Current approach to the management of psoriatic arthritis according to a sample of Italian rheumatologists

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Abstract

Objective

The purpose of this study was to have an overview of the current approach to psoriatic arthritis (PsA) by a group of Italian rheumatologists.

Methods

Rheumatologists from all around Italy were asked to participate in a survey to give their opinion on a number of statements made by a panel of rheumatologists who are experts in PsA. The survey was conducted through two rounds using a Delphi-like method. The two rounds yielded a consensus on the management of PsA.

Results

Fifty rheumatologist from 50 rheumatology centres participated in the survey. Of the 117 proposed statements, only 10 did not reach the 66% concordance threshold. The main results of the survey were that diagnosis of PsA should be made using both the CASPAR criteria and clinical judgment, that all of the features of the psoriatic disease are relevant in the assessment and therapy of PsA, that treatment recommendations are taken into account, that all of the available biological agents may be used in bio-naïve patients, that anti-drug antibody testing is still not used in daily practice, that both switching or swapping are useful options in the case of bio-failure because of lack or loss of efficacy, and that swapping is considered the best choice in the case of bio-failure due to adverse events.

Conclusion

The results of this survey showed that a comprehensive evaluation of the patient and a therapy choice based on both patient clinical features and evidence of drug efficacy and safety are considered the current best of care for PsA patients.

Key words

psoriatic arthritis, diagnosis, therapy, DMARDs, biologics

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Introduction

Psoriatic arthritis (PsA) is a chronic systemic inflammatory disorder which is extremely heterogeneous in terms of extent of tissues involvement, patterns of joint inflammation and severity of disease course. The high variability in clinical presentation may cause a substantial inhomogeneity in the approach of the rheumatologists to the disease, concerning both diagnosis and therapeutic management of the patient (1). A valuable effort has been made over the recent years by scientific societies and groups of experts to help standardising the approach to the patient through the dissemination of guidelines and treatment recommendations (2-7). Nevertheless, the rheumatologists' approach to the management of PsA is still rather variable (1), and often based mainly on their personal experience. The new acquisitions on the pathogenesis of the disease and the resulting development of new drugs targeting specific mechanisms (8-14) have made the management of PsA even more complicated. As the availability of these new therapies will allow more individualised treatments, rheumatologists need to continuously update their approach to this disease.

The aim of this survey was to give an overview of the current approach to PsA, with emphasis on therapy with biologics, according to a group of Italian rheumatologists working in dedicated services, and to provide a consensus by this group of experts on some critical aspects of the management of this disease.

Methods

A panel of experts in the management of PsA (AM, EL, IO, CS, RR) identified some relevant topics concerning diagnosis and treatment of this disorder, based on current knowledge and recent advances in the management of the disease. This board identified 27 scenarios which represented some key aspects in the management of PsA in rheumatology practice, and for every scenario they formulated a variable number of statements which described possible approaches to the situation. Only the drugs for PsA commercially available in Italy as to March 2015 were considered as therapeutic options.

A survey was then conducted in two rounds to assess the opinion on the proposed statements of a group of Italian rheumatologists involved in the management of patients with PsA. For the survey, the Delphi technique was used because it is a well-known reliable method to collect opinions and to reach a consensus on critical points. However, as the purpose of the survey was to draw a picture of the approach to PsA and not to formulate guidelines or recommendations, the procedure used for this study should not be considered a classical Delphi exercise.

Rheumatologists from all around Italy with an expertise in PsA treatment (that is, working in tertiary care centres authorised to prescribe biological products for this disease) were invited to participate in the survey. It has been estimated that in Italy there should be about 130 Rheumatology Centres prescribing biological drugs. The invitation list was created by contacting these Centres, explaining the project, and asking for rheumatologists potentially interested in participating. An information letter giving the details of the survey procedure was then sent to all of the rheumatologists who had agreed to receive it. Those willing to participate were invited to anonymously fill an on-line questionnaire to complete the first round of the survey. The questionnaire included the statements formulated by the panel of experts, and for each of these statements every participant had to provide a grade of agreement, using a 1–5 rating scale as follows: 1 = maximum disagreement, 2 = disagreement, 3 = agreement, 4 = good agreement, 5 = maximum agreement.

When the first on-line round was completed, the results of the survey were analysed and summarised. For each statement, agreement (positive consensus) was defined when ≥66% of the participants gave a score of 3 or 4 or 5, disagreement (negative consensus) when ≥66% of the participants gave a score of 1 or 2, and lack of consensus when positive (3 + 4 + 5) or negative (1 + 2) scores were <66%.

The results of the first round were pre-

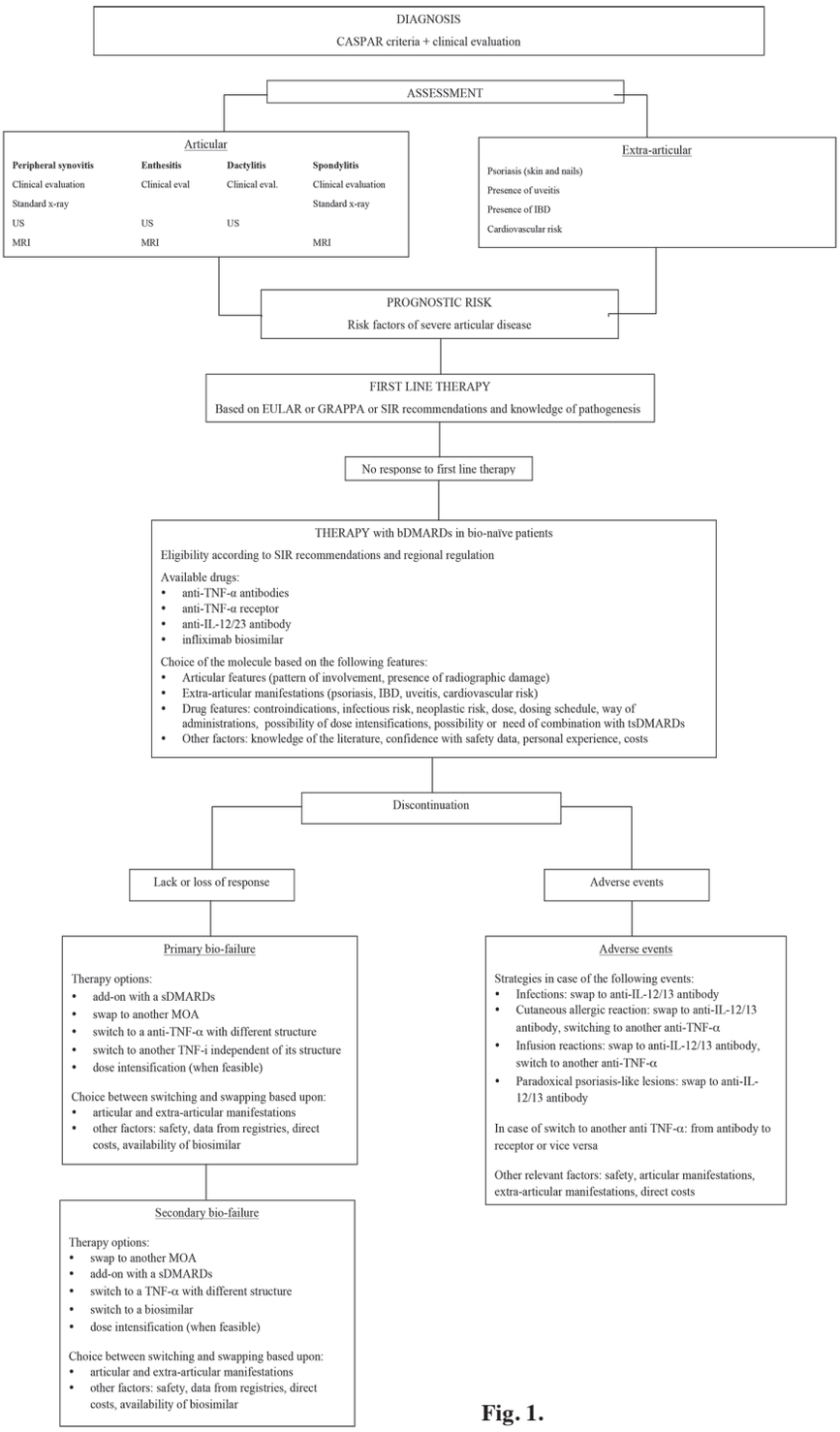

Fig. 1.

sented during two meetings, with each participant of the on-line consultation attending only one them. Statements for which a positive or negative consensus was not reached at the first round were discussed and voted again. The final results of the two distinct re-evaluations were pooled and then analysed and summarised.

Results

After invitation, 50 rheumatologists, representing 50 Italian rheumatology centres, agreed to participate in the survey and all of them completed both rounds of consultations. Among them 28 (56%) were females and the median age was 52 years (interquartilic range: 30–59). As for the geographic distribution, 23 rheumatologists came from northern Italy, 11 from central Italy, and 16 from southern Italy.

After the first round of the survey, 104 of the 117 statements achieved a positive or negative consensus, while 13 statements did not reach consensus and were discussed at the second round. After this re-evaluation, 10 statements remained below the 66% concordance threshold.

The final results of the survey are comprehensively reported in Tables I-V and showed as summary flow-chart in Figure 1. The most relevant findings are also described hereinafter.

Diagnosis and clinical evaluation

All of the participants agreed that the diagnosis of PsA should rely on both clinical evaluation and CASPAR criteria (15). To evaluate the various features of PsA, in addition to clinical evaluation, they recognised the utility of radiography, magnetic resonance imaging (MRI), and ultrasound (US) for the assessment of peripheral synovitis; they did not recommend the use of US for spondylitis; they considered US helpful and radiography useless for both dactylitis and enthesitis; and they deemed MRI as useful for enthesitis but not for dactylitis.

A positive consensus was also achieved about the importance of assessing the typical extra-articular manifestations of PsA and the prognostic factors of severity of articular disease and cardiovascular events (Table I).

Treatment in general

When starting a treatment, the participants judged important taking into account both the pathogenic mechanisms of the disease (16, 17) and main treatment recommendations (2, 4, 5). It was agreed that a patient should be eligible for a therapy with a biological disease -modifying anti-rheumatic drug (bDMARD) if not responsive to the non-biological treatments usually indicated for that manifestation and satisfying the criteria of disease activity according to the recommendations of the Italian Society of Rheumatology (SIR) (4) (Table II).

Table I. Diagnosis and clinical evaluation.

Statement	Consensus	%
When I make a diagnosis of psoriatic arthritis, I stand to:		
Clinical evaluation only	Negative	67.5
CASPAR criteria only	Non consensus	52.5
Both CASPAR criteria and clinical evaluation	Positive	100
To evaluate peripheral arthritis, I rely on:		
Clinical features	Positive	98
Traditional x-ray	Positive	84
Magnetic resonance	Positive	68
Ultrasound	Positive	82
To evaluate spondylitis, I rely on:		
Clinical features	Positive	98
Traditional x-ray	Positive	88
Magnetic resonance	Positive	100
Ultrasound	Negative	88
To evaluate dactylitis, I rely on:		
Clinical features	Positive	100
Traditional x-ray	Negative	75.5
Magnetic resonance	Non consensus	65.3
Ultrasound	Positive	95.9
To evaluate enthesitis, I rely on:		
Clinical features	Positive	97.9
Traditional x-ray	Non consensus	60.5
Magnetic resonance	Positive	77.1
Ultrasound	Positive	100
To evaluate extra-articular manifestations, it is important to assess:		
Cutaneous psoriasis	Positive	100
Nail psoriasis	Positive	95.8
Uveitis	Positive	100
Inflammatory bowel disease	Positive	97.9
As prognostic factors of severe disease I consider:		
Number of swollen joints	Positive	97.9
Number of tender joints	Positive	91.7
Joint lesions on x-ray	Positive	100
Elevation of acute phase reactants	Positive	93.7
Moderate/severe skin involvement	Positive	83.3
Cardiovascular risk factors (diabetes, hypertension, waist circumference, dyslipidaemia, obesity)	Positive	85.4

Table II. Therapy in general.

Statement	Consensus	%
When I decide a treatment with sDMARDs and bDMARDs, I consider important:		
Pathogenic mechanisms knowledge	Positive	95.8
EULAR recommendations	Positive	97.9
GRAPPA recommendations	Positive	100
SIR recommendations	Positive	91.7
A bio-naïve patients is defined as:		
A subject never exposed to a treatment with bDMARDs in her/his lifespan	Positive	95.8
A patient is eligible to a treatment with a biologic if		
He is affected by PsA not responsive to first line treatments (NSAIDs, sDMARDs, glucocorticoid injections) according to regional protocols	Positive	100
To define a patient eligible to a treatment with a biologic		
I stand to criteria of disease severity as defined by SIR recommendations	Positive	95.8

sDMARDs: synthetic disease-modifying anti-rheumatic drugs; bDMARDs: biological disease-modifying anti-rheumatic drugs; SIR: Società Italiana di Reumatologia.

Treatment with bDMARDs in bio-naïve patients

The survey participants agreed that only the subjects never exposed to a bDMARD throughout their lifespan should be defined bio-naïve.

To start a therapy with a bDMARD in a bio-naïve patient, the potential efficacy of the treatment on just peripheral arthritis was considered inadequate, and it was agreed that the efficacy on all of the musculo-skeletal manifestations of PsA, along with the extra-articular manifestations, are relevant. The choice of the bDMARD should also be based on considerations about its efficacy on the long-term consequences of the disease (radiographic progression and cardiovascular risk), as well as on more general information like data from literature, personal experience and costs. Among the considered treatment strategies, the agreement was reached for anti-TNF-α antibodies, anti-TNF-α receptor, biosimilar anti-TNF-α, and anti-IL-12/23. A positive consensus was reached also on the importance of all of the main safety concerns reported in the summary of product characteristics (SmPC) (with the exception of the ANA positivity) as well as of the technical characteristics of the product (Table III).

Treatment with bDMARDs in bio-failure patients

When starting a treatment with a bDMARD in a patient bio-failure for either primary (failure to achieve remission or minimal disease activity) or secondary (loss of efficacy during the treatment) inefficacy, different treatment strategies can be considered. A positive consensus was reached for increasing the dosage of anti-TNF-α (when feasible), adding a synthetic DMARD (sDMARD), switching to another anti-TNF-α with a different structure (antibody versus receptor), and swapping to the anti-IL-12/23. A consensus was not reached for the hypothesis of switching to an anti-TNF-α biosimilar in both primary and secondary bio-failure patients. The option of switching to another anti-TNF-α independent of its structure was agreed upon (but with a relatively low percent-

Table III. Treatment with bDMARDs in bio-naïve patients.

Statement	Consensus	%
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a bio-naïve patient not responsive to first line treatments (NSAIDs, sDMARDs, glucocorticoid injections), I consider:		
Efficacy of the bDMARD on clinical manifestations of peripheral arthritis only	Negative	67.8
Efficacy of the bDMARD on all the clinical articular manifestations of PsA	Positive	97.9
Efficacy of the bDMARD on the clinical articular manifestations of the patient only	Positive	85.1
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF biosimilar, or anti-IL-12/23) in a bio-naïve patient not responsive to first line treatments (NSAIDs, sDMARDs, glucocorticoid injections), besides clinical manifestations of the patient, I consider:		
Efficacy of the bDMARD on cutaneous psoriasis	Positive	94.6
Efficacy of the bDMARD on nail psoriasis	Positive	83.8
Efficacy of the bDMARD on uveitis	Positive	86.5
Efficacy of the bDMARD on IBD	Positive	83.8
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF biosimilar, or anti-IL-12/23) in a bio-naïve patient not responsive to first line treatments (NSAIDs, sDMARDs, glucocorticoid injections), I consider:		
Efficacy of the bDMARD on radiographic progression of peripheral joint damage	Positive	95.7
Efficacy of the bDMARD on radiographic progression of axial damage	Positive	91.5
Efficacy of the bDMARD on cardiovascular risk	Positive	93.6
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF biosimilar, or anti-IL-12/23) in a bio-naïve patient not responsive to first line treatments (NSAIDs, sDMARDs, glucocorticoid injections), I consider:		
Personal experience/ confidence with the molecule	Positive	91.3
Knowledge of supporting literature	Positive	100
Confidence with safety profile of the drug: trials, registries, personal experience	Positive	95.6
Direct costs of the drug	Positive	75.7
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF biosimilar, or anti-IL-12/23) in a bio-naïve patient not responsive to first line treatments (NSAIDs, sDMARDs, glucocorticoid injections), I consider the following options:		
Anti-TNF-α antibody	Positive	97.8
Anti-TNF receptor	Positive	95.6
Anti-TNF biosimilar	Positive	78.3
Anti-IL-12/23	Positive	93.5
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF biosimilar, or anti-IL.12/23) in a bio-naïve patient not responsive to first line treatments (NSAIDs, sDMARDs, glucocorticoid injections), among contraindications for anti-TNF-α (originator and biosimilar) reported in the SmPC I consider important:		
Congestive heart failure	Positive	100
Alteration of liver enzymes	Positive	82.6
ANA positivity	Non consensus	60.7
Risk of infections (from trials, registries)	Positive	91.3
Risk of demyelinating diseases	Positive	89.1
Potential weight change due to the drug	Positive	75.7
Risk of neoplasms (from trials, registries)	Positive	78.3
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a bio-naïve patient not responsive to first line treatments (NSAIDs, sDMARDs, glucocorticoid injections), among the characteristics reported in the SmPC I consider important:		
Fixed dosage versus weight-related dosage	Positive	86.7
Dosing schedule and frequency of administration	Positive	97.8
Way of administration	Positive	100
Age	Positive	84.4
Possibility/need of a background therapy	Positive	95.6
Possibility/need of an add-on therapy	Positive	91.1
Possibility of a dose-intensification	Positive	88.9

sDMARDs: synthetic disease-modifying anti-rheumatic drugs; bDMARDs: biological disease-modifying anti-rheumatic drugs; SmPC: summary of product characteristics.

age of consensus) for primary bio-failure patients only, but a consensus was not reached for secondary bio-failure patients. The dosage of anti-drug antibodies (ADA) was not deemed as relevant both for primary and secondary bio-failure patients (Table IV-V).

For bio-failure patients, because of adverse events, the choice of swapping to an anti-IL-12/23 gained a positive consensus for all types of adverse reactions, while a positive consensus (but with lower percentages) for switching to another anti-TNF-α was achieved only in case of allergic reactions and infusion reactions, but not in the case of serious or recurrent infections or paradoxical psoriasis-like lesions. When assessing the preference of the participants about the choice of another anti-TNF- in a patient bio-failure for adverse events, a positive consensus was found for changing from antibody to receptor or vice versa, but a negative consensus was given for changing from antibody to antibody and for switching to an anti-TNF-α biosimilar (Table VI).

Discussion

The results of this survey showed, in a group of 50 Italian rheumatologists (representing 50 different rheumatologic centres) with expertise in the management of PsA, a good concordance on diagnosis, global assessment and therapeutic approach of this disease. A consensus was not achieved only for a low number of statements.

Diagnosis and classification of PsA are the first challenging issues in the approach to a patient with this disease, as suggested by the high number of classification criteria that were formulated in the past years (18). Recently, CASPAR criteria were shown to have a high sensibility and sensitivity in identifying patients with early PsA in clinical practice (19). However, as they are classification criteria, they are not supposed to be used for diagnostic purposes but only to better define patients included in clinical and investigative studies, with the aim to create more homogeneous populations in experimental settings. Accordingly, the participants of the survey unanimously agreed that the integration of CASPAR criteria with

Table IV. Treatment with bDMARDs in primary bio-failure patients.

Statement	Consensus	%
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a primary bio-failure patient (who failed to achieve remission or minimal disease activity), I consider:		
Assessment of anti-drug antibodies	Negative	75
Increasing dosage of anti-TNF-α (when feasible)	Positive	82.2
Switching to another anti-TNF (independent of its structure)	Positive	77.8
Switching to another anti-TNF with a different structure (antibody versus receptor)	Positive	95.6
Switching to a biosimilar bDMARD	Non consensus	56.8
Swapping to anti-IL-12/23	Positive	95.6
Add-on a sDMARD (if not assumed yet)	Positive	97.8
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a primary bio-failure patient (who failed to achieve remission target or minimal disease activity), to decide whether switching or swapping I consider:		
Clinical musculoskeletal manifestations	Positive	93.3
Cutaneous manifestations	Positive	97.8
Uveitis	Positive	97.8
IBD	Positive	97.8
Cardiovascular risk	Positive	91.1
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a primary bio-failure patient (who failed to achieve remission or minimal disease activity), to decide whether switching or swapping I consider:		
Data from registries on the retention rate of anti-TNF-α when switching	Positive	93.3
Data from registries on the retention rate of anti-IL-12/23 in psoriatic patients	Positive	93.3
Availability of the first biosimilar DMARD	Positive	82.2
Safety	Positive	100
Direct costs	Positive	86.7

sDMARDs: synthetic disease-modifying anti-rheumatic drugs; bDMARDs: disease-modifying anti-rheumatic drugs.

clinical judgment should be the most reliable method to make a diagnosis of PsA. Classification criteria alone and clinical evaluation alone were considered insufficient.

Another interesting observation that arose from the results of this survey was the great attention paid to extra-articular manifestations and comorbidities (such as inflammatory bowel disease or uveitis) both in the assessment phase and in the therapeutic setting. This comprehensive approach to the patient is in line with the recent concept of "Psoriatic Disease", which recognises PsA as part of a broader clinical entity in which several different tissues can be involved, with an extremely variable clinical expression of cutaneous, articular, and other extra-articular manifestations probably sharing many pathogenic mechanisms (20). The recently reported increase in risk of cardiovascular events in patients with psoriasis and PsA (21) has also been recognised by the participants to the survey, who agreed on taking into account this aspect in both assessment and treatment of PsA.

In the evaluation of PsA, imaging techniques such as MRI and US have gained a relevant role. If the importance of MRI in the assessment of axial involvement is well established, its role in the evaluation of peripheral arthritis is less clear (22, 23). The participants to the survey unanimously confirmed the importance of MRI to assess axial inflammation and agreed that this imaging technique may be used to evaluate peripheral synovitis and enthesitis but not dactylitis. A significant role for US in the evaluation of peripheral arthritis, dactylitis and enthesitis, but not of spondylitis, was also recognised by the participants to the survey. As dactylitis can be easily evaluated clinically, one may wonder why this group of rheumatologists largely agreed on using US for this feature. Possible explanations might be a certain lack of confidence in diagnosing, assessing, and, maybe, treating dactylitis on a clinical ground alone, and the growing use of US in clinical practice.

This survey was mostly focused on the therapy of PsA. It is worth noting that, in addition to guidelines derived from recommendations by experts, the participant rheumatologists judged important a personal knowledge of the pathogenic mechanisms of the disease and of the results of clinical trials. On this basis, the low consensus achieved on some issues as, for example, the use of biosimilar anti-TNF-α, might be related to the lack of published data on this drug in patients with PsA. In fact, in Italy, the authorisation to use this therapeutic product in PsA is based only on the extrapolation of data about its efficacy from studies performed in patients with rheumatoid arthritis and ankylosing spondylitis (24, 25).

The choice of the first drug in patients eligible to a biological therapy is undoubtedly a very important issue. The results of this survey showed that the participant rheumatologists valued the efficacy of the drug on all the articular and extra-articular manifestations of the disease, including a possible effect on the cardiovascular risk. They also considered relevant the impact of the drug on the progression of the anatomic damage. This attitude of the survey participants might be interpreted as a willingness to make the therapy as much tailored on the patient as possible. Personal experience, confidence with the molecule, costs, and contraindications reported in the SmPC were, as expected, also considered relevant in the therapy choice. As for the substance itself, there was a consensus for all of the drugs commercially available in Italy for the therapy of PsA. This consensus was similar for originator TNF-α inhibitors and anti-IL-12/23 antibody but lower for infliximab biosimilar.

When considering patients who failed a first treatment with an anti-TNF-α because of lack of efficacy, the presence of some data in literature on this topic in patients with rheumatoid arthritis might explain the preference of the participant rheumatologists for

Table V. Treatment with bDMARDs in secondary bio-failure patients.

Statement	Consensus	%
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a secondary bio-failure patient (loss of efficacy), I consider:		
Assessment of anti-drug antibodies (ADA)	Non consensus	52.8
Increasing dosage of anti-TNF-α (when feasible)	Positive	73.3
Switching to another anti-TNF-α (independent of its structure)	Non consensus	52.8
Switching to another anti-TNF-α with a different structure (antibody *versus* receptor)	Positive	93.3
Switching to a biosimilar bDMARD	Positive	83.3
Swapping to an anti-IL-12/23	Positive	97.8
Adding-on a sDMARD (if not assumed yet)	Positive	95.6
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a secondary bio-failure patient (loss of efficacy), to decide whether switching or swapping I consider:		
Clinical musculoskeletal manifestations	Positive	95.6
Cutaneous manifestations	Positive	100
Uveitis	Positive	97.8
IBD	Positive	97.8
Cardiovascular risk	Positive	91.1
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a secondary bio-failure patient (loss of efficacy), to decide whether switching or swapping I consider:		
Data from registries on the retention rate of anti-TNFs when switching	Positive	93.3
Data from registries on the retention rate of anti-IL-12/23 in psoriatic patients	Positive	95.6
Availability of the first biosimilar DMARD	Positive	73.3
Safety	Positive	95.6
Direct costs	Positive	86.7

sDMARDs: synthetic disease-modifying anti-rheumatic drugs; bDMARDs: disease-modifying anti-rheumatic drugs IBD: inflammatory bowel disease.

Table VI. Treatment with bDMARDs in bio-failure patients for adverse events.

Statement	Consensus	%
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a patient bio-failure for adverse events, I consider:		
Serious infection or recurrent non serious infections:		
Switching to another anti-TNF-α	Non consensus	55.6
Swapping to an anti-IL12/23	Positive	84.4
Cutaneous allergic reactions:		
Switching to another anti-TNF-α	Positive	73.3
Swapping to an anti-IL-12/23	Positive	95.6
Infusional reactions:		
Switching to another anti-TNF-α	Positive	73.3
Swapping to an anti-IL-12/23	Positive	91.1
Paradoxical psoriasis-like lesions (drug induced):		
Switching to another anti-TNF-α	Non consensus	54.3
Swapping to an anti-IL-12/23	Positive	93.3
When I decide a treatment with another anti-TNF-α in a patient bio-failure for adverse events, I prefer:		
Changing from antibody to receptor or vice versa	Positive	88.9
Changing from antibody to antibody	Negative	92
Changing to a biosimilar anti-TNF-α	Negative	80
When I decide a treatment with a bDMARD (anti-TNF-α originator, or anti-TNF-α biosimilar, or anti-IL-12/23) in a patient bio-failure for adverse events, I consider:		
Clinical musculoskeletal manifestations	Positive	93.3
Skin and nail manifestations	Positive	95.6
Data on safety	Positive	100
Direct costs	Positive	82.2

bDMARDs: biological disease-modifying anti-rheumatic drugs.

swapping to a product with a different target or switching to a product with the same target but a different structure, rather than using a drug with a similar structure (26, 27). It is of interest that in the setting of failure to a first bDMARD because of lack o loss of efficacy, switching to an anti-TNF-α with different structure and swapping to another bDMARD were both considered feasible but with a highest degree of agreement for swapping. In terms of daily practice, this might imply a preference to use the anti-IL-12/23 antibody in patients who are primary or secondary failure to an anti-TNF-α agent. This choice was even more agreed upon in case of failure to a TNF-α inhibitor because of adverse events, a setting where data on safety were considered of pivotal importance. The opinion of the participants to the survey, however, was not only driven by the available evidence. This is clearly indicated by the positive agreement on adding a sDMARD in patients with a primary or secondary failure to a bDMARD, a strategy not supported by any evidence whatsoever. Similarly, the choice of using the anti-IL-12/23 antibody in case of palmo-plantar pustolosis due to anti-TNF-α therapy was not dictated by evidence.

Another issue which is attracting growing interest is the impact of ADAs on the clinical response to biological drugs. This survey, however, showed that the participant rheumatologist were not convinced of the usefulness of dosing ADAs in clinical practice. The uncertainty raised by conflicting results in experimental studies, partly due to the different methodologies of measurement (28), and the current limited feasibility of these assays in clinical practice.

The results of this survey should be interpreted keeping in mind its characteristics. As only 50 of an estimated 130 Italian rheumatology centres authorised to biological prescription in PsA were involved, the emerging picture can only be considered an approximation of the rheumatologists' approach to this disease. The statements regarding the therapeutic approach were focused mainly on biological products

because the use of these drugs represents the most debated and challenging issue in the pharmacological management of patients with PsA. Moreover, data on sDMARDs in PsA are scarce, mainly related to peripheral arthritis, and show a low efficacy of these drugs in patients with PsA (29-31). The essentially practical nature of this survey conditioned the inclusion only of drugs commercially available in Italy at that time, while other therapeutic products, whose efficacy in PsA was demonstrated by clinical trials, were not included. This survey did not cover all of the aspects of the management of PsA but only some of those more commonly encountered in daily practice. Finally, the results of the survey were not meant to create guidelines or recommendations for the management of PsA but only to have a picture of the approach to this condition by a group of rheumatologists working in centres authorised to prescribe biological agents for this disease.

In conclusion, the results of this Delphi survey provide an insight in the management of PsA by a group of Italian rheumatologists with an expertise in this condition. Overall, a comprehensive evaluation of the patient, a therapy choice based on both patient clinical features and solid evidence of drug efficacy and safety, and a distinction between bio-naïve and bio-failure patients have emerged as the more relevant aspects of the management of PsA.

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