599-608.

AAD, American Academy of Dermatology; **ASAS**, Assessment of SpondyloArthritis international Society; **AT**, Achilles tendon; **BASDAI**, Bath Ankylosing Spondylitis Disease Activity Index; **BSA**, body surface area; **C**, calcaneus; **DIP**, distal interphalangeal; **LDI**, Leeds Dactylitis Index; **LEI**, Leeds Enthesitis Index; **MASES**, Maastricht Ankylosing Spondylitis Enthesitis Score; **mNAPSI**, modified NAPSI; **MRI**, magnetic resonance imaging; **NAPSI**, Nail Psoriasis Severity Index; **PASI**, Psoriasis Area and Severity Index; **PGA/IGA**, physician's/investigator's global assessment; **RA**, rheumatoid arthritis; **SI**, sacroiliac; **SJC**, swollen joint count; **SPARCC**, Spondyloarthritis Research Consortium of Canada; **TJC**, tender joint count.



A Quick Guide for PsA Evaluation

For optimal management of patients with psoriatic arthritis (PsA), the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) recommends the evaluation of each domain of PsA.¹



Learn how to **identify** and **assess** the six domains of PsA, and **recognize** the impact of each on your patients.




The Six Domains of PsA:

Identification, Assessment, and Patient Impact

● PSORIASIS

Common Locations: Elbows, knees, hands, scalp, trunk²⁰

Identification: Thickened plaques (see image), inverse, guttate, pustular, erythrodermic



Plaque psoriasis is the most common clinical type of psoriasis, with sharply demarcated erythematous or violaceous lesions covered by silvery lamellar scales^{22,23}

—
Permission granted by AAD²¹

Assessment Examples:

PASI Surface area and lesional severity of psoriasis is measured in the head, trunk, arms, and legs¹⁰

BSA The percentage of body surface area affected by psoriasis is measured¹⁰

PGA/IGA The investigator's overall assessment of the patient's skin lesions is measured¹⁰


Patient Impact: Even moderate amounts of psoriatic skin involvement are associated with a greater disease burden of PsA, with greater reported pain, fatigue, and work impairment²⁴

Prevalence: 100% of PsA cases³

● AXIAL DISEASE

Common Locations: Spine, hips, cervical spine³²

Identification: Clinical presentation, radiograph, MRI (see image)



MRI can identify inflammation as represented by bone marrow edema in the SI joint and spine earlier in the disease than radiography³⁴

—
Permission granted by Arthritis Res Ther³³

Assessment:

BASDAI The degree of fatigue, pain, tenderness, and stiffness are assessed with a questionnaire³⁵

Spinal mobility measurements Range of movement of various parts of the axial skeleton are measured using dynamic tests³⁶


Patient Impact: PsA patients with axial disease have worse disease and widespread impairment of patient-reported outcomes than those without³⁷

Prevalence: 50% of PsA cases³

● DACTYLITIS

Common Locations: Fingers, toes¹⁵

Identification: Clinical presentation (see image)



Uniform swelling throughout the entire digit, which may be painful or relatively asymptomatic^{17,18}

—
Permission granted by N Engl J Med¹⁶

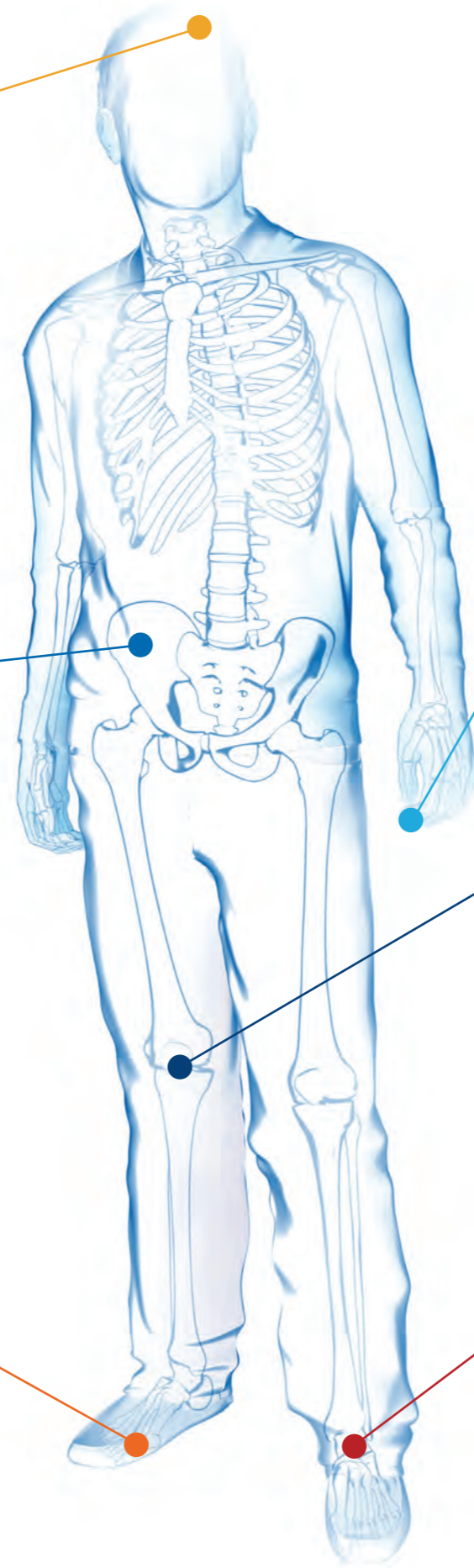
Assessment:

LDI Dactylitic digits are identified in the hands and feet, and tenderness is assessed in the phalangeal spaces of those digits^{10,19}

Dactylitic count Number of digits affected⁴

Patient Impact: Fatigue, pain, and swelling in dactylitis impairs work and non-work activities¹⁴

Prevalence: 30-50% of PsA cases³



● NAIL

Common Locations: Fingernails, toenails²⁵

Identification:

Nail matrix psoriasis Pitting (See photo), nail plate crumbling, leukonychia, red spots in the lunula

Nail bed psoriasis Onycholysis and oil-drop dyschromia, splinter hemorrhages, subungual hyperkeratosis

Differential diagnosis Onychomycosis



One of the most common nail lesions in PsA, pits are superficial depressions within the nail plate, associated with inflammation of the proximal nail matrix^{27,28}

—
Permission granted by J Am Acad Dermatol²⁶

Assessment:

mNAPSI The severity/presence of seven types of nail lesions are evaluated in each fingernail and scored²⁹

NAPSI The severity/presence of nine types of nail lesions are evaluated in four quadrants of the nail³⁰

PGA/IGA The investigator's overall assessment of the patient's nail psoriasis of the target fingernail is measured³¹


Patient Impact: Nail involvement is associated with discomfort and pain, and can lead to functional impairment and psychological stress²⁷

Prevalence: 87% of PsA cases³

● PERIPHERAL ARTHRITIS

Common Locations: Elbows, wrists, knees, hands, feet, other²

Identification: Clinical presentation (see image), MRI, radiograph, ultrasound



Joint involvement may be symmetrical, asymmetrical, polyarticular, oligoarticular, or monoarticular. DIP involvement is a characteristic feature of PsA over RA²

—
Permission granted by N Engl J Med³

Assessment:

68/66 TJC/SJC The presence of tenderness and swelling are assessed at 68 and 66 joints, respectively, covering a majority of those affected in PsA^{4,5}

Patient Impact: At a median interval of two years, PsA may result in radiological damage in up to 47% of patients. Pain and irreversible deformities can result in loss of function^{6,7}

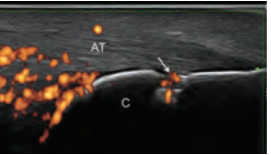
Prevalence: 96% of PsA cases³

● ENTESITIS

Common Locations: Inflammation at the tendon and ligament attachment points⁸

Common sites include: the epicondyle humerus, proximal achilles, and medial condyle femur³⁸

Identification: Ultrasound (see image), MRI, physical exam and/or clinical presentation



Ultrasound can identify bony changes and allow functional evaluation of vascularization using Doppler technology⁹

—
Permission granted by Semin Arthritis Rheum⁹

Assessment:

SPARCC Tenderness is assessed at 16 enthesal sites^{10,11}

LEI Tenderness is assessed at 6 enthesal sites^{10,12}

MASES Tenderness is assessed at 13 enthesal sites^{10,13}

Patient Impact: PsA patients with entesitis face a greater burden than those without, reporting greater pain, fatigue, and impairment of work and activities¹⁴

Prevalence: 30-50% of PsA cases³