## Generalized pustular psoriasis, multicenter study with 25 patients

Raquel Aragón Miguel (1), Alberto Fernández Bernáldez (2), Diana Ruiz Genao (3), Mariano Ara Martin (4), Antonio Sahuquillo Torralba (5), Isabel Martín González (1), Raquel Rivera Díaz (6) (1) Servicio Dermatología del Hospital Universitario de Getafe, (2) Servicio de Dermatología del Hospital Universitario de la Princesa, (3) Hospital Universitario Fundación Alcorcón, (4) Hospital Clínico Universitario Lozano Blesa Zaragoza, (5) Hospital Universitario y Politécnico La Fe de Valencia, (6) Hospital Universitario 12 de Octubre.

**Introduction:** generalized pustular psoriasis (GPP) is a severe and infrequent form of psoriasis, characterized by the generalized eruption of sterile superficial pustules. GPP can occur with or without systemic inflammation, with or without psoriasis vulgaris and can either be a relapsing (>1 episode) or persistent (>3 months) condition. Its natural history is still little known. No therapeutic agents have been approved for GPP to date in Europe or the United States.

**Results:** 25 patients were included, 19 women and 6 men between 23 and 89 years old. 12% of the patients were smokers. The presence of cardiovascular risk factors was the most common comorbidity observed. 10 patients had concomitant Psoriatic Arthritis (PsA).

Regarding previous treatments, 72% of the patients had received conventional systemic treatment. Three patients had received apremilast and eight patients had been treated with biologic drugs. Anti-TNF agents were used more frequently as the first biological treatment with only one patient first receiving ustekinumab. 90.9% of the biologicals were suspended due to lack of efficacy.

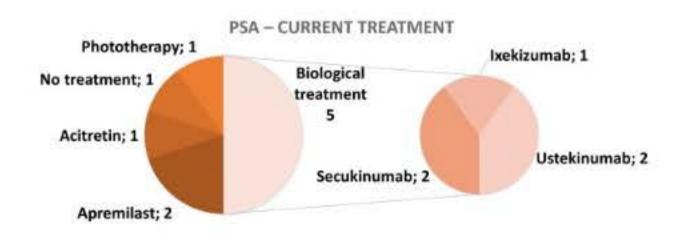
At the time of data collection, 24 patients were receiving some treatment. 48% of the patients were treating with a biological agent. Two patients received more than three different biological treatments. The median duration of current treatments was 27 months.

Sex	Women	19 (76%)	
	Men	6 (24%)	
Age	Range	23-89	
	Median	72	
Smoker		3 (12%)	
Comorbidity	Psoriatic Arthritis	10 (40%)	
	Diabetes	6 (24%)	
	Dyslipidemia	14 (56%)	
	Arterial hypertension	11 (44%)	
	Cancer	8 (32%)	

Conventional systemic treatment	9 (36%)		
Metotrexate	1 (4%)		
Acitretin	7 (28%)		
Phototherapy	1 (4%)		
Apremilast	4 (16%)		
Biological treatment	11 (44%)		
Adalimumab	1 (4%)		
Ustekinumab	3 (12%)		
Secukinumab	4 (16%)		
Ixekizumab	1 (4%)		
Brodalumab	1 (4%)		
Tildrakizumab	1 (4%)		
No systemic treatment	1 (4%)		

Material and Methods: retrospective study which included GPP patients from dermatology departament of six Spanish hospitals. Sociodemographic data (age, sex, comorbidities), previous treatments, reason for suspension and current treatment were collected. Efficacy was evaluated by Physician's Global Assessment scale (PGA 0-4).

Previous treatments		Reason for suspension						
		Lack of efficacy	Intolerance		Toxicity	Another	No data	
Conventional systemic treatment	37	1	3	2	4	1	13	
Metotrexate	12		4	1	2	1	4	
Acitretin	9	( 0	4	0	2	0	3	
Cyclosporine	12		4	1	0	0	7	
Phototherapy	4		1	0	1	0	2	
Apremilast	3		1	1	0	1	0	
Biological treatment	12	1	0	1	0	0	0	
Adalimumab	3		2	1	0	0	0	
Etanercept	5		4	0	0	0	1	
Infliximab	2		2	0	0	0	0	
Ustekinumab	2	3	2	0	0	. 0	0	



**Conclusions:** GPP is a rare and serious pathology for which the EMA has not yet approved no treatment. In our series it was observed that the patient with GPP is predominantly a non-smoker woman, in the 60's and with PsA. 96% of patients needed systemic treatment to control their disease, 76% requiring more than one, and almost half of them being a biological.