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## ORIGINAL ARTICLE

# Physician and Patient Perception of Disease Severity, Quality of Life, and Treatment Satisfaction in Psoriasis: An Observational Study in Spain

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### KEYWORDS

Psoriasis;  
Quality of life;  
Physician-patient  
relationship;  
Treatment satisfaction

### Abstract

**Objectives:** The aims of this study were to determine the impact of psoriasis on patient quality of life, to analyze differences in perception between patients and physicians regarding quality of life, treatment satisfaction, and patient needs, and to assess the physician-patient relationship.

**Material and methods:** A multicenter, observational, cross-sectional study was undertaken in which a representative group of dermatologists—working in hospitals and outpatient clinics throughout Spain—and their patients with a diagnosis of psoriasis completed specifically designed questionnaires. The questionnaires covered patient demographics, disease characteristics, impact of the disease on quality of life, treatment of psoriasis, and the relationship between patient and dermatologist.

**Results:** A total of 151 dermatologists from throughout Spain included a mean of 5 patients each. The analysis included 771 questionnaires completed by dermatologists and 732 completed by patients. Two-thirds of patients had moderate-to-severe psoriasis with a major impact on quality of life, particularly in relation to emotional wellbeing. Nevertheless, quality of life was only assessed routinely and systematically by 19.9% of dermatologists. Overall, 47% of patients reported being quite satisfied or very satisfied with the treatment they received. No significant differences were observed between patients and dermatologists on the aspects analyzed.

**Conclusions:** Our results highlight the substantial impact of psoriasis on patient quality of life and the consequent need for systematic quality-of-life assessment in affected

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**PALABRAS CLAVE**

Psoriasis;  
Calidad de vida;  
Relación médico  
paciente;  
Satisfacción

patients. Patients reported a high level of satisfaction with the care provided by dermatologists and the treatment received. There was good agreement between patients and dermatologists in their assessment of the variables analyzed.

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**Percepción del médico y paciente de la gravedad de la psoriasis, su impacto en la calidad de vida y satisfacción con la atención y el tratamiento recibido. Estudio observacional en España****Resumen**

**Introducción:** El objetivo de este estudio fue evaluar el impacto de la psoriasis en la calidad de vida del paciente, las diferencias entre médicos y pacientes en las percepciones sobre la calidad de vida, los tratamientos y las necesidades de los pacientes y la relación médico-paciente.

**Material y métodos:** Estudio observacional, multicéntrico, de corte transversal, en el cual un grupo de dermatólogos representativos de toda la geografía española, con ejercicio tanto en el ámbito hospitalario como ambulatorio, y de pacientes con diagnóstico de psoriasis, cumplimentaron una encuesta especialmente diseñada para el estudio. La encuesta incluía preguntas sobre datos demográficos del paciente, características de la enfermedad, impacto de esta sobre la calidad de vida, manejo terapéutico de la psoriasis y relación paciente-dermatólogo.

**Resultados:** Un total de 151 dermatólogos de toda España incluyeron una media de 5 pacientes cada uno. Se incluyeron en el análisis un total de 771 encuestas cumplimentadas por los dermatólogos y 732 encuestas cumplimentadas por los pacientes. Dos terceras partes de los pacientes presentaban una enfermedad moderada a grave con una importante repercusión en la calidad de vida, en especial sobre el estado emocional. No obstante, la calidad de vida sólo era evaluada de forma sistemática y rutinaria por el 19,9% de los dermatólogos. El 47% de los pacientes estaba muy satisfecho o bastante satisfecho con el tratamiento que recibía. No se encontraron diferencias relevantes entre las percepciones del paciente y del médico sobre los aspectos evaluados.

**Conclusiones:** Nuestros resultados señalan el importante impacto que tiene la psoriasis sobre la calidad de vida del paciente y la necesidad de evaluar este parámetro de forma sistemática. Los pacientes refieren un buen grado de satisfacción con la atención recibida por los dermatólogos y los tratamientos administrados. Existe bastante concordancia entre los pacientes y los dermatólogos en la valoración de los parámetros evaluados.

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## Introduction

Psoriasis is a chronic inflammatory disease of the skin that affects approximately 2% of the world's population, with a similar prevalence in men and women.<sup>1</sup> In Spain, the estimated prevalence in the general population ranges from 1.17% to 1.43%, with higher rates in adults aged 20 to 50 years and in the dry, central regions of the country.<sup>2</sup>

Although psoriasis is generally considered to be a benign disease, it has a substantial impact on both individuals and society. It is associated with social stigmatization, discomfort, physical disability, and above all, emotional distress.<sup>3,4</sup> Social stigmatization has important repercussions, and considerably affects emotional well-being and disability, more so, in fact, than disease severity or site of lesions.<sup>5</sup> The frequency of depression and suicide ideation has been found to be higher in patients with psoriasis, and particularly those with severe forms of the disease, than in general medical patients,<sup>6</sup> and emotional distress and impaired social functioning appear to be the factors most closely associated with suicide ideation.<sup>7</sup> Furthermore, the stress induced by psoriasis, combined with inter-

related risk factors such as obesity, tobacco addiction, and alcohol abuse<sup>8,9</sup> also appear to be responsible for the elevated cardiovascular mortality detected in patients with more severe forms of psoriasis.<sup>10</sup> Emotional distress also appears to be associated with poorer treatment response in psoriasis.<sup>11</sup> The disease also has a major social impact, as it places a very high financial burden on society both directly—through health care costs<sup>12</sup>—and indirectly—through loss of productivity at work.<sup>13</sup>

Finally, psoriasis is responsible for considerably impaired quality of life.<sup>14</sup> Patients with psoriasis experience a similar or even greater reduction in health-related quality of life compared to patients with other chronic diseases such as ischemic heart disease or diabetes.<sup>15-17</sup> According to a survey conducted by the US National Psoriasis Foundation, 80% of patients with psoriasis consider their disease to be a moderate or large problem in their everyday lives.<sup>18</sup> Even patients with limited disease consider psoriasis to have an important impact on their lives,<sup>19</sup> and quality of life is also impaired in family members and partners.<sup>20</sup> In Spain, a survey conducted among patients seen in dermatology outpatient clinics<sup>21</sup> and another conducted

among the members of an association for patients with psoriasis<sup>22</sup> showed that psoriasis affected work and social activities and had a major impact on emotional well-being. The second study also found that perceptions of disease severity differed between physicians and patients.<sup>22</sup>

The aims of this study were to evaluate the impact of psoriasis on patient quality of life and to analyze differences in perception between physicians and patients regarding quality of life, treatment, patient needs, and the physician-patient relationship.

## Material and Methods

### Study Design and Population

We performed a multicenter, observational, cross-sectional study in which a representative group of dermatologists—working in hospitals and outpatient clinics throughout Spain—and their patients—all with a confirmed diagnosis of psoriasis—completed questionnaires specifically designed for the study. The questionnaires included sections on patient demographics, disease characteristics, impact of psoriasis on quality of life, treatment, and physician-patient relationship. Dermatologists with a specialist interest in the management of psoriasis were selected to participate in the study.

### Questionnaires

Two questionnaires were completed: one by the dermatologists selected for the study and another by their patients. Each dermatologist completed a separate questionnaire for each patient they included in the study. All of the questionnaires were anonymous and contained no personally identifiable information.

The questionnaire designed for the dermatologists included questions on the age and sex of the dermatologist and on where the questionnaire was completed. There were also 30 questions covering *a)* patient demographics (age, sex, and occupation); *b)* disease characteristics (duration, severity, type, site(s) affected, and presence of psoriatic arthritis); *c)* impact on quality of life with the evaluation of physical and emotional aspects using a 4-point Likert-type scale (“no impact” “some impact”, “quite an impact”, or “a big impact”), and level of support received from family or friends; *d)* treatment (current and past treatment and level of satisfaction with current treatment); *e)* physician-patient relationship (overall rating of relationship, patient’s opinion of dermatologist, dedication to patient, patient satisfaction with care received); *f)* systematic use of tools to evaluate disease severity or quality of life in the office setting; and *g)* patient’s knowledge of the disease and treatment options and involvement in patient associations.

The questionnaire designed for the patients was similar in structure and wording but had some differences: *a)* the demographics section included additional questions on level of education and current employment situation; *b)* the disease characteristics section included questions on family history of disease and the diagnosing physician; and *c)* questions about treatment were simplified and the

patients were also asked if they were familiar with the benefits and risks of their current treatment and invited to mention who had explained these to them.

### Statistical Analysis

The statistical analysis of the questionnaires was essentially descriptive. Means and SD were calculated for quantitative variables while absolute and relative frequencies were calculated for qualitative variables.

Answers given by the dermatologists and the patients were compared using the  $\chi^2$  test. All the tests were 2-tailed and significance was set at a level of  $P < .05$ .

## Results

### Sociodemographic Characteristics

In total, 151 dermatologists from throughout Spain were included in the study. The most heavily represented communities were Andalusia (16.5%), Madrid (13.1%), the Autonomous Community of Valencia (13%), and Catalonia (10%). Just over half (55%) of the dermatologists were men and the mean (SD) age was 40.5 (8.8) years. In all, 68.9% of the questionnaires were completed in a hospital setting.

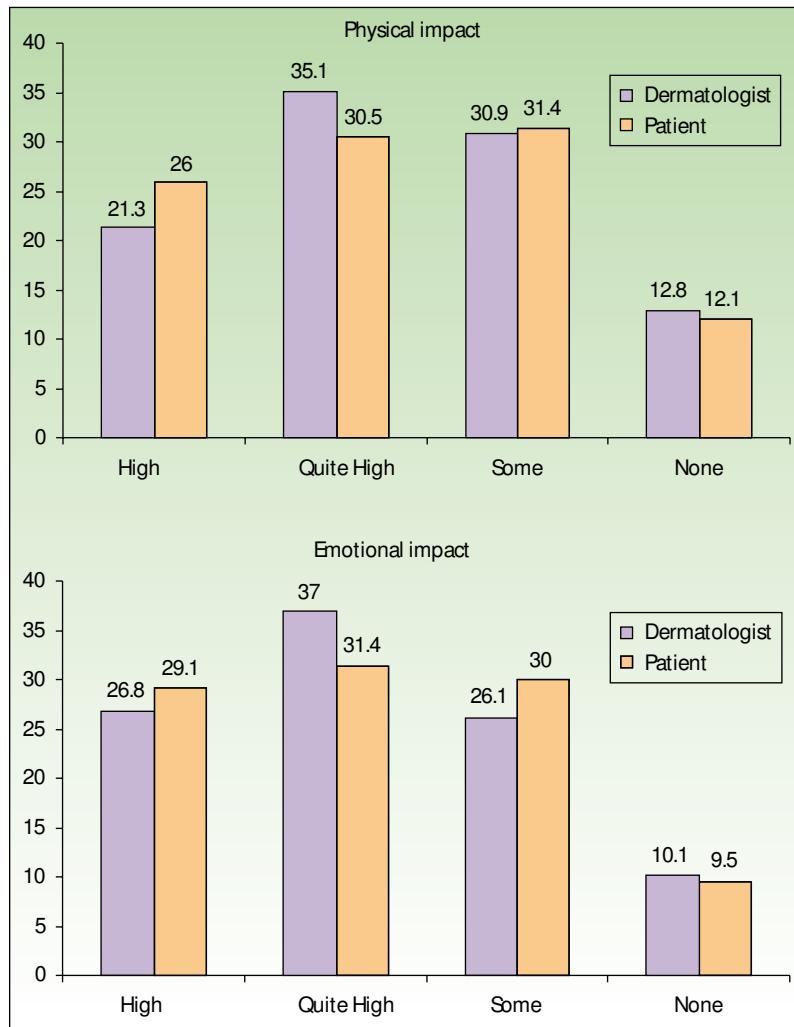
The number of patients included was 771, with each dermatologist recruiting an average of 5 patients. We analyzed 771 dermatologist questionnaires and 732 patient questionnaires.

In the patient group, 58% of the participants were men and the mean age was 44.1 (14.9) years; 63.8% were in active employment at the time of the study.

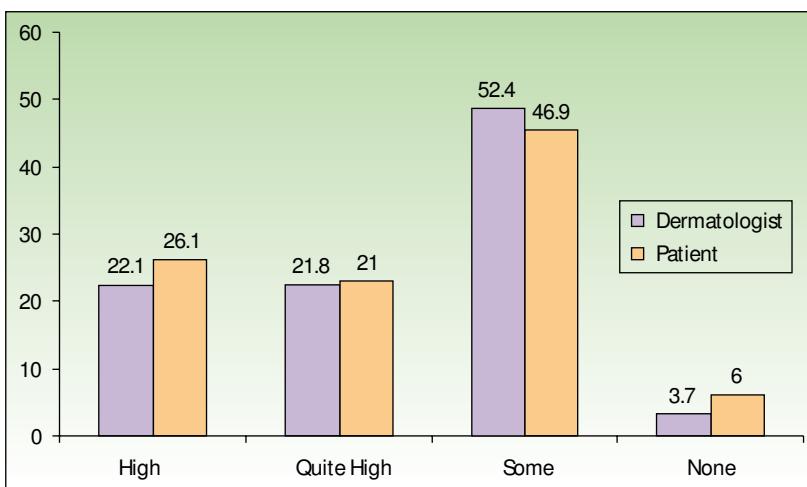
### Disease Characteristics and Impact on Quality of Life

The clinical variants of psoriasis were plaque psoriasis (in 86.6% of patients), guttate psoriasis (5%), and erythrodermic or pustular psoriasis (8.4% combined). The most frequent sites affected were the arms and the forearms (80.3%), the thighs and the legs (76%), the trunk (72.6%), and the scalp (59%). The mean (SD) time since onset of the disease was 15.6 (12.7) years. The majority of patients (65.7%) had moderate to severe disease, and 15.3% had psoriatic arthritis. The diagnosis of psoriasis had been confirmed by the patients’ dermatologists in all cases. Based on information collected from the patients’ questionnaires, however, the initial diagnosis had been made by their dermatologist in 57.3% of the cases, by a primary care physician in 39.6% of the cases, and by other specialists in the remaining 3% of cases. Almost a tenth (9.3%) of patients had required some form of hospitalization for their psoriasis.

According to the dermatologists’ evaluation, psoriasis had a big or quite a big impact on physical and emotional well-being in 56.4% and 63.8% of patients, respectively (Figure 1). The results as assessed by the patients were almost identical (Figure 1). Coinciding with the opinion of the dermatologists, most of the patients (82.5%) stated that they received a lot or quite a lot of support from their family and friends.



**Figure 1** Impact of psoriasis on quality of life according to dermatologists and patients. The figures refer to percentage of patients.



**Figure 2** Satisfaction with current treatment according to dermatologists and patients. The figures refer to percentage of patients.

**Table 1** Treatments Administered

Treatment	% of Patients
<i>Topical Treatment</i>	
Any treatment*	86.9
Corticosteroids	77
Vitamin D analogs	57.6
Keratolytics	33.1
Tar	11.6
Retinoids	5.8
Anthrakin	1.3
Other	2.7
<i>Conventional systemic therapy and/or phototherapy</i>	
Any treatment*	34.8
Phototherapy	32.1
Methotrexate	31
Retinoids	29.5
Ciclosporin	19.8
Other	3.8
<i>Biological therapy</i>	24.1

\*Calculated as a percentage of the total number of patients. For specific treatments, the percentages were calculated based on the number of patients who had received this treatment.

## Treatment

At the time of the survey, most patients were receiving topical treatment (86.9%), mainly corticosteroids and vitamin D analogs (Table). Conventional systemic therapy, including phototherapy, was being used in 34.8% of patients, and 24.1% of patients were receiving biological therapy.

A large proportion of patients (47%) were very or quite satisfied with the treatment they were receiving. The dermatologists had a similar impression regarding treatment satisfaction (Figure 2).

The dermatologists considered that the treatment-related improvements were physical in 72.8% of patients and emotional in 57.4%. Treatment adherence was high according to both dermatologists and patients (Figure 3).

## Physician-Patient Relationship

Practically all of the patients considered they had a very good or good relationship with their dermatologists; they had a high opinion of them and were satisfied with the quality of care and the time their dermatologists devoted to them (Figure 4).

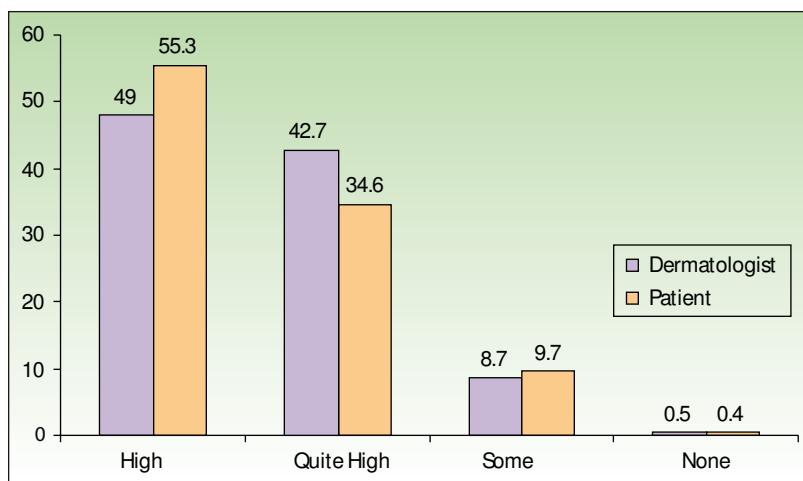
## Other Aspects

Disease severity and quality of life were routinely assessed by 58% and 19.9% of dermatologists, respectively. In total, 65% of the dermatologists considered that the patients were very well or quite well informed about psoriasis and its treatment options; the proportion of patients who considered that they were well informed was higher, at 74% ( $P<.001$ ). When asked about involvement with patient associations, 92% of the dermatologists and 93.9% of patients said that they had little or no involvement.

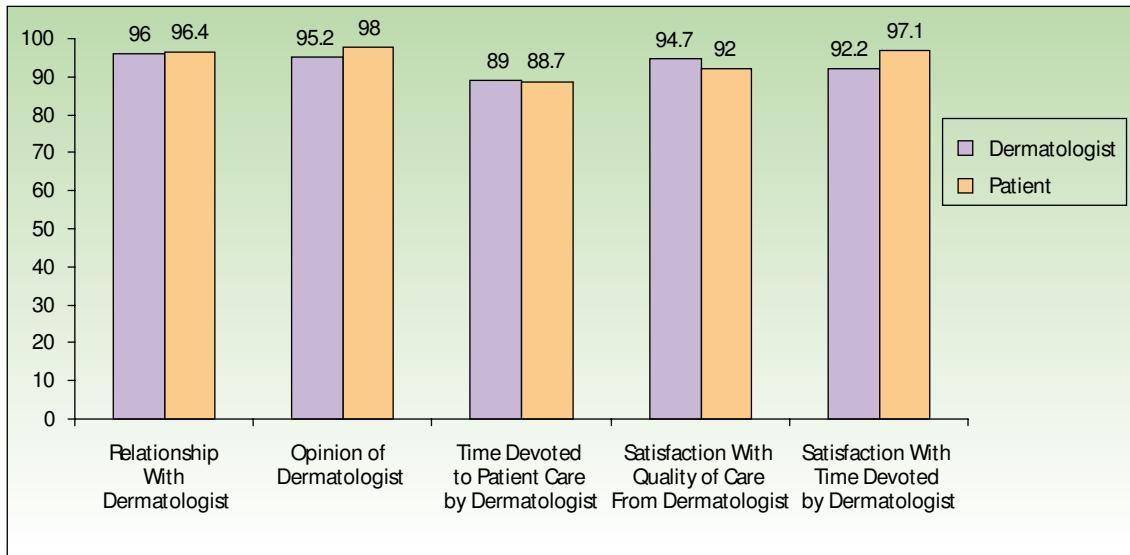
## Discussion

Two-thirds of the patients analyzed in our study had moderate to severe psoriasis and considerably impaired quality of life, particularly in terms of emotional aspects. Most of the patients were receiving topical treatment but, interestingly, the proportion of patients receiving conventional systemic therapy or biological therapy was also high, at 34.8% and 24.1%, respectively. A substantial proportion of patients (around 50%) were also very or quite satisfied with the treatment they were receiving, although the benefits noted were more physical than emotional.

In contrast to findings by Ribera et al,<sup>22</sup> and despite a tendency for patients to rate their disease as more severe than dermatologists, we found no significant differences between dermatologists and patients in their evaluation of disease severity. These conflicting findings are probably due to differences in the patient populations. The patients analyzed by Ribera et al also answered a questionnaire but they were all members of an association for patients



**Figure 3** Treatment adherence according to dermatologists and patients. The figures refer to percentage of patients.



**Figure 4** Physician-patient relationship according to dermatologists and patients. The figures refer to the percentage of patients who were very satisfied or quite satisfied with the relationship.

with psoriasis. As the authors indicated, the fact that their patients belonged to such an association probably meant that they had more severe psoriasis and this may have introduced a certain bias. This theory is supported by the fact that Ribera et al reported a longer duration of disease than we did (24 vs 13 years). Also, a larger proportion of their patients considered they had moderate or severe disease (85% vs 70.2% in our study).

Almost two-thirds of the patients in our study considered that psoriasis had a considerable effect on their quality of life, with a greater impact on emotional than physical aspects. This finding is in agreement with previous reports<sup>3,22-24</sup> and is very important because psoriasis-related emotional distress and stress are important triggers of flare-ups, have been associated with poor treatment response,<sup>11</sup> contribute significantly to suicide ideation,<sup>7</sup> and, together with other factors, may be responsible for increased cardiovascular mortality.<sup>10</sup> Nonetheless, despite the seriousness of this situation, many physicians, including dermatologists, often do not realize the intensity of the stress or distress a patient is going through, and even when they do, only a third of these patients receive adequate psychological support.<sup>3,25</sup> Quality of life has also been found to have an impact on work in patients with psoriasis, and, unlike disease severity, is associated with productivity loss.<sup>26</sup> Many factors should be taken into account when considering treatment needs in patients with psoriasis, including the extent and severity of lesions, comorbidity, treatment costs, but also, and very importantly, patient preferences and the level of quality of life impairment.<sup>27,28</sup> We therefore believe that it is important to pay greater attention to quality of life in psoriasis and increase the systematic use of evaluation systems; only 19.9% of the dermatologists included in our study systematically assessed how psoriasis affected their patients' quality of life. Nevertheless, the growing use of biological therapies may improve the quality of life of these patients.<sup>29</sup>

Most patients (87%) were receiving topical treatment, either alone or in combination, with corticosteroids being the most common option. Conventional systemic therapies, phototherapy, or a combination of the two, and biological therapies were used in a greater proportion of patients than in series from the United Kingdom<sup>30</sup> or the United States.<sup>31</sup> Treatment satisfaction was high, with approximately 94% of the patients analyzed reporting some level of satisfaction. This finding again contrasts with the results of Ribera et al,<sup>22</sup> who found that fewer than 50% of the patients they studied (all members of a psoriasis association) were satisfied with their treatment. Again, these differences might be related to the populations studied. It should also be noted that in our study all the patients were asked to evaluate their satisfaction with level of care and attention received from their dermatologists in a questionnaire given to them by their dermatologists. This is undoubtedly the greatest limitation of our study as it will have introduced a clear bias that should be borne in mind when interpreting results.

It is also interesting to note that in other countries such as the United States patients who are members of a psoriasis association consider their disease to be less of a burden and are more satisfied with treatment than those who do not belong to such an association, even though they have more severe forms of psoriasis.<sup>32</sup> The difference between the situation in such countries and Spain is probably due to the fact that psoriasis associations are less developed in Spain. Indeed, it is remarkable that just 6.1% of the patients in our study were involved in a psoriasis association, particularly considering the long duration of disease among our patients. Nevertheless, the high level of treatment satisfaction observed is consistent with the fact that both patients and dermatologists considered that they had an excellent relationship.

In conclusion, our study highlights once again the considerable impact that psoriasis has on quality of life and underlines the need to introduce a system for systematically and routinely assessing this aspect throughout the follow-up of patients.

Contrasting with results from previous studies conducted in Spain, our study revealed no relevant or consistent differences between how dermatologists and patients rate disease severity and impact on quality of life. Finally, patients seem to be satisfied with the treatment they are receiving and the quality of care provided by their dermatologist.

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## Conflict of Interest

Esteban Daudén has been an advisory board member, received grants and research support, participated in clinical trials, and received speakers fees from the following pharmaceutical companies: Abbott, Astellas, Biogen, Centocor Ortho Biotech Inc, Galderma, Glaxo, Janssen-Cilag, Leo Pharma, Merck-Serono, Pfizer, Novartis, Schering-Plough, Stiefel, Wyeth Pharmaceuticals, 3M, and Celgene.

Julián Conejo Mir has no conflicts of interest.

Carmen García Calvo works in the Medical Department of Pfizer, S.L.

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