

# Impact of a Multidisciplinary Centre for Immune-Mediated Inflammatory Diseases on the Management of Psoriatic Arthritis: A Five-Year Analysis of Implementation

Marina Sánchez-Lucas<sup>1,2</sup>, Camille Bourgeois<sup>1,2</sup>, Ofelia Baniandrés<sup>3</sup>, Esther Chamorro de Vega<sup>4</sup>, Juan Molina-Collada<sup>1,2</sup>, Teresa González<sup>1,2</sup>, Amparo López-Esteban<sup>1</sup>, Juan Carlos Nieto<sup>1</sup>, José María Álvaro-Gracia<sup>1,2,5</sup>, Isabel Castrejón<sup>1,2,5</sup>

Department of Rheumatology, Hospital General Universitario Gregorio Marañón, Madrid, Spain. <sup>2</sup>Instituto de Investigación Sanitaria Gregorio Marañón (IISGM), Madrid, Spain. <sup>3</sup>Dermatology Department, HGUGM <sup>4</sup>Pharmacy department, Hospital General Universitario Gregorio Marañón. <sup>5</sup>Department of Medicine, Complutense University, Madrid, Spain

## BACKGROUND

- Psoriatic arthritis (PsA) is an immune-mediated inflammatory disease (IMID) characterized by immune system dysregulation, leading to enthesitis, synovitis, skin manifestations, and involvement of the gastrointestinal tract, eyes, cardiovascular system, and/or metabolic syndrome.
- These diverse clinical manifestations underscore the necessity of a multidisciplinary approach to address the multiple challenges in delivering high-quality care to patients with PsA, from the pre-diagnosis phase through long-term follow-up.

## OBJECTIVES

To evaluate the impact of an IMID multidisciplinary centre, established in February 2019 on the management of patients with PsA.

## METHODS

- A specialized multidisciplinary centre (CEIMI) with a holistic approach to IMID patients was established at our University Medical Centre, which include 3 rheumatologists, 3 gastroenterologists, 2 dermatologists, 2 ophthalmologists, clinical nurse specialists, an on-site pharmacy, and immunization clinics.
- This integrated clinic model facilitates comprehensive patient evaluation and management through improved interdisciplinary communication and support educational activities for both patients and physicians.
- Patients with PsA on biologic or targeted synthetic DMARDs (b/tsDMARD) were identified and compared between rheumatology routine care and CEIMI multidisciplinary care.
- Clinical, demographic, and treatment variables and cardiovascular risk factors were retrospectively collected via electronic medical record.
- A descriptive analysis is presented.

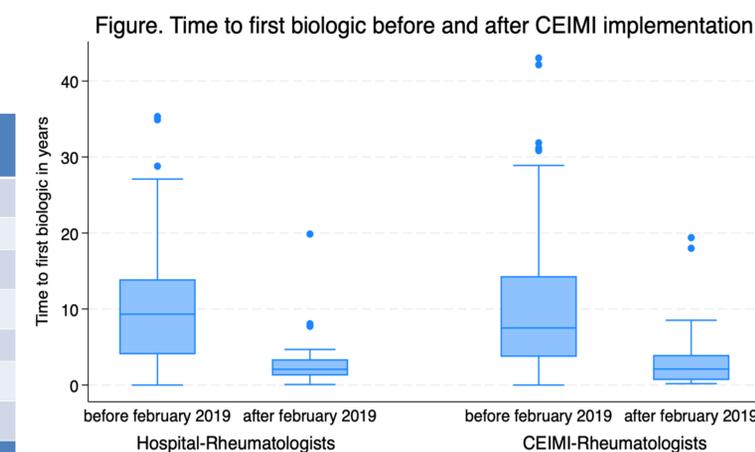
## RESULTS

- A total of 278 patients were included, 123 (44%) with active follow-up at our routine care clinic and 155 (56%) at CEIMI-multidisciplinary care.
- Average age was 41.4, disease duration 13.8 years, 48.6% were female, with no significant differences between groups.
- Patients in the routine care group have higher BMI and higher proportion of obesity.
- A higher percentage of patients have an evaluation by a dermatologist (49.3 vs 25.9,  $p=0.003$ ), and by the nurse specialist (94.4 vs 57.7,  $p<0.001$ ) at CEIMI-multidisciplinary care, with a better evaluation for cardiovascular risk and smoking cessation recommendations

	All Patients N=278	Routine Care N=123	CEIMI N=155	p-value
Age, years, mean (SD)	41.4 (13.0)	41.5 (13.0)	41.3 (13.0)	0.88
Sex, n (%) female	135 (48.6)	62 (50.5)	72 (46.7)	0.54
Current smoker, n (%)	19 (6.8)	7 (5.7)	12 (7.7)	0.50
BMI, mean (SD)	26.8 (5.9)	31.9 (5.9)	24.7 (4.0)	0.001
Obesity, n (%)	6 (25)	4 (57.1)	2 (11.8)	0.02
Disease duration, years	13.8 (9.1)	13.6 (9.4)	14.0 (8.9)	0.74
DAPSA, mean (SD)	11.0 (9.6)	13.6 (14.3)	10.1 (7.4)	0.23
<b>Time to first biologic, years, mean (SD)</b>				
Before February 2019	10.2 (8.5)	9.9 (7.8)	10.4 (8.9)	0.66
After February 2019	3.6 (4.6)	3.2 (3.9)	4.1 (5.5)	0.50
<b>Number of biologics, N (%)</b>				
• First line	150 (54.0)	71 (57.7)	79 (51.0)	0.28
• Second line	66 (23.7)	30 (24.4)	36 (23.2)	
• Third or more	62 (22.3)	22 (17.9)	40 (25.8)	
<b>Treatment, n (%)</b>				
• TNFi	189 (68.0)	83 (67.5)	106 (68.4)	0.32
• Anti-IL17	41 (14.7)	15 (12.2)	26 (16.8)	
• JAKi	26 (9.3)	16 (13.0)	10 (6.4)	
• Anti-IL23	14 (5.0)	5 (4.1)	9 (5.8)	
• Apremilast	8 (2.9)	4 (3.2)	4 (2.6)	
Dermatologist evaluation, n (%)	103 (37.2)	32 (25.9)	76 (49.3)	0.003
Nurse specialist evaluation, n (%)	218 (78.4)	71 (57.7)	147 (94.8)	$p<0.001$
<b>Smoking cessation recommendation, n (%)</b>				
• No evaluation	114 (51.8)	85 (69.1)	59 (38.1)	$p<0.001$
• <2 risk factors	85 (30.6)	28 (22.8)	57 (36.8)	
• Complete evaluation	49 (17.6)	10 (8.1%)	39 (25.2)	

## RESULTS

- Time to first biologic decrease significantly in both groups after CEIMI implementation, from 9.9 to 3.2 at routine care ( $p<0.001$ ) and from 10.4 to 4.1 at CEIMI ( $p<0.001$ ).
- Number of biologics and prescription patterns were similar between groups.



## CONCLUSIONS

- Our multidisciplinary approach appears effective in improving management of psoriatic disease, as evidence by a significant reduction in the time to first biologic initiation in both groups.
- Patients under active follow-up at CEIMI multidisciplinary care demonstrated improved cardiovascular risk assessment and better control of risk factors, including smoking cessation and obesity.

Table: Patients demographic, clinical, and treatment characteristics in CEIMI versus routine care management

