Background: Since the 2015 GRAPPA treatment recommendations were published, therapeutic options and management strategies for psoriatic arthritis (PsA) have advanced considerably.

Objectives: The goal of the GRAPPA recommendations update is to develop high quality, evidence-based recommendations for the treatment of PsA, including related conditions and comorbidities.

Methods: GRAPPA rheumatologists, dermatologists and patient research partners (PRPs) updated overarching principles for the management of adults with PsA by consensus. Principles considering use of biosimilars and tapering/discontinuing of therapy were added to this update. Systematic literature searches based on data publicly available from three databases (MEDLINE, EMBASE, and Cochrane CENTRAL) were conducted from the end of the previous recommendations’ searches through August 2020. Additional abstract searches were performed for conference presentations in 2017-2020. Searches covered PsA treatments (peripheral arthritis, axial arthritis, enthesitis, dactylitis, skin, and nail disease). Additional searches were performed for related conditions (uveitis and IBD) and comorbidities evaluating their impact on safety and treatment outcomes. Individual groups assessed the risk of bias and applied the GRADE system to generate strong or conditional recommendations for therapies within the domain groups and for the management of comorbidities and related conditions. These recommendations were then incorporated into an overall treatment schema.

Results: Updated, evidence-based treatment recommendations are shown (Table 1). Since 2015, many new medications have been incorporated. Additional results for older medications, such as methotrexate, have been published across PsA domains. Based on the evidence, the treatment recommendations developed by individual groups were incorporated into the overall schema including principles for management of arthritis, spondylitis, enthesitis, dactylitis, skin, and nail disease in PsA and associated conditions (Figure 1). Choice of therapy for an individual should ideally address all of the domains that impact on that patient, supporting shared decision making with the patient involved. Additional consideration in the recommendations was given to key associated conditions and comorbidities as these often impact on therapy choice.

Conclusion: These GRAPPA treatment recommendations provide up to date, evidence-based guidance to providers who manage and treat adult patients with PsA. These recommendations are based on domain-based strategy for PsA and supplemented by overarching principles developed by consensus of GRAPPA members.
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Efficacy and Safety of Guselkumab in Patients with Active Psoriatic Arthritis who Demonstrated Inadequate Response to Tumor Necrosis Factor Inhibition: Week 24 Results of a Phase 3b, Randomized, Controlled Study

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Background: Guselkumab (GUS), a selective monoclonal antibody targeting the interleukin-23p19 subunit, has demonstrated efficacy in 2 pivotal Phase III psoriatic arthritis (PsA) studies (DISCOVER-1 and DISCOVER-2). The primary endpoint was failure to achieve the American College of Rheumatology 20% (ACR20) and Psoriasis Area and Severity Index (PASI) 75 criteria at Week 16. The Phase 3b COSMOS study was designed to confirm these results and to evaluate the efficacy and safety following 52 weeks of treatment.

Objectives: The objective of this study was to evaluate the efficacy and safety of GUS in patients (pts) with inadequate response (IR) to tumor necrosis factor inhibitor (TNFi) treatment. The secondary objective was to investigate the safety of GUS in patients with a prior history of TNFi discontinuation due to IR.

Methods: In this randomized, double-blind, placebo (PBO)-controlled trial, 285 pts with active PsA (≥3 swollen joints and ≥3 tender joints) who demonstrated lack of benefit or intolerance to ≥2 TNFIs were randomized to receive placebo (PBO) or GUS 100 mg (N=189) at W0, W4, then every 8 weeks (W8W24) through W24. At W16, pts who met early escape (EE) criteria (<5% improvement in both tender and swollen joint counts) also could switch from PBO to GUS. The primary efficacy endpoint was ACR20 response at W24 among randomized, treated pts. Missing ACR20 data at W24 were imputed using multiple imputation. The same method was used for missing data at W12, the primary endpoint. For the final analysis, EE was defined as (1) a decrease in both tender and swollen joint counts of ≥5% from the baseline value, and (2) a decrease in EULAR response from baseline to W16. EULAR response was defined by the European League Against Rheumatism as a decrease of ≥20% in tender and swollen joint counts, ≥50% improvement in the Health Assessment Questionnaire (HAQ-DI) 0-3, C-reactive protein (CRP) ≤1 mg/L, and no new or worsening extra-articular manifestations. The primary endpoint was the proportion of pts who achieved ≥50% improvement in both tender and swollen joint counts and ≥20% improvement in the HAQ-DI (≥20% improvement in the HAQ-DI and ≥50% improvement in tender and swollen joint counts) from baseline to Week 24 (W24).

Results: Baseline characteristics were similar across GUS and PBO pts, with the exception of a higher proportion of females and more severe joint symptoms in the PBO group. At W24, 44.4% of GUS vs 19.8% of PBO pts achieved ACR20 (p<0.001). Efficacy was consistent across subgroups defined by baseline characteristics, including pts who discontinued prior TNFI use due to inadequate efficacy (84% GUS vs 81% PBO) and pts with ≥16% reduction in PASI (16% GUS vs 19% PBO). At W24, 52% of GUS and 38% of PBO pts were in remission (≥90% ACR20 response).

Conclusions: Guselkumab 100 mg (N=189) is non-inferior to placebo (PBO) at W24 in pts with active PsA who have failed ≥3 TNFIs, irrespective of prior TNFI discontinuation.