Dr. Cauli, *et al* reply

To the Editor:

We thank Dr. Kavanaugh, Dr. Catalan, and Dr. Cassell for their insightful comments and new data on nail involvement and patient's perception of disease in psoriatic arthritis (PsA)[1]. We read with great interest their report, which supports the usefulness of patient self-assessment by means of visual analog scale (VAS) in the evaluation of PsA nail disease.

Assessment of PsA is challenging because of its varied clinical manifestations including skin, peripheral joints, axial disease, enthesitis, dactylitis, and last but not least, nail disease. Recently, GRAPPA and OMERACT have reached a consensus on a core set of domains to be evaluated in randomized controlled trials and longitudinal observational trials[2], but which were recommended also for rheumatology clinics focusing on PsA. Six domains were selected: peripheral joint activity, skin activity, pain, patient global assessment, physical function, and health-related quality of life. Other domains, including nail diseases (and spinal disease, dactylitis, enthesitis, fatigue, radiography, physician global assessment, acute-phase reactants), were considered important but not mandatory.

Patient perception of disease was therefore confined to global assessment of disease (the PGA). Nevertheless, because patient's perspective is affected by all the different manifestations of the disease, it was also recommended that a specific study should be performed to determine if patient global assessment of disease activity is sufficient or if we should also assess the effect of skin and joint involvement, as the main manifestations of disease, segregated into 2 separate questions. Many members noted that 3 VAS questionnaires were too many to be administered to patients, even in a research setting, and therefore separate VAS questionnaires for all the different manifestations of PsA were not considered. GRAPPA set up a working group of 18 centers in 10 countries in order to assess this issue[3].

Table 1. Nail involvement and outcome measures for psoriatic arthritis.

	Spearman's rho	p
mNAPSI vs		
Duration of arthritis (years)	0.12	0.46
Duration of psoriasis (years)	0.09	0.54
SJC (swollen joint count)	–0.18	0.27
TJC (tender joint count)	–0.07	0.67
PASI	0.32	0.04
Physician nail assessment	0.99	< 0.0001
Physician VAS global	0.04	0.78
Physician VAS skin	0.29	0.07
Physician VAS joint	–0.25	0.12
Patient VAS global	0.08	0.61
Patient VAS skin	0.19	0.23
Patient VAS joint	–0.05	0.75
HAQ	–0.04	0.81
Physician nail assessment vs		
Duration of arthritis	0.11	0.49
Duration of psoriasis	0.09	0.59
SJC	–0.18	0.26
TJC	–0.07	0.66
PASI	0.31	0.05
mNAPSI	0.99	< 0.0001
Physician VAS global	0.03	0.83
Physician VAS skin	0.28	0.08
Physician VAS joint	–0.25	0.11
Patient VAS global	0.08	0.63
Patient VAS skin	0.19	0.24
Patient VAS joint	–0.05	0.74
HAQ	–0.04	0.80

mNAPSI: modified Nail Psoriasis Severity Index; VAS: visual analog scale; PASI: Psoriasis Area and Severity Index; HAQ: Health Assessment Questionnaire.

In this multicenter GRAPPA study, nail involvement was not included in the protocol but was evaluated in a subset of 40 patients from the outpatient clinic of the University of Cagliari. Nail involvement was assessed as "modified Nail Psoriasis Severity Index" (mNAPSI)[4] and as "physician nail assessment" by means of a 0–100 mm VAS. Patient male/female ratio was 28/12, mean age was 49.3 ± 13.9 years, and mean disease duration was 13.5 ± 11.3 years for skin and 10.1 ± 7.6 years for joints. Pairwise correlations between nail involvement and several outcome measures, in particular the skin and joint objective evaluations as well as patients' and physicians' perception of disease, have been calculated using Spearman's rho statistic (Table 1).

In our cohort of patients we observed a strong correlation between the 2 instruments used to evaluate nail involvement: the mNAPSI and "physician nail assessment"; further, we observed a significant correlation between nail involvement and skin disease, evaluated by the PASI. On the other hand we did not observe a significant correlation with joint disease or with global PsA activity. It is nevertheless noteworthy, as emphasized by Kavanaugh, *et al*[1], that some differences may be observed according to the cohort studied.

Detailed assessment of all the domains of PsA (including nails) is important in order to provide better care to patients. This requires implementation of a set of instruments, specific for each of the domains, which must be "feasible" for the patient and the treating physician, otherwise they would not be applied in the clinic or even in research studies. The patient's perception of disease is well summarized by the PGA, which is an acceptable single measure for clinical trials and clinical practice; in certain circumstances, such as the study of a drug that may improve the joints but not the skin, or vice versa, it would be important to also assess the patient-specific perception of joint and skin disease. Similarly, specific circumstances may also induce the physician to evaluate the patient's specific perception of nail involvement, dactylitis, or enthesitis.

ALBERTO CAULI, MD, PhD, Department of Medical Sciences, University of Cagliari, Monserrato, Italy; DAFNA D. GLADMAN, MD, FRCPC, The University of Toronto, Toronto Western Hospital, Toronto, Ontario, Canada; ALESSANDRO MATHIEU, MD, Rheumatology Unit, Policlinico di Monserrato, University of Cagliari; GIOVANNI PORRU, MD, Department of Medical Sciences, University of Cagliari; ALESSANDRA VACCA, MD, Rheumatology Unit, Policlinico di Monserrato, University of Cagliari; PHILIP J. MEASE, MD, Swedish Medical Center and University of Washington School of Medicine, Seattle, Washington, USA, and the GRAPPA 3PPsA Study Group. Address correspondence to Dr. A. Cauli, Dipartimento di Scienze Mediche, Università di Cagliari, ss 554, Monserrato 09042, Italy. E:mail: cauli@medicina.unica.it

REFERENCES

1. Kavanaugh A, Catalan T, Cassell S. Patient assessments of skin, joint, and nail disease activity in psoriatic arthritis [letter]. J Rheumatol 2012;39:653-4.
2. Gladman DD, Mease PJ, Healy P, Helliwell PS, FitzGerald O, Cauli A, et al. Outcome measures in psoriatic arthritis. J Rheumatol 2007;34:1159-66.
3. Cauli A, Gladman DD, Mathieu A, Olivieri I, Porru G, Tak PP, et al. Patient global assessment in psoriatic arthritis: A multicenter GRAPPA and OMERACT study. J Rheumatol 2011;38:898-903.
4. Cassell S, Bieber J, Rich P, Tutuncu Z, Lee SJ, Kalunian K, et al. The modified Nail Psoriasis Severity Index: Validation of an instrument to assess psoriatic nail involvement in patients with psoriatic arthritis. J Rheumatol 2007;34:123-9.

J Rheumatol 2012;39:3; doi:10.3899/jrheum.111194