

## **Current characteristics of a population of psoriatic arthritis and gender disparities**

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03-Dec-2022

Ref.: Ms. No. JCTRes-D-22-00196

Current Characteristics of a Population of Psoriatic Arthritis and Gender Disparities

Journal of Clinical and Translational Research

Dear Doctor Menis,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

Please pay particular attention to the comments of review 2, which must be addressed to the fullest extent possible. Also, it is imperative that you indicate in the discussion what novel information your study contributes to literature, in juxtaposition to previously published studies.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Also, please ensure that the track changes function is switched on when implementing the revisions. This enables the

reviewers to rapidly verify all changes made.

Your revision is due by Jan 02, 2023.

To submit a revision, go to <https://www.editorialmanager.com/jctres/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #2: This is a retrospective study mainly describing PsA population in a single center.

However, the limitations of the study are many and not mentioned in the Discussion:

- methodology limitations: mainly selection process (random selection? based on electronic search? )
- why did the authors not choose to do a matched case-control study ? this would draw more interesting conclusions rather than descriptive
- only one center included (results of the study cannot be generalized to other population)
- no data on disease severity, eg. scores of PsA disease activity not analysed
- handling of missing data should be detailed
- main results were not highlighted in the first paragraph of the discussion
- Discussion is too long and not focusing on the main outcomes of the study

Some modifications to the text should also be made:

\* Need to clarify if this sentence is a comment and should be in the discussion paragraph and not results : "An increased tendency to hyperuricemia and initial biological inflammatory syndrome is reported in the male population, without any significant difference."

\* Please rephrase and Change:

"dermatosis" to "skin disease",

"osteoarticular ultrasound" to "musculoskeletal ultrasound",

"osteoarticular symptomatology" to "musculoskeletal involvement".

"Extra-articular" to the most recent term "extra-musculoskeletal manifestations" (EMMs)

\* Please rephrase these sentences, their use is not very adequate: "The data in the literature are consistent with this"; "The literature supports these data [14]"; "The literature supports our data [17]."

\* Please change the term "dermatologically"

\* Please define all abbreviations used including CASPAR, SAPHO

Reviewer #3: This is a very well written paper and does not need any major revision.

The discussion section is too long and can be reduced

Author should consider the following important reference:  
Chandran V, Raychaudhuri SP. Geoeidemiology and environmental factors of psoriasis and psoriatic arthritis. J Autoimmun. 2010 May;34(3):J314-21

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Authors' response

To: Prof. Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Dear Professor Heger,

Please find enclosed our answers to the reviewers of our original article: Ref.: Ms. No. JCTRes-D-22-00196 "Current Characteristics of a Population of Psoriatic Arthritis and Gender Disparities".

We answered their questions as well as possible, which made it possible to improve our article, in particular with a shorter discussion. There is little description of this type of rheumatism according to gender and it is a growing question among clinicians with the corollary of a possible difference in response to treatment according to gender.

We have highlighted our changes in yellow in the main text to facilitate the critical reading.

We hope you will now find it suitable for publication.

Kind regards.

Prof. Vincent GOEB  
& Dr Jimmy MENIS

## Reviewers' comments

**Reviewer #2: This is a retrospective study mainly describing PsA population in a single center.**

**However, the limitations of the study are many and not mentioned in the Discussion:**

**- methodology limitations: mainly selection process (random selection? based on electronic search?)**

In order to clarify the selection of our patients, we have modified the following sentence: “We prospectively included all patients with psoriatic arthritis seen in consultation, day hospital and conventional hospitalization, over a 4-month period”. (2. Materials and Methods, 2.1. Patient Selection, First paragraph).

**- why did the authors not choose to do a matched case-control study? This would draw more interesting conclusions rather than descriptive**

We thank the reviewer for his suggestion but we wished here only to describe a population of "real life" patients with PsA and not to match them with patients with another inflammatory rheumatic disease such as RA or another rheumatologic pathology, hence our descriptive work.

**- only one center included (results of the study cannot be generalized to other population)**

Of course, we accept this remark. However, our center is the referral regional university hospital for the Picardy region, which does not have any other rheumatology service in the peripheral hospitals ("medical desert" in Picardy). We are therefore able to collect a regional reference population.

**- no data on disease severity, eg. scores of PsA disease activity not analysed**

We fully agree with this remark. But this was not the objective of this work since the patients are not seen at similar stages of their pathology (early PsA vs. PsA followed for several years with different lines of treatment received). As a result, the collection of activity scores was not equivalent between the different patients followed with the use of the DAS28, BASDAI or ASDAS for musculoskeletal involvement and PASI for skin involvement. In the interest of rigor

and homogeneity of the results, we have deliberately chosen not to highlight or discuss these results, which are too heterogeneous in their collection, since they concern patients with very heterogeneous durations of evolution of their rheumatism.

**- handling of missing data should be detailed**

We have highlighted throughout the article, the main significant missing data that may be questionable and whose conclusions must be made with caution. Here are the main examples:

- “78 patients were tested for the HLA-B\*27 allele”. (3. Results, 3.3. Biological Characteristics, First paragraph).
- “81 patients out of 132 had lipid profile (39 men and 42 women) and 82 patients out of 132 had uric acid test during the course of the disease (43 men and 39 women)”. (3. Results, 3.3. Biological Characteristics, Second paragraph).
- “Among the patients who underwent CT scan and/or MRI of the sacroiliac joints (61 individuals in total)”. (3. Results, 3.4. Radiological Characteristics, Second paragraph).
- “Among the patients who had an ultrasound examination of the peripheral joints and/or entheses (51 people in total)”. (3. Results, 3.4. Radiological Characteristics, Second paragraph).

We also decided not to reveal all the biological data collected (complete blood count, liver function, creatinine, modification of diet in renal disease (MDRD) clearance, fasting blood glucose, glycated hemoglobin (HbA1C) and 25-OH-vitamin D) in order not to overload the table 3 (Biological Characteristics) with information that we considered irrelevant.

As for the rest of the missing data, they have not been replaced in our work: "Missing data were not replaced". (2. Materials and Methods, 2.3. Statistical Analysis).

**- main results were not highlighted in the first paragraph of the discussion**

**- discussion is too long and not focusing on the main outcomes of the study**

We agree with these comments and have therefore rewritten the discussion to shorten it and highlight our main findings. The conclusion has been rewritten. Because of all the changes made, the numbering of references has also changed.

**Some modifications to the text should also be made:**

**\* Need to clarify if this sentence is a comment and should be in the discussion paragraph and not results: "An increased tendency to hyperuricemia and initial biological inflammatory syndrome is reported in the male population, without any significant difference."**

We agree. This sentence in the commentary on the results could have been taken as belonging to the discussion. We have therefore changed it to read: "There was a tendency for men with PsA to have hyperuricemia and a higher biological inflammatory syndrome compared to women." (3. Results, 3.3. Biological Characteristics, Second paragraph).

**\* Please rephrase and Change: "dermatosis" to "skin disease", "osteoarticular ultrasound" to "musculoskeletal ultrasound", "osteoarticular symptomatology" to "musculoskeletal involvement". "Extra-articular" to the most recent term "extra-musculoskeletal manifestations" (EMMs)**

We have made these various changes in the text. They are highlighted in yellow throughout the article.

**\* Please rephrase these sentences, their use is not very adequate: "The data in the literature are consistent with this"; "The literature supports these data [14]"," The literature supports our data [17]."**

We have made these various changes in the text. For example: "Among the peripheral manifestations observed in our study, polyarticular presentation predominates and is more frequent in the female population, whereas oligoarticular presentation comes second and is essentially found in the male population, as showed by Eder and al [16]." (4. Discussion, Fifth paragraph).

**\* Please change the term "dermatologically"**

The term "Dermatologically" has been changed to "In terms of dermatology". (3. Results, 3.2. Clinical Characteristics, Second paragraph).

**\* Please define all abbreviations used including CASPAR, SAPHO**

We thank the reviewer for this comment. We have added the definitions of the following terms:

- CASPAR: "Classification Criteria for Psoriatic Arthritis". (2. Materials and Methods, 2.1. Patient Selection, First paragraph).

- SAPHO: "Synovitis-Acne-Pustulosis-Hyperostosis-Osteitis". (2. Materials and Methods, 2.1. Patient Selection, First paragraph).

**Reviewer #3: This is a very well written paper and does not need any major revision.**

**The discussion section is too long and can be reduced.**

We totally agree with this comment. In order to make the discussion as clear as possible, we have decided to shorten it and highlight our main findings. The conclusion has been rewritten. Because of all the changes made, the numbering of references has also changed.

**Author should consider the following important reference:**

**Chandran V, Raychaudhuri SP. Geoepidemiology and environmental factors of psoriasis and psoriatic arthritis. J Autoimmun. 2010 May;34(3):J314-21.**

We thank the reviewer for this suggestion and have added the following sentence: “Chandran and Raychaudhuri showed a disparity in the prevalence of PsA worldwide: higher in the European population compared to the Japanese population, which can be explained by a differential of genetic and environmental factors [4].” (1. Introduction, Second paragraph).

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2<sup>nd</sup> Editorial decision  
17-Dec-2022

Ref.: Ms. No. JCTRes-D-22-00196R1  
Current Characteristics of a Population of Psoriatic Arthritis and Gender Disparities  
Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Please notify our assistant editor/production editor when you receive the proofs if your article should belong to a special issue specifying the issue's title.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Comments from the editors and reviewers: