

# Prologue: 2009 Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA)

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**ABSTRACT.** The 2009 Annual Meeting of the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) was held in June 2009 in Stockholm, Sweden, and was attended by rheumatologists, dermatologists, biopharmaceutical company representatives, and patient groups. A primary goal of GRAPPA is to foster outreach and interdisciplinary communication between the fields of rheumatology and dermatology. Several members attended an adjacent meeting of the International Federation of Psoriasis Associations; reports were also provided of recent meetings of the American Academy of Dermatology and the Assessment of SpondyloArthritis (ASAS) working group. In a training session of the GRAPPA meeting, members served as faculty while rheumatology fellows and dermatology residents presented original research work. In one module of the meeting, several response measures were discussed. In another module, discussions were held on the need for dermatologists to be able to diagnose psoriatic arthritis (PsA) among their psoriasis patients; several PsA screening questionnaires were presented, and progress was reported on developing online training videos as an aid to educate clinicians in their diagnoses. Other topics for discussion at the GRAPPA meeting included presentations on genetic associations with PsA and on comorbidities in patients with PsA. Current and future research projects also were outlined. (J Rheumatol 2011;38:522–5; doi:10.3899/jrheum.101113)

*Key Indexing Terms:*  
PSORIASIS                      PSORIATIC ARTHRITIS                      GRAPPA                      OUTCOME MEASURES

On the occasion of the Second World Psoriasis and Psoriatic Arthritis Conference in 2009 in Stockholm, Sweden, the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) held its annual meeting over a 2-day period. GRAPPA was formed in 2003 and has grown to 307 members from many parts of the globe who are investigators in the fields of rheumatology and dermatology, representatives of biopharmaceutical companies, or from patient service leagues (Table 1). Each year, GRAPPA holds a 3-hour meeting adjacent to key rheumatology and dermatology academic and clinical scientific congresses as well as a 2-day stand-alone meeting attended by rheumatologists and dermatologists, as exemplified by this meeting in Stockholm in 2009.

GRAPPA was originally formed to fulfill a number of purposes. One of the foremost was to provide a forum wherein investigators keenly interested in all aspects of psoriasis and psoriatic arthritis (PsA) could meet, in person, by telephone, or by e-mail, to discuss issues of mutual interest,

foster research, create educational initiatives, and interact with leaders of patient service leagues and industry. It is exceptional in its goal to foster interdisciplinary communication between 2 different medical disciplines, not to mention international cross-linking. Some core projects that have been accomplished by GRAPPA members, working cooperatively, include the following.

1. The establishment of the classification criteria for PsA (CASPAR), based on a multicenter in-depth evaluation of over 1000 PsA patients and controls<sup>1</sup>.
2. In conjunction with OMERACT (Outcome Measures in Rheumatology Clinical Trials), identification of the core domains of PsA that should be assessed in clinical trials through a multi-year project including a Delphi exercise, literature review, and extensive discussion within the OMERACT process<sup>2,3,4</sup>.

Table 1. Composition of Grappa members, June 2009.

Participant Type	Non-North America	North America	Total
Dermatologist	42	43	85
Rheumatologist	112	37	149
Geneticist	0	4	4
Methodologist	8	4	12
Patient Group/Government Representative	7	3	10
Radiologist	3	4	7
Sponsors	NA	NA	40
Totals	172	95	307

NA: not applicable.

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3. Collaborative exercises between rheumatologists and dermatologists to assess the accuracy and reliability of physical examination measures of the various clinical domains of PsA and psoriasis<sup>5,6,7</sup>.
4. A collaborative exercise among centers to validate approaches to patient global assessment in PsA (A. Cauli, personal communication).
5. Publication of articles on screening and assessment of PsA and psoriasis<sup>8,9,10,11,12,13,14,15</sup>.
6. An evidence-based review of treatment of the various clinical domains of PsA (joints, skin, nails, enthesitis, dactylitis, and spine) and stemming from that, development of consensus on international treatment recommendations for the clinical domains of PsA.
7. Education sessions at specialty society meetings to update the broader group of clinicians about advances in PsA and psoriasis.
8. Collaboration with patient service leagues to hold the First and Second World Psoriasis and Psoriatic Arthritis Congress, as well as smaller regional conferences.
9. Mentoring trainees in rheumatology and dermatology in basic and clinical science aspects of psoriasis and PsA.
10. Establishment of a business structure with bylaws and executive and steering committees (Table 2), as well as a committee structure.
11. Committees that perform the work of GRAPPA include (A) Genetic and genomic science. (B) Translational science (biomarkers, tissue). (C) Assessments: i. Screening questionnaires; ii. Physical examination and patient-reported outcome measures; iii. Imaging [radiographs, ultrasound, magnetic resonance imaging (MRI)]; iv. Function and quality of life; v. Composite disease activity and responder indices. (D) Quality measures. (E) Registries. (F) Drug safety. (G) Education.

The annual meeting provides an opportunity for members to meet and be updated on new developments in the fields of psoriasis and PsA as a whole, in particular regarding the projects that individual members are pursuing, either independently or in collaboration with other GRAPPA members. It also provides an opportunity for ideas to spark new projects.

As in Leeds in 2008, the 2009 meeting of GRAPPA in Stockholm began with a meeting of trainees, both rheumatology fellows and dermatology residents, who presented original research work to GRAPPA members, who served as faculty. The organization of this session was led by Christopher Ritchlin (rheumatologist, Rochester, NY, USA), Mona Ståhle (dermatologist, Stockholm, Sweden), Laura Coates (rheumatologist, Leeds, United Kingdom), and Lotus Malibris (dermatologist, Stockholm, Sweden) and is reviewed in the accompanying article<sup>16</sup>. Submitted abstracts were evaluated prior to the meeting, and top abstracts were selected for oral presentation; all others were presented in a poster session. The session was inspiring because of the

Table 2. GRAPPA Executive and Steering Committee Membership 2009–2010.

Executive Committee	Position
Philip Mease	President
Wolf-Henning Boehncke	Vice President
Dafna Gladman	Immediate Past President
Amit Garg	Member
Arthur Kavanaugh	Member
Gerald Krueger	Member
Costantino Pitzalis	Member
Steering Committee	Location
Wolf-Henning Boehncke	Frankfurt, Germany
Alberto Cauli	Cagliari, Italy
Kurt de Vlam	Leuven, Belgium
Luis Espinoza	New Orleans, LA, USA
Oliver FitzGerald	Dublin, Ireland
Peter Foley	Fitzroy, Australia
Amit Garg	Worcester, MA, USA
Joel Gelfand	Philadelphia, PA, USA
Dafna Gladman	Toronto, Canada
Alice Gottlieb	Boston, MA, USA
Arthur Kavanaugh	La Jolla, CA, USA
Gerald Krueger	Salt Lake City, UT, USA
Ennio Lubrano	Campania, Italy
Neil McHugh	Bath, England
Walter Maksymowych	Edmonton, Canada
Philip Mease	Seattle, WA, USA
Peter Nash	Queensland, Australia
Ignazio Olivieri	Potenza, Italy
Costantino Pitzalis	London, England
Abrar Qureshi	Boston, MA, USA
Proton Rahman	St. John's, Canada
Mona Ståhle	Stockholm, Sweden
Vibeke Strand	Portola Valley, CA, USA

enthusiasm and evident scientific curiosity and critical thinking of the trainees.

The next day, Lars Ettarp (Boras, Sweden), representing the International Federation of Psoriasis Associations (IFPA)<sup>17</sup> welcomed the group, and Philip Mease expressed a welcome on behalf of GRAPPA president Dafna Gladman, who was unable to attend the meeting.

The first module reviewed the subject of response measures for PsA and psoriasis. Dr. Mease provided an overview of the GRAPPA response measure project, the goal of which has been to develop a composite responder index, potentially taking into account all the various clinical domains of PsA (peripheral arthritis, skin and nail disease, spine disease, enthesitis, and dactylitis). A number of questions were raised for consideration, including whether a responder index should include a disease activity measure, how important it is to have a PsA-specific instrument, whether the instrument needed to characterize all clinical domains, and the role of other groups, including the American College of Rheumatology (ACR) and the European League Against Rheumatism (EULAR). The importance of having patient input in the process was emphasized as well as the value of having a quantitative goal of treatment such as achievement

of minimal disease activity or remission. Discussion of these issues was followed by a historical review of the OMER-ACT core domain construct project, the ACR response criteria, the Disease Activity Score (DAS) and EULAR response criteria, the PsA Response Criteria (PsARC), the recently developed PsA Joint Activity Index (PsAJAI), and minimal disease activity criteria for PsA.

Vibeke Strand (Stanford, CA, USA) next reviewed examples of the development of composite responder indices in various disease states [rheumatoid arthritis (RA), osteoarthritis (OA), lupus, ankylosing spondylitis (AS), fibromyalgia], within the OMERACT structure. Among her conclusions: responder indices can increase statistical power, especially if they include domains that are not closely related, that it would be ideal to measure disease activity as well as response, to remember the potential disparity between clinician and patient assessments, to use data from randomized controlled trials (RCT) in constructing the instrument, and also to validate the instrument within RCT.

Dr. Strand's discussion was followed by a detailed review by Philip Helliwell (Leeds, UK) of the process that the Assessment of SpondyloArthritis (ASAS) working group pursued to develop the Ankylosing Spondylitis Disease Activity Score (ASDAS). The process involved selection of single-item variables, statistical construction of candidate scores, Delphi exercises among ASAS members and patients, and a validation program in order to pick the most appropriate scoring system<sup>18,19</sup>.

Finally, work by FitzGerald and Mumtaz was presented regarding a composite disease activity scoring system for PsA. A significant discussion ensued, partly related to issues around how best to include skin disease severity in this scoring system, whether it should be included with the musculoskeletal assessments or stand independently. An ongoing study, the GRAPPA Composite Exercise (GRACE) project, will include more than 400 patients from GRAPPA centers who are having extensive measures of all clinical domains. It is from this dataset that the core data for a potential PsA-specific responder index will arise, be validated in RCT, and ultimately be presented at OMERACT for ratification<sup>19</sup>.

The second module of the GRAPPA meeting focused on the need for dermatologists to have the knowledge and discriminative ability to diagnose PsA within their psoriasis patients. Vinod Chandran (Toronto, Canada) reviewed 3 screening questionnaires that have been developed by GRAPPA members — the Toronto PsA Screen (ToPAS), PsA Screening and Evaluation (PASE), and Psoriasis Epidemiology Screening Tool (PEST)<sup>20,21,22</sup>, which have all shown good specificity and sensitivity as well as feasibility in identifying patients with PsA<sup>8,9,10</sup>. These questionnaires are all being tested and validated further in various clinical settings.

Abrar Qureshi completed this module with a discussion of the role of dermatologists<sup>21</sup>. He reviewed the process and results of the IMPART study<sup>7</sup>, in which both rheumatolo-

gists and dermatologists evaluated patients with PsA, addressing where both disciplines did or did not do well in their evaluations, thus pinpointing the need for further training in evaluation of musculoskeletal components for dermatologists and of skin and nails for rheumatologists. He then showed results from a study at his center in which a wide variety of musculoskeletal diseases presented with psoriasis, pointing again to the need for better training of dermatologists to recognize and distinguish conditions such as PsA, OA, fibromyalgia, and gout.

A summary of the GRAPPA meeting at the American Academy of Dermatology was presented by Wolf-Henning Boehncke (Frankfurt, Germany), who addressed the following questions: Can dermatologists assess PsA? Can dermatologists diagnose PsA? Can biologics replace conventional therapies? — lessons from CHAMPION. How will physician tiering influence access to biologics for patients? Is platelet P-selectin a good biomarker for psoriasis? An example cited was IMPART (International Multicenter Psoriasis and Psoriatic Arthritis Reliability Trial), in which both rheumatologists and dermatologists evaluated patients with severe musculoskeletal as well as skin disease to try to improve reliability and accuracy<sup>23</sup>.

Philip Mease presented a second session in this module regarding identification and assessment of inflammatory musculoskeletal disease, the goal of which was to review the various clinical musculoskeletal domains (peripheral joint disease, spine disease, enthesitis, and dactylitis), show what they look like and are identified, and how to assess and monitor these clinical domains<sup>24</sup>. A primary goal of GRAPPA is to teach clinicians, including dermatologists, how to readily recognize inflammatory musculoskeletal features so they may recognize the presence of PsA and either refer their patient to a rheumatologist for evaluation and management, or know how to treat these clinical problems themselves.

Next, a progress report was given by Kristina Callis Duffin (Salt Lake City, UT, USA) on the development of online training videos that teach clinicians how to examine skin, nails, joints, entheses, dactylitis, and the spine<sup>25</sup>. GRAPPA members have been called upon for some time to teach a standardized method to assess various clinical domains including investigator meetings for drug studies. The US Food and Drug Administration and clinical trial sponsors have recommended that clinicians be trained to do physical examinations in an accurate and reliable way and be certified in this training. Additionally, there is a need for standardized examination for entities such as national clinical registries and for trainees in rheumatology and dermatology. A plan was developed to create professional quality videos of GRAPPA faculty teaching physical examinations, using patients as well as slides and photos. The intent is to post these teaching videos on the Internet, accessible via the GRAPPA website. The media company assisting with the project has a methodology that includes testing and evalua-

tion to certify proficiency. Issues such as intellectual property rights, secure access, fees, and rules of use for corporations using them for clinical studies, etc. are being resolved. This project was greeted with significant favor during the session.

Other subjects addressed during this session included an update by Proton Rahman (St. John's, Canada) on current understanding of genetic associations with PsA and projects under way to expand our knowledge in this area<sup>26</sup>. Additionally, Drs. Boehncke and Chandran led discussions on comorbidities associated with psoriasis and PsA, emphasizing the prominence of cardiovascular disease, which can lead to early mortality in PsA<sup>27</sup>. The presence of both metabolic syndrome (obesity, hyperlipidemia, hypertension) and inflammation leads to premature atherosclerosis and must be monitored and treated aggressively. Other comorbid conditions can include depression and osteoporosis.

A business meeting followed, including election of new officers and some members to the executive committee. Upcoming meetings in conjunction with rheumatology and dermatology society meetings were discussed. South American colleagues made a special request to have a contingent of GRAPPA members attend the annual Brazilian Rheumatology Society meeting in September 2010. This was approved, partly with the goal to increase awareness about PsA and psoriasis around the globe and recruit members to GRAPPA from countries outside Europe and North America.

GRAPPA 2009 was deemed successful. It engaged a large number of rheumatology and dermatology members of GRAPPA; key projects and topics were presented and discussed as detailed elsewhere in this supplement; and current and new research agenda projects were planned.

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