Letters to the Editors

Reply

Sirs,

I read with great interest the study by Pisoni *et al*., which sheds another light on the management of leflunomide. It confirms that findings of clinical and epidemiological studies may vary according to various parameters such as patient characteristics and conditions of treatment, which are mostly country-dependent. These discrepancies highlight the importance of repeating pharmacoepidemiologic studies in each country to take into account treatment patterns which may play a role in the actual efficacy and safety of drugs.

Several remarks can be made. The population in Pisoni's study was quite similar to ours and confirms differences with the population included in clinical trials. Nevertheless, the severity of the disease and prior treatment seem to be different. Moreover, there appear to be differences in the management of adverse events (stopping the treatment in our study and reduction of the daily dose or continuation of the treatment in Pisoni's study). In the Italian cohort, only 17.9% of the patients had previously received a loading dose and the dose of leflunomide was adjustable as the occasion may have required. The authors seem to explain the lower discontinuation rate by the lower leflunomide dose (lower daily dose without previous loading dose). Era *et al:* (1) did not find any significant association between loading dose and the presence of adverse events but the number of patients included in their study was too small to draw definite conclusions on this point.

Poor *et al*. (2) found a better efficacy profile with the 20 mg daily dose than with 10 mg. As the two parameters (efficacy and safety) should be taken into account in the treatment, it is difficult draw a conclusion regarding the best approach. In any case, large prospective studies or studies focusing on the role of the dose regimen should be conducted in order to improve our knowledge on leflunomide and the best way to manage long-term treatment in real-life settings.

Dr. K. MARTIN, *PharmD, PhD*

Department of Pharmacology, Bordeaux 2 University, Inserm U657, France.

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2. 3: Leflunomide Multinational Study Group. Efficacy and safety of leflunomide 10 mg versus 20 mg once daily in patients with active rheumatoid arthritis: multinational double-blind, randomized trial. *Rheumatology* 2004; 43: 744-9.

Table

Anatomical target	Mean	Standard deviation	Median
Longitudinal dorsal scan	5.75	0.34	6
Bone profile	5.55	0.42	5.5
Extensor tendon	5.55	0.52	5.75
Articular cartilage	5.5	0.45	5.5
Total	5.59	0.08	5.6

Level of agreement between rheumatologists on US image acquisition using a 3D volumetric probe

Sirs,

In recent times, technological advances have enabled the ultrasound (US) exploration of small joints and superficial soft tissues with high-frequency volumetric probes. They provide the possibility to acquire an infinite number of 2D US images within a 3D data set generated automatically, which proposes to rectify the operator dependency of US in the acquisition process (1, 2). A consensus meeting was convened in Barcelona on the 28th of January 2006 for the purpose of verifying that the image acquisition process using a 3D volumetric probe is operator independent.

This was the initial step for clarifying the methodology for a multi-centre international study on hand arthritis.

All the participants (9 experienced rheumatologist sonographers and a rheumatologist with no previous US experience) were asked to acquire 3D data sets of the second metacarpophalangeal (MCP) joint in a single healthy subject as follows: dorsal and volar approaches with hand in the neutral position and dorsal approach with the hand held in full flexion at the MCP joints.

The acquisition of the 3D data sets was carried out using a Logiq 9 system (General Electrics Medical Systems, Milwaukee, WI) equipped with the 4D16L 3D probe.

Attention was paid to the correct anatomical positioning of the subject together with the use of an adequate amount of acoustic gel.

The 3D data sets were processed collectively using dedicated 3D Viewer software (Centricity Radiology RA 600 Version 6.1) compatible with standard personal computers, in order to select the most representative US images of the following standard scans: longitudinal dorsal scan with MCP joint in neutral position and fully flexed.

Two sets of mosaic were constructed containing the selected US images corresponding to the above standard scans.

According to the Delphi method (3), the participants were asked to state their level of agreement on the fact that the US images in the mosaics were similar in their depiction of longitudinal dorsal scan, bone profile, extensor tendon and articular cartilage.

Moreover, the level of agreement was tested in comparing the US images acquired by the inexperienced rheumatologist to those of the experienced rheumatologist sonographers.

The Delphi method uses a semi-quantitative scale ranging from 1 (strong disagreement) to 6 (strong agreement).

The table reports the mean values and standard deviations of the scores.

The results of this consensus meeting clearly show the concordance between independent operators in the acquisition of 3D US imagery. In addition, we have also demonstrated that previous US experience or skills are not necessary for obtaining US images indistinguishable from those of the experts. This is the first exercise to verify the operator independent nature of the 3D volumetric probe in acquiring US images of the MCP joint. Similar evidence in other anatomical sites should be gathered to evaluate the full potential of 3D US in rheumatology.

E. FILIPPUCCI[1*] L. MAYORDOMO[6]
G. MEENAGH[2*] I. MOLLER[7]
J.J. DE AGUSTIN[3] C. MORAGUES[7]
E. DE MIGUEL[4] E. NAREDO[8]
A. IAGNOCCO[5] F. SALAFFI[1]

[*]*The first two authors contributed equally to the study.*
[1]*Cattedra di Reumatologia, Università Politecnica delle Marche, Ancona, Italy;*
[2]*Department of Rheumatology, Musgrave Park Hospital, Belfast, UK;*
[3]*Hospital Vall d´Hebron, Barcelona, Spain;*
[4]*Hospital La Paz, Madrid, Spain;*
[5]*Università La Sapienza, Rome, Italy;*
[6]*Hospital de Valme, Seville, Spain;*
[7]*Instituto Poal, Barcelona, Spain;*
[8]*Hospital de Bellvitge, Barcelona, Spain;*
[9]*Hospital Severo Ochoa, Madrid, Spain.*

Please address correspondence to: Dr. Emilio Filippucci, Clinica Reumatologica, Università Politecnica delle Marche, Ospedale "Murri", Via dei Colli 52, 60035 Jesi (AN), Italy.

E-mail: emilio_filippucci@yahoo.it

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