Optimal control of psoriasis in clinical practice: 12% of patients under stable treatment still have PASI score above 5

Daniel Lopez-Castillo, Ferran Olmos, Álvaro March, Ainhoa Vidal, Fernando Gallardo, Ramon M Pujol, Marta Ferran

Dermatology Department, Hospital del Mar, Barcelona

Introduction

In the present, disposing of a wide range of treatment options for psoriasis, most of the patients with moderate-to-severe psoriasis patients treated with systemic therapy should have minimal psoriasis activity. Currently, absolute PASI (Psoriasis Area and Severity Index) values have raised popularity as measurement of therapeutic efficacy. Recent guidelines agreed PASI <5 and DLQI ≤5 as the minimal appropriate response, and PASI ≤3 the pursued goal. PGA ≤1 and DLQI ≤1 has also been considered as the ideal outcome target. Data is scarce regarding how many patients are in acceptable or excellent disease state according to these therapeutic objectives in a real-world setting. JM Gelfand showed that effectiveness of psoriasis therapies in the era pre-anti-IL-17 is lower than in previously reported trials, reaching target PGA ≤1 between 23% (methotrexate) and 47% (adalimumab). More recently, JM Norlin et al have described that 18% of psoriatic patients in Swedish Registry for Systemic Treatment still presented with PASI ≥ 10 and/or DLQI ≥10 after >12 weeks of treatment. The aim of this project is to study disease severity within patients with psoriasis following stable systemic therapy at Dermatology outpatient clinics from a third level hospital. The fact that the patient was on stable systemic treatment was considered to be under acceptable disease control by their treating dermatologist. The primary objective is to describe the proportion of patients achieving absolute PASI ≤5. Secondary objectives are to analyse the proportion of patients achieving PASI ≤3, PGA ≤1 and DLQI ≤1.

Material and methods

This is a descriptive cross-sectional study carried out in Dermatology outpatient clinics from a third level hospital consisting of one-visit study from 1st of April 2018 to 1st of March 2019. Patients diagnosed with moderate-to severe plaque psoriasis treated with systemic therapies (conventional and/or biological) that have been on stable treatment for at least 6 months were included. All patients filled an informed written consent. Patient data collection include demographics and detailed psoriasis clinical history. Severity psoriasis measures including PASI, IGA and BSA were assessed. Patients also completed self-reported questionnaires including DLQI, pruritus VAS score and treatment satisfaction scale. A correlation coefficient and P-value were calculated using the Spearman's Correlation Coefficient. The study was approved by the Medical Ethical Committee of the correspondent hospital.

Conclusions

- A relative high proportion of patients that are under stable systemic therapy for psoriasis in a daily-practice population still show an inappropriate response to the treatment (12.2% scoring PASI >5), showing worrisome results if we focus on what is currently considered as the clinical pursued goal (23.6% scoring PASI >3).
- A noteworthy proportion of patients have a relevant affected disease-related quality of life (42.5% scoring DLQI >1), obtaining a weak to moderate correlation between clinical disease severity and patient's quality of life.

Results

Table 1. Demographic characteristics of studied population

	Total (n=123)
Male % (n)	64.2 (79)
Age (sd)	51 (14)
Onset age (sd)	27 (13.6)
Accumulated disease time (sd)	23.9 (13.2)
Body mass index kg/m² (sd)	27.9 (5.1)
Psoriatic arthritis % (n)	35.8 (44)
Active smoker % (n)	31.7 (39)

Table 2. Psoriasis severity measures, quality of life and treatment satisfaction scale medium scores

	Total (n=123)
PASI (sd)	2.2 (2.4)
PGA [0-4] (sd)	1.4 (0,9)
DLQI [0-30] (sd)	3.1 (6.1)
Treatment satisfaction scale [0-100] (sd)	85.1 (23.5)

Table 3. Proportion of appropriately controlled patients according to disease severity and quality of life measuring tools

	Total (n=123)
PASI ≤3 % (n)	76.4 (94)
PASI ≤5 % (n)	87.8 (108)
PGA ≤1 % (n)	54 (68)
DLQI ≤1 % (n)	58.5 (72)
DLQI ≤5 % (n)	83.7 (103)
PASI v5 and DLQI ≤5 % (n)	93.5 (8)

Table 4. Correlation analysis of PASI and DLQI scores using Spearman's Correlation Coefficient.

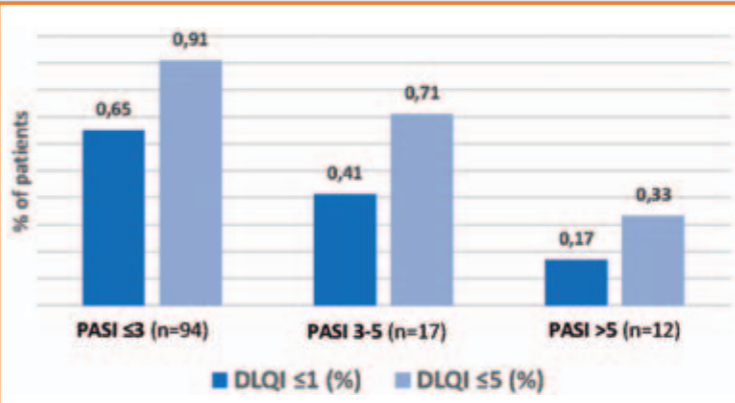|	PASI		
	n	R	p
DLQI	123	0.558	<0.001

R= Spearman's Correlation Coefficient

Figure 1. DLQI score proportion according to PASI score distribution. The obtained distribution shows a fast quality of life detriment once reached uncontrolled patients according to PASI scores.
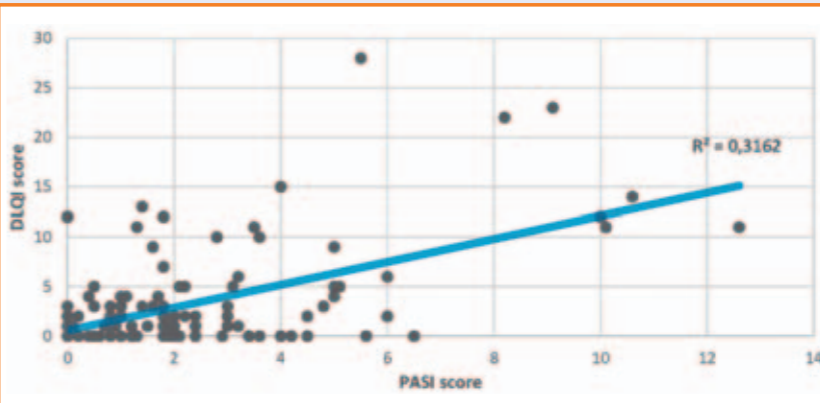

Figure 2. Correlation analysis of PASI and DLQI scores. The obtained correlation value of 0.558 shows a weak to moderate correlation between PASI and DLQI scores (R= Spearman's Correlation Coefficient, obtained P-value= <0.001).

Discussion

New biologics have set ambitious treatment goals of complete clearance or near-complete clearance of the skin. Therefore, this broaden therapeutic armentarium should lead us to minimize psoriasis activity in clinical practice. The obtained results in this study show that most of the patients that are under stable systemic therapy for psoriasis have an appropriate response to the treatment according to PASI scale (87.3% scoring PASI<5). However, when considering outcomes according to new pursued goals (PASI ≤3), only 76.4% of patients achieve them. These findings in a daily-practice psoriatic population may differ in contrast to the high effectiveness idea associated to the currently broad available treatments. Our results are consistent with previous published data. However, the lack of similar studies impedes an optimal outcome's comparison. Focusing on patient-reported quality of life outcomes, only 58.5% of the population scored a value that would be considered as the pursued goal in correctly controlled patients (DLQI ≤1). Our analysis obtained a weak to moderate correlation (Spearman's correlation coefficient, R = 0.558) between PASI and DLQI scores. Patient's expectations and goals related to psoriasis treatment and patient-defined treatment benefits can considerably differ from those defined by clinical assessment measures.

References

1. Gelfand JM, Wan J, Callis Duffin K, Krueger GG, Kalb RE, Weisman JD, Sperber BR, Stierstorfer MB, Brod BA, Schleicher SM, Bebo BF Jr, Troxel AB, Shin DB, Steinemann JM, Goldfarb J, Yeung H, Van Voorhees AS. Comparative effectiveness of commonly used systemic treatments or phototherapy for moderate to severe plaque psoriasis in the clinical practice setting. Arch Dermatol. 2012;148(4):487-94.
2. Carretero G, Puig L, Carrascosa JM, Ferrándiz L, Ruiz-Villaverde R, de la Cueva P, Belinchon I, Vilarrasa E, Del Rio R, Sánchez-Carazo JL, López-Ferrer A, Peral F, Armesto S, Eiris N, Mitxelena J, Vilar-Alejo J, A Martin M, Soria C; from the Spanish Group of Psoriasis. Redefining the therapeutic objective in psoriatic patients candidates for biological therapy. J Dermatolog Treat. 2018;29(4):334-346.
3. Amatore F, Villani AP, Tauber M, Viguier M, Guillot B. French guidelines on the use of systemic treatments for moderate-to-severe psoriasis in adults. J Eur Acad Dermatol Venereol. 2019;33(3):464-483.
4. Norlin JM, Calara PS, Persson U, Schmitt-Egenolf M. Real-world outcomes in 2646 psoriasis patients: one in five has PASI ?10 and/or DLQI ?10 under ongoing systemic therapy. J Dermatolog Treat. 2017 Sep;28(6):500-504.