

---

---

# Update on imaging in rheumatic diseases

---

X. Baraliakos, J. Braun, P.G. Conaghan, M. Østergaard, T. Pincus\*

---

---

The guest co-editors welcome you to the 19th annual *Clinical and Experimental Rheumatology* supplement concerning Contemporary Topics in Rheumatic Diseases.

The previous volumes in this series include:

- 1999 – Combination DMARD therapy in rheumatoid arthritis
- 2000 – Bone mass in the rheumatic diseases
- 2001 – Controversies in COX-2 inhibitor therapy
- 2002 – Innovative therapies for spondyloarthritis
- 2003 – Early arthritis
- 2004 – Benefit/risk of new drugs for rheumatoid arthritis
- 2005 – Quantitative clinical assessment of rheumatic diseases
- 2006 – Remission in rheumatic diseases
- 2007 – Quality of care in rheumatology: opportunities and challenges
- 2008 – Mortality in rheumatic diseases
- 2009 – Rheumatoid arthritis and ankylosing spondylitis: similarities and differences
- 2010 – Methotrexate in rheumatic diseases
- 2011 – Low-dose glucocorticoids in rheumatic diseases
- 2012 – Treat to target in rheumatic diseases
- 2013 – Possible discontinuation of therapies in rheumatic diseases
- 2014 – Optimising assessment in clinical trials, clinical research and clinical care
- 2015 – Psoriatic arthritis
- 2016 – Information technology in rheumatology
- 2017 – Pain in rheumatic diseases

The 2018 supplement presents an update on imaging of rheumatic diseases. New imaging techniques are continuing to expand possibilities for classification, early diagnosis, assessment and monitoring of the diseases we treat. Refinement of existing modalities and the introduction of newer technologies has advanced the rheumatologist's knowledge of pathogenesis and course, ability to evaluate disease burden and

activity, and better assess prognosis and outcomes of many rheumatic diseases.

We thank the authors who have provided 23 informative articles, all of which have been peer-reviewed by the guest editors. We are happy to present this annual supplement at the ACR annual meeting – as over the previous 18 years.

While conventional radiography remains a mainstay in rheumatology, ultrasound and magnetic resonance imaging (MRI) have become increasingly common in patient care. Furthermore, exciting research findings in computed tomography (CT), dual-energy CT (DECT), dual energy x-ray absorptiometry (DXA), conventional scintigraphy, positron emission tomography (PET) with and without CT or MRI, angiography, functional MRI, and others, are being incorporated into routine care of certain patients with certain diseases. Ongoing research indicates many novel approaches will become available in the future.

The supplement is divided into 3 sections:

- The first section presents a brief overview of ultrasound (US) and magnetic resonance imaging (MRI), with basic information for the practicing rheumatologist that is not included in the more specialised sections.
- The second section addresses advances in imaging of specific rheumatic diseases, including rheumatoid arthritis, spondyloarthritis, psoriatic arthritis, osteoarthritis, gout, systemic lupus erythematosus, polymyositis, fibromyalgia, vasculitis, polymyalgia rheumatica, and osteoporosis.
- The third section reviews advances in imaging pathology of specific structures, including enthesitis, tenosynovitis, cartilage abnormalities, peripheral nerves, the salivary gland in Sjögren's syndrome, the lung and cardiovascular disease.

We hope readers will find the volume as informative and interesting as we do. Comments and critique are welcome. We also invite suggestions for future supplements in this series.

\*Dr Pincus is president of Medical History Services, LLC, and holds a copyright and trademark on MDHAQ and RAPID3 for which he receives royalties and license fees, all of which are used to support further development of quantitative questionnaire measurements for patients and doctors in clinical care and other research and publications to advance rheumatology care and outcomes.