



Shin Shen Yong
shinshen@um.edu.my

Characteristics of patients with psoriasis on biological drugs notified to the Malaysian Psoriasis Registry and assessment of response to treatment

Shin Shen Yong¹, Wooi Chiang Tan², Suganthy Robinson³, Zhenli Kwan¹

¹Division of Dermatology, Department of Medicine, Faculty of Medicine, University of Malaya

²Department of Dermatology, Hospital Pulau Pinang

³Department of Dermatology, Hospital Kuala Lumpur

Disclosures: None

RCD 2020 Poster Presentation

INTRODUCTION

The Malaysian Psoriasis Registry (MPR) is a prospective observational cohort of patients with psoriasis in Malaysia. Recent advancements in biological treatment have offered more treatment options in addition to the conventional systemic therapy to patients with severe psoriasis.

OBJECTIVE

We examined the baseline characteristics and treatment response of the patients notified to the registry who had been commenced on biological drugs.

METHODS

The details of patients with psoriasis and on biological treatment who were registered in the Malaysian Psoriasis Registry between 2008 and 2017 were extracted.

The information include patients' baseline characteristics, comorbidities, type of biological treatment used, and PASI scores before and after treatment.

RESULTS

Sixty-seven patients on biological treatment were notified to the registry.

The mean age was 40.4 years (SD 11.56).

The male-to-female ratio was 1.58.

Other baseline characteristics such as comorbidities, nail involvement, presence of arthropathy are reported in table 1.

Variable	n	(%)
Gender		
Male	41	61.2
Female	26	38.8
Ethnic		
Malay	34	50.8
Chinese	23	34.3
Indian	7	10.5
Others	3	4.5
Comorbidities		
Obese WHO (BMI≥30)	18	26.9
Hypertension	12	17.9
Hyperlipidaemia	9	13.4
Diabetes Mellitus	3	4.5
Ischaemic Heart Disease	2	3.0
Cerebrovascular Disease	-	-
Nail involvement		
Yes	41	61.2
No	10	14.9
Psoriatic arthritis		
No	29	43.3
Yes	22	32.8
Body surface area		
>10%	18	26.9
≤10%	15	22.4
DLQI		
>10	25	37.3
≤10	23	34.3

Table 1: Socio-demographic characteristics of patients with psoriasis treated with biological treatment
BMI = body mass index; DLQI = Dermatology Life Quality Index

Majority of the patients (67.2%, n=45) were commenced on biological drugs after failing phototherapy and standard systemic therapy.

Other indications for biologic treatment and frequency of type of biologic agents used are as tabulated in table 2.

Ustekinumab was used most frequently due to its high level of efficacy by targeting IL 23, the master regulator of the immune-inflammatory response in psoriasis¹.

Other reasons include the favourable safety profile and convenience of infrequent dosing of ustekinumab¹.

Variable	n	(%)
Indication for Biologic treatment		
Failed phototherapy and standard systemic therapy	45	67.2
Intolerant to phototherapy and standard systemic therapy	14	20.3
Phototherapy and standard systemic therapy are contraindicated	3	4.3
Failed standard systemic therapy	1	1.5
Poor response to enbrel after 10 years old	1	1.5
Severe arthritis	1	1.5
Psoriatic arthropathy	1	1.5
Biologic agent		
Ustekinumab SC	29	43.3
Adalimumab SC	28	41.8
Secukinumab	5	7.5
Etanercept SC	2	3.0
Efalizumab	2	3.0
Infliximab IV	1	1.5

Table 2: Indications for biological treatment and types of drugs used

The median overall Psoriasis Area and Severity Index (PASI) score pre-treatment was 19.6 (interquartile range, IQR=27.1) compared to 3.0 (IQR=16.8) after treatment.

The best improvement was reported in patients treated with adalimumab (median score pre-treatment was 21.3 with IQR=26.5 and median score post-treatment was 2.5 with IQR 5.1).

This finding is consistent with other study that showed adalimumab being the most effective biological agent in treating plaque psoriasis².

Variable	Pre-				Post-			
	n	Median	IQR	(25th-75th)	n	Median	IQR	(25th-75th)
Overall PASI Score	67	19.6	27.1	(0.9 - 28.0)	23	3.0	16.8	(0.6 - 17.4)
Biologic agent								
Adalimumab SC	28	21.3	26.5	(2.7 - 29.2)	6	2.5	5.1	(0.0 - 5.1)
Ustekinumab SC	29	16.8	27.6	(0.0 - 27.6)	14	2.9	16.8	(0.6 - 17.4)
Efalizumab	2	10.0	17.6	(1.2 - 18.8)	2	9.3	16.2	(1.2 - 17.4)

Table 3: Pre- and post-treatment response for biologic treatment

References

1. Gooderham MJ, Papp KA, Lynde CW. Shifting the focus - the primary role of IL-23 in psoriasis and other inflammatory disorders. *J Eur Acad Dermatol Venereol.* 2018;32(7):1111-9.
2. Carrera CG, Dapavo P, Malagoli P, Naldi L, Arancio L, Gaiani F, et al. PACE study: real-life Psoriasis Area and Severity Index (PASI) 100 response with biological agents in moderate-severe psoriasis. *J Dermatolog Treat.* 2018;29(5):481-6.

CONCLUSION

Biological drugs are an effective treatment option, particularly for patients with severe disease and joint involvement who either do not respond or who are unable to undergo phototherapy and/or standard systemic therapies.

Take home message

Improving access should be prioritised to provide optimal care for patients with psoriasis.