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Psoriatic Arthritis and Axial Spondyloarthritis

Highlights from Clinical Trials and Treatment Guidelines

Several novel targeted therapies have emerged over the last decade for the treatment of psoriatic arthritis **(PsA)** and axial spondyloarthritis **(axSpA)**

Existing and emerging pharmacological interventions for the treatment of PsA and axSpA

Disease-modifying antirheumatic drugs (DMARDs)

Conventional synthesis (cs) DMARDs such as methotrexate (MTX), sulfasalazine, leflunomide, and tumour necrosis factor inhibitors (TNFi)

Biologic (b) DMARDs targeting different cytokines including TNFs, interleukin (IL)-12/23, and IL-17A

Targeted synthetic (ts) DMARDs that inhibit phosphodiesterase-4 (PDE4) or Janus kinases (JAKs)

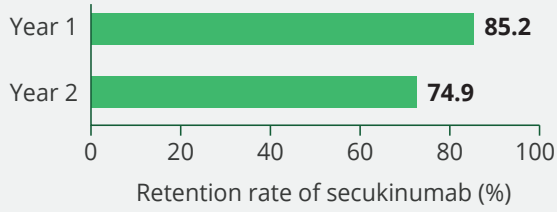
2022 highlights from clinical trials assessing the safety and efficacy of new generation drugs: A summary

IL-17i

Secukinumab

Findings from a real-world study in patients with PsA treated with secukinumab (SERENA study)

- Sustained effectiveness and safety over two years
- Adequate safety and efficacy in patients with enthesitis-related arthritis and juvenile PsA



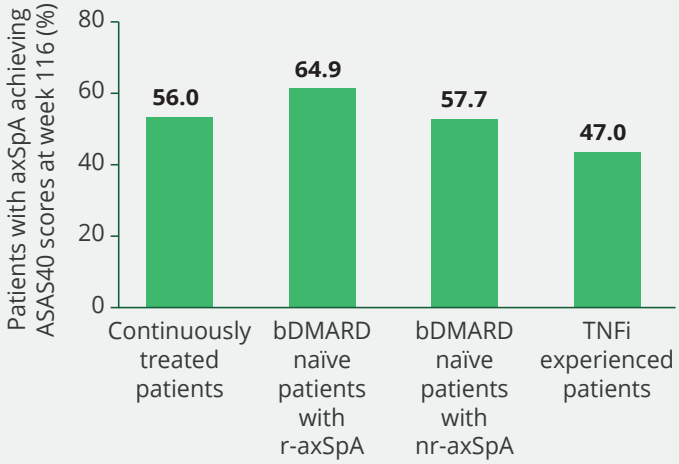
Ixekizumab

Findings from the COAST trial: Two-year results on the safety and efficacy in patients with axSpA

- Sustained long-term improvements in treatment naïve and experienced patients
- Achievement of low disease activity scores
- Safety profile and tolerability consistent with earlier reports, demonstrated through data from four clinical trials and 2,000 patient-years of exposure

Common adverse events

- Inflammatory bowel disease
- Candidiasis
- Allergies
- Injection site reactions



ASAS score: Assessment of SpondyloArthritis international Society score
r: radiographic
nr: non-radiographic

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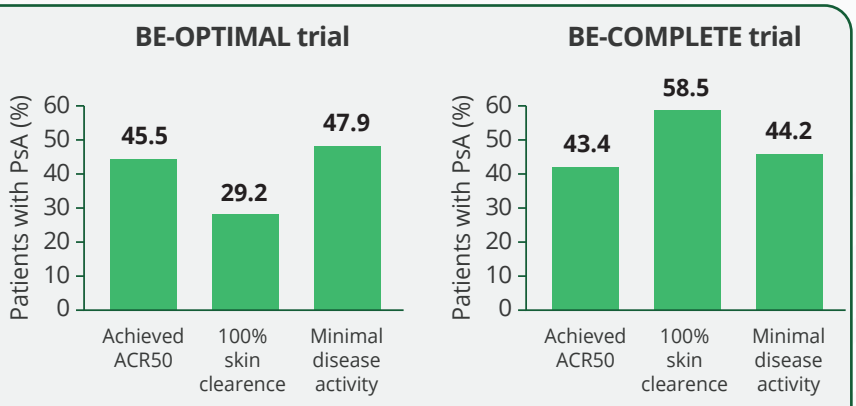
Bimekizumab

Findings from two phase III, randomised controlled trials on patients with PsA

- Improvements in joint and skin efficacy outcomes
- Safety demonstrated over a three-year period

Common adverse events

- Nasopharyngitis
- Upper respiratory tract infection
- Bronchitis
- Oral candidiasis



ACR: American College of Rheumatology criteria

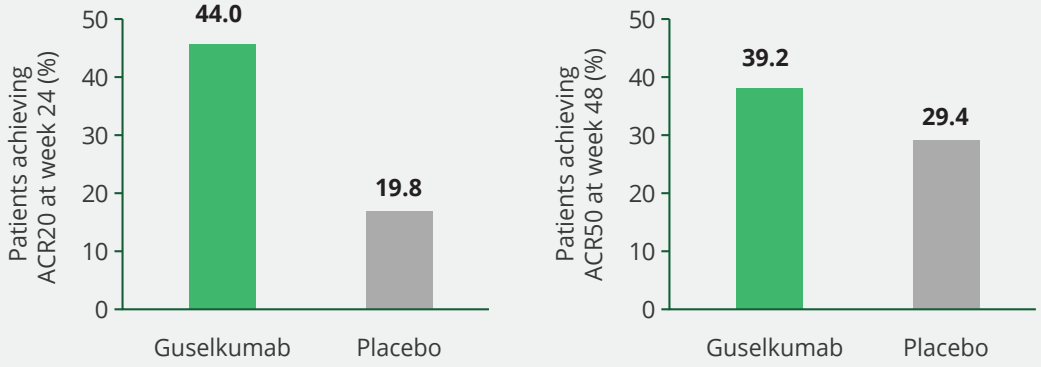
IL-23i

Guselkumab

One-year results of a phase IIIb, randomised, controlled study (COSMOS study) in patients with inadequate response to TNFi

Significant improvements in

- Joint and skin manifestations
- Physical function

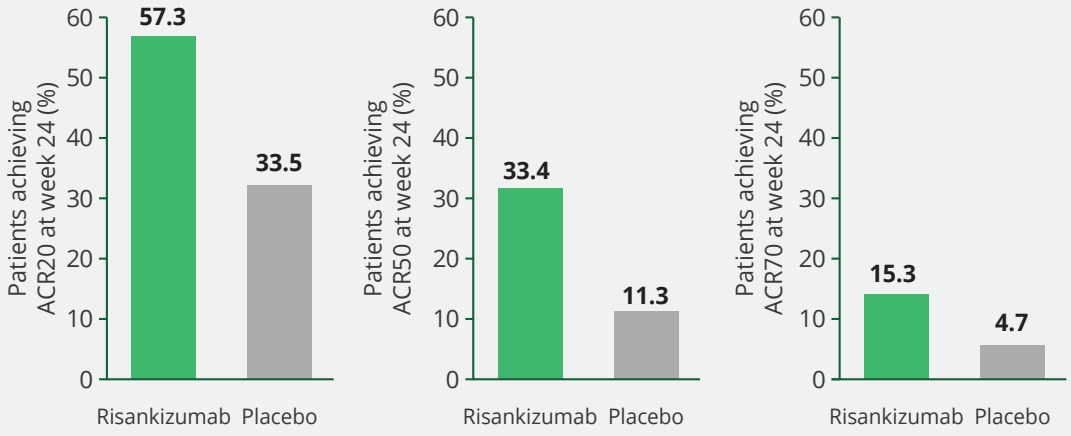


ACR: American College of Rheumatology criteria

Risankizumab

Findings from randomised, double-blind, phase III trials (KEEPsAKE trials) in patients with inadequate response or intolerance to TNFα inhibitors, csDMARDs, and bDMARDs

- Significant improvements in signs and symptoms of PsA on treatment with risankizumab, as measured by the ACR scores



ACR: American College of Rheumatology criteria

JAK inhibitors (JAKi)

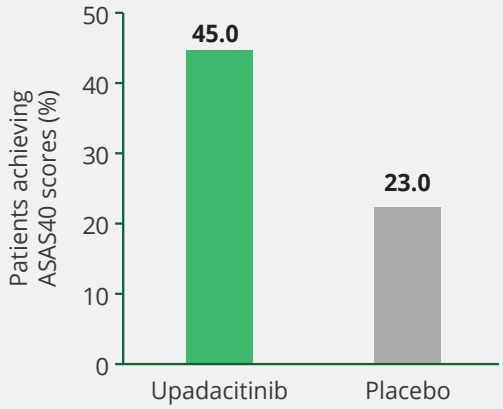
Upadacitinib

Results from a randomised, placebo-controlled, phase III, double-blind trial (SELECT-AXIS 2 study)

- Significant improvements in the signs and symptoms of patients with non-radiographic axSpA

Common adverse events

- Hepatic disorders
- Anaemia
- Neutropenia



ASAS score: Assessment of SpondyloArthritis international Society score

The European League Against Rheumatism (EULAR) and the Assessment of SpondyloArthritis international Society (ASAS) have updated recommendations that can guide clinicians on treatment approaches for PsA and axSpA

Evidence-based: Derived from clinical trials and systematic review data

Experience-based: Derived from patients' perceptions and expectations, and physicians' experiences

Consensus-based

PsA

EULAR pharmacological treatment recommendations for PsA

Treat-to-target approach

- Treatment should be aimed at achieving a target, such as remission or low disease activity, through regular monitoring
- Initiate non-steroidal anti-inflammatory drugs (NSAIDS) for the management of musculoskeletal symptoms and glucocorticoids as adjunctive therapy if required

In case of insufficient response

Type of symptom	Guidelines
Polyarthritis Monoarthritis/oligo arthritis with poor prognostic factors	Initiate treatment with a csDMARD, preferably methotrexate in case of skin involvement
If response to a csDMARD is inadequate	
Peripheral arthritis	Initiate treatment with a bDMARD such as a IL-12/IL-17/IL-23 inhibitor If response is still inadequate, consider administering JAKi
Enthesitis	Initiate treatment with a bDMARD
Pre-dominantly axial disease	Initiate treatment with a bDMARD or TNFi/IL-17i

Additional recommendations

Patients with mild disease who do not respond well or are unsuitable for csDMARDs, bDMARDs, or JAKi → Consider PDE4 inhibitors

Patients who respond poorly or are intolerant to bDMARDs → Switch to another bDMARD or tsDMARD

Patients achieving remission → Consider cautious tapering of DMARDs

axSpA

ASAS-EULAR pharmacological and non-pharmacological treatment recommendations for axSpA

Individualised treatment approach based on

Current symptoms

Clinical features of the disease

Comorbidities

Psychosocial status

Patient-reported outcomes

Guidelines

Exercise and physiotherapy

Quit smoking

If symptomatic

Initiate NSAIDs and analgesics, such as paracetamol and opioid-(like) drugs for residual pain

In case of insufficient response

Type of symptom	Guidelines
Peripheral disease	Glucocorticoid injection at the local site of inflammation or consider sulfazine
Purely axial disease	• Initiate TNF/IL-17/JAKi • In case of inadequate response, re-evaluate diagnosis and comorbidities • Switch to another bDMARD or JAKi • Taper the DMARD dose in case of sustained remission
Radiographic evidence of structural damage	Total hip arthroplasty or spinal corrective osteotomy

In case of a history of recurrent uveitis or active inflammatory bowel disease, a monoclonal antibody against TNF is preferred. In patients with significant psoriasis, an IL-17i may be preferred

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Advantages of the updated clinical recommendations for the treatment of PsA and axSpA

- Include the latest evidence and new-generation drugs that have proven to be effective
- Provide a phase I to phase IV framework for the treatment of mild to severe disease based on the clinical features of the disease, patient-specific characteristics, treatment responses, and outcomes
- Serve as a roadmap for clinicians in selecting and switching therapies as required
- Account for the role of other healthcare specialists for a more collaborative and holistic treatment approach
- Consider the cost-effectiveness of treatments
- Include patients' perspectives on the symptoms and outcomes of the disease and highlight the importance of shared decision-making
- Address a wider spectrum of clinical features of the disease

Key takeaways

- **Past, ongoing, and emerging clinical trials on the efficacy of new generation drugs for PsA and axSpA provide key insights, evidence, and essential data regarding their use in clinical practice on different patient cohorts, can support the development of customised treatment interventions, and open new avenues for the treatment of these disorders**
- **Updated clinical treatment guidelines provide an integrated and structured treatment approach that can guide clinicians in the timely selection of the correct treatments, based on the individual needs of patients**

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