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GRAPPA 2024 Annual Meeting: An Update on Major Project Milestones

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ABSTRACT. At the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) 2024 annual meeting, members were updated on several ongoing activities during the key project update session. These activities included the Biomarker Project, the Axial Psoriatic Arthritis Molecular and Clinical Characterization study, the Diagnostic Ultrasound Enthesitis Tool (DUET) study, the Sex- and Gender-Based Analysis of the Effectiveness of Advanced Therapies in Psoriatic Arthritis (SAGE-PsA) study, the Early Recognition of PsA (COMPOSITION) study, and the GRAPPA treatment recommendations.

Key Indexing Terms: biomarker, GRAPPA, psoriasis, psoriatic arthritis, treatment recommendations, ultrasound

Biomarker Project, by Dr. Vinod Chandran

Dr. Chandran presented an update on behalf of the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) Biomarker Team. The goal of the project is to identify biomarkers present at baseline in patients with psoriatic arthritis (PsA) that may predict which patients are likely to (1) respond to a specific therapy and (2) develop radiographic damage. The team worked with industry partners Atturos and Pfizer to collect patient samples for biomarker identification from 2 clinical trials, Oral Psoriatic Arthritis Trial (OPAL) Broaden and OPAL Beyond, testing treatment responses. The group evaluated a panel of approximately 200 existing candidate biomarkers from the 2 trials. Several novel serum protein biomarkers were discovered, and a manuscript reporting these findings is currently being prepared for publication.

With Eli Lilly, the GRAPPA Biomarker Team has identified biomarkers for radiographic damage using samples from the SPIRIT-P1 trial. Work is underway to replicate the findings of the radiographic biomarker panel in an observational cohort based in Toronto, Canada.

Axial Psoriatic Arthritis Molecular and Clinical Characterization study, by Dr. Philip Mease

Dr. Mease presented an update on the GRAPPA Axial Psoriatic Arthritis Molecular and Clinical Characterization study, an independent investigator study sponsored by Janssen. The study is recruiting patients across several international study sites. The primary goal is to identify liquid and/or tissue biomarkers to identify presence of axial involvement in PsA. The team is enrolling biologic-naïve patients with PsA with disease duration < 10 years, half with and half without axial involvement. The initial diagnosis of axial involvement is based on investigator judgment, taking into account previous and current clinical, laboratory, and imaging assessments. The final diagnosis will also depend upon centrally read imaging assessment. Clinical data as well as blood, stool, skin, and synovial biopsy samples are being sent to the University Health Network in Toronto, Canada, which serves as the central repository. Imaging, radiography, and magnetic resonance imaging of the sacroiliac joints and spine will be read centrally. Extensive biomarker analysis is planned. The Seattle site has completed enrollment of 5 patients. Interim molecular analysis is planned for synovial samples from this initial subset of patients. Six other global sites are working to obtain contractual and regulatory approvals before they can begin recruiting patients.

Diagnostic Ultrasound Enthesitis Tool study, by Drs. Lihi Eder, Sibel Aydin, and Gurjit Kaeley

The Diagnostic Ultrasound Enthesitis Tool (DUET) study aims to develop a new sonographic enthesitis scoring system to improve early diagnosis of PsA.[1,2] Led by Drs. Eder, Aydin,

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and Kaeley, the study began as a GRAPPA project in March 2021 and completed enrollment at 17 sites across 8 countries in March 2023. The study included a prospective collection of data from rheumatologist assessment, patient surveys, and ultrasound (US) scanning of 16 entheseal sites. All US scans were scored for inflammatory and structural entheseal lesions by 3 central sonographers. A total of 213 patients with PsA were enrolled, 100 patients with psoriasis (PsO) alone, and 106 nonpsoriatic controls. Initial scoring of the scans was completed in July 2023, with consensus scoring involving an additional adjudicator completed in May 2024. The development of the tool used a combined data- and expert-driven approach to identify the optimal combination of elementary lesions and entheseal sites. Preliminary results presented at the GRAPPA 2024 annual meeting showed that power Doppler signal was relatively uncommon overall but was more prevalent in patients with PsA. Erosions were generally rare across most sites but were predominantly found in PsA cases. Some entheseal sites appear to be more discriminative than others. The team is currently working to create a tool that incorporates a combination of sonographic lesions and entheseal sites discriminative enough to be used in the clinic. They will also explore contextual factors, particularly age, that may have a significant effect on the sonographic scoring system.

Sex- and Gender-Based Analysis of the Effectiveness of Advanced Therapies in Psoriatic Arthritis, by Dr. Lihi Eder

Sex- and Gender-Based Analysis of the Effectiveness of Advanced Therapies in Psoriatic Arthritis (SAGE-PsA) is an international, multicenter study supported by GRAPPA through multiple pharmaceutical industry–supported grants. The study aims to understand how sex and gender influence response to advanced therapies in PsA. Specifically, it aims to determine which biological and sociocultural mechanisms explain differences in treatment response between men and women with PsA.

SAGE-PsA was launched in March 2023 and includes 36 sites worldwide. Twenty-seven sites have been fully activated, and 188 patients (out of 540) have been enrolled to date. The team plans to complete study enrollment by 2026.

In addition, Dr. Mease is leading a qualitative study (SAGE-Qual) with focus groups in Toronto, Cleveland, and Seattle. The aims of SAGE-Qual are to (1) characterize the influence of sex and gender on patient experience and treatment outcomes, and (2) identify patterns in barriers and facilitators to management of PsA by sex and gender. A medical anthropologist will interview participants and identify common and sex-specific themes.

SAGE-PsA should improve our understanding of the effects of sex and gender on PsA, which will contribute to more personalized approaches to caring for people living with PsA.

Early Recognition of PsA (COMPOSITION) study, by Dr. Denis Poddubnyy

Dr. Poddubnyy introduced the COMPOSITION study, a new GRAPPA project that aims to improve detection of PsA among patients with PsO. The study seeks to evaluate a combined approach using patient questionnaires and dermatologist evaluations. This prospective multicenter study aims to compare the diagnostic performance of a traditional physician (dermatologist)-based screening and referral strategy with a patient questionnaire–based approach. The study will focus on identifying patients with a high likelihood of having PsA, which is often underdiagnosed or diagnosed with significant delay, negatively affecting patient outcomes.[3]

Patients with PsO will undergo a 2-step screening process. The first step involves a patient-completed Psoriasis Epidemiology Screening Tool (PEST) questionnaire. Patients scoring ≥ 3 on the PEST will be considered "PEST-positive" and eligible for further referral.[4] Simultaneously, all patients will receive a standardized musculoskeletal (MSK) evaluation by dermatologists, who will be blinded to the PEST results. This evaluation will assess the presence of peripheral arthritis, enthesitis, dactylitis, and axial symptoms. Dermatologists will receive specialized training (printed material, video, and in-person) for conducting these assessments.

Patients identified as either PEST-positive or showing MSK signs (dermatologist-positive) will be referred to rheumatologists for further evaluation. Rheumatologists will perform a comprehensive clinical examination and record detailed physical findings, as well as collect demographic data, family history, and patient-reported outcomes. The primary objective is to determine the proportion of patients diagnosed with PsA using the different screening methods.

The study's design is based on the hypothesis that incorporating dermatologist-based MSK evaluations into the screening process will enhance the accuracy of PsA detection. By doing so, the study aims to address the limitations of current patient-reported screening tools, which often yield false positives and result in unnecessary referrals. The collaborative nature of this research, involving both dermatologists and rheumatologists, represents a critical step in refining PsA screening, reducing diagnostic delays, and improving patient outcomes through earlier and more accurate detection.

With 1000 patients with PsO expected to be screened across multiple centers and 500 patients referred for rheumatology assessment, this study has the potential to significantly influence the diagnostic pathway for PsA, streamlining care and ensuring timely treatment.

GRAPPA treatment recommendations update, by Drs. Arthur Kavanaugh, Enrique Soriano, Laura Coates, Ennio Lubrano, Ying Ying Leung, Suzanne Grieb, and Lourdes Perez-Chada

During the annual meeting in 2024, the GRAPPA Treatment Recommendations Committee presented a summary on the progress since the 2022 recommendations publication,[5] as well as a proposed timeline for future updates. The 2022 treatment recommendations and the supporting literature reviews are all now published.[5-13] Spanish and Portuguese translations are now included as supplementary information in the updated article.[14]

Ongoing updates and development of the current treatment recommendations remain part of the core mission of GRAPPA.

A new steering committee has been appointed to further develop the recommendations. A survey collected in an effort to recruit additional GRAPPA members to support this project yielded more than 150 responses. Co-leaders of each treatment domain have been appointed, and group members were assigned to 1 of 8 domains based on their preference: peripheral arthritis, skin, nail, axial, enthesitis, dactylitis, related conditions, and comorbidities. Each domain includes a steering committee liaison, domain leaders, a Young-GRAPPA member, and a patient research partner. This project is expected to be completed by late 2025 and will include the development of PICO (patient/population – intervention – comparison/comparator – outcome) questions, literature searches, and data synthesis, followed by drafting and publication of the treatment recommendations.

Conclusion

This report summarizes some of the research and educational major projects presented during the GRAPPA 2024 annual meeting that align with GRAPPA's missions to address educational and research needs in psoriatic disease, foster community networking, and enhance patient care through collaborative networks and treatment recommendations.

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ETHICS AND PATIENT CONSENT

Institutional review board approval and patient consent were not required.

PEER REVIEW

As part of the supplement series GRAPPA 2024, this report was reviewed internally and approved by the Guest Editors for integrity, accuracy, and consistency with scientific and ethical standards.

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