

**PSORIASIS. Una
enfermedad
sistémica**

MÁS PROFUNDA QUE LA PIEL

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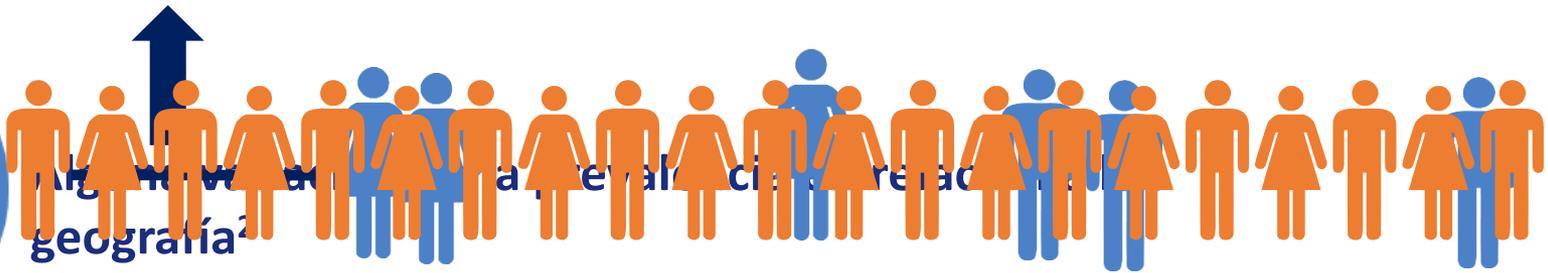
CONFLICT OF INTEREST

- Dr. Pablo Coto-Segura is a consultant and/or speaker, has received speaking fees and/or unrestricted research and/or educational grants and/or conducted clinical trials of Abbvie (former Abbot laboratories), Celgene, Gebro, Lilly, MSD, Novartis, Pfizer, Janssen-Cilag Pharmaceuticals and UCB pharma.



Psoriasis Prevalencia mundial 2%

Tasas más altas notificadas en las latitudes del norte³



A menudo aparece en la franja de edad de 16-25

... pero se puede desarrollar a cualquier edad⁴

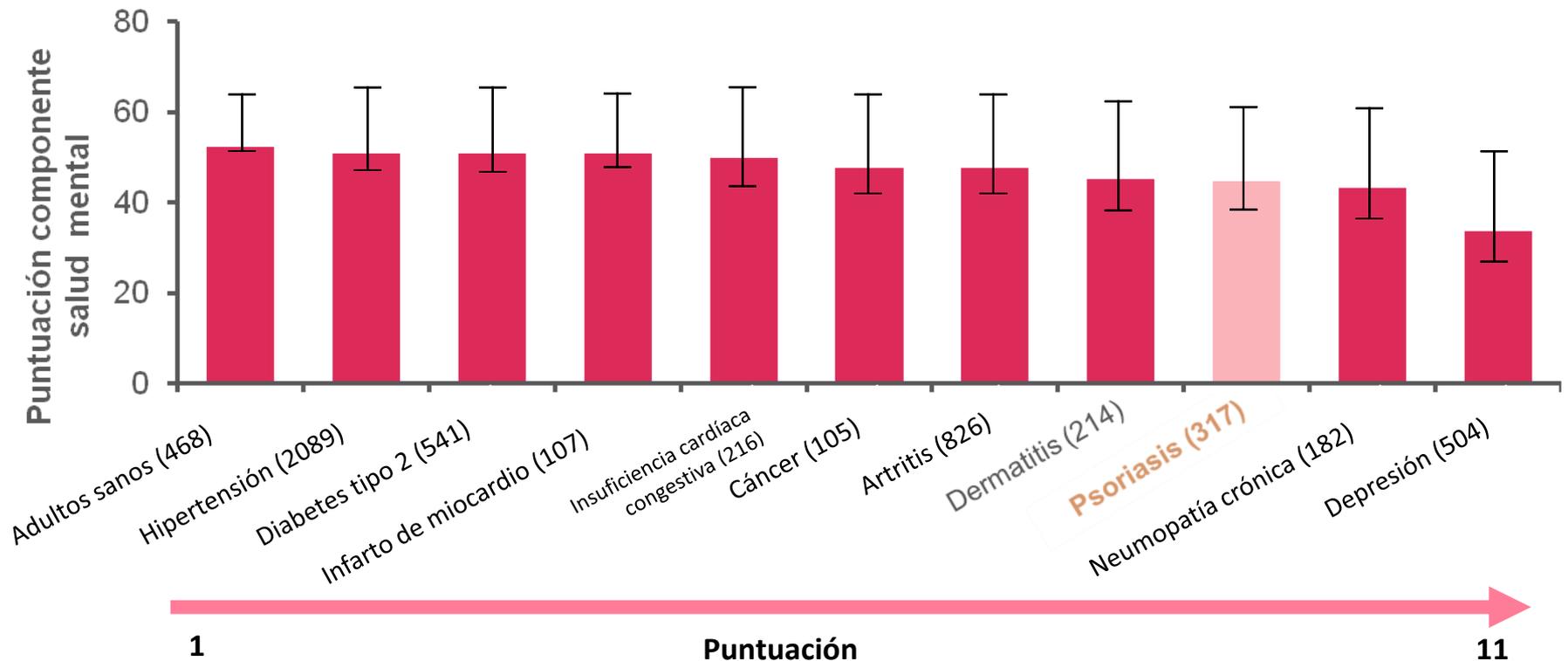
Las tasas son diferentes entre los por personas de raza blanca que las de otras etnias³

• 1. Christophers E. *Clin Experiment Dermatol* 2001;26:314–20. 2. Parisi R et al. *J Invest Dermatol* 2013;133,377–85. 3. Raychoudhuri SP and Farber EM. *JEADV* 2001;15:16–17. 4. Henseler T and Christophers E. *J Am Acad Dermatol* 1985;13:450–6.

El impacto psicológico de la psoriasis es similar al de otras enfermedades crónicas

Enfermedades evaluadas con el **componente de salud mental del cuestionario SF-36.**

•Una puntuación cercana a **1** indica un mejor funcionamiento.

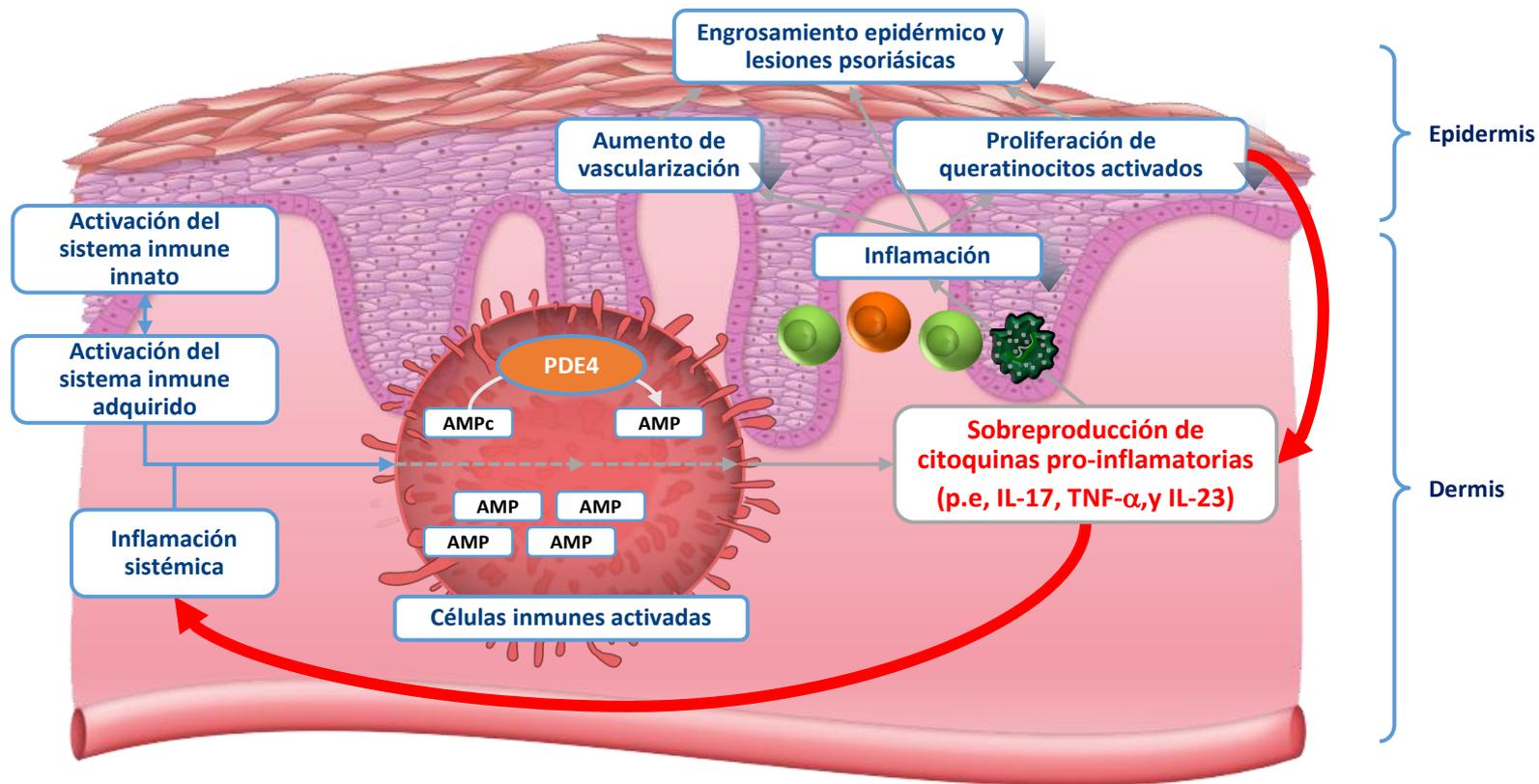


Psoriasis: Efectos en la calidad de vida

Los efectos de la psoriasis en la calidad de vida de los pacientes es similar a la de enfermedades como el cáncer, ataques al corazón, artritis, diabetes tipo 2 y depresión.



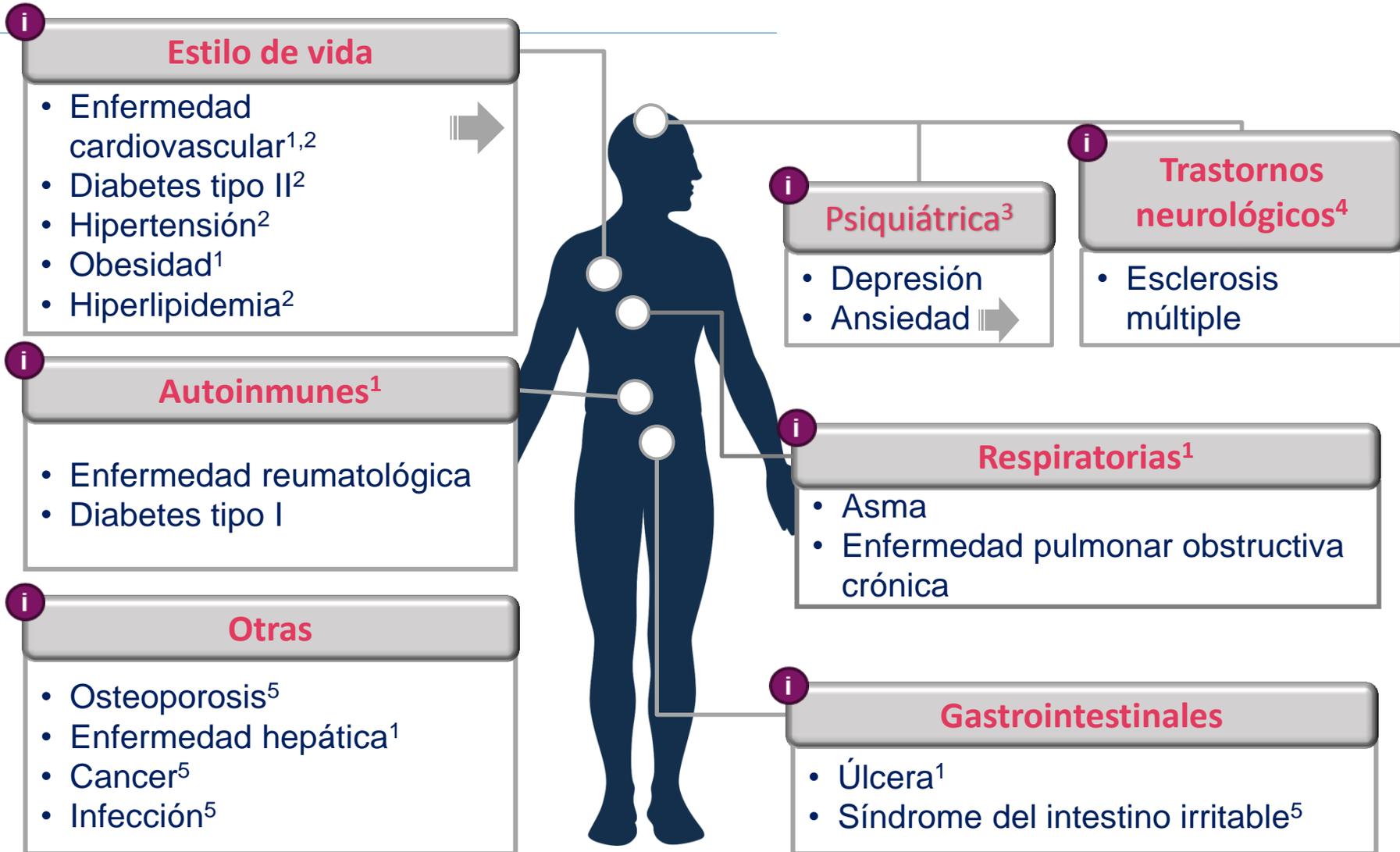
La sobreproducción de **mediadores pro-inflamatorios** explica muchos signos y síntomas de la psoriasis



PSO=psoriasis; PDE4=fosfodiesterasa 4; AMPc=adenosina monofosfato cíclico; AMP=adenosina monofosfato

1. Pietrzak AT et al. *Clin Chim Acta* 2008;394:7-21. 2. Coimbra S et al. *Int J Dermatol* 2012;51:389-95. 3. Boniface K et al. *J Immunol* 2005;174:3695-702; 4. Detmar M et al. *J Exp Med* 1994;180:1141-6. 5. Nakamura M et al. *Br J Dermatol* 2003;149:718-30. 6. Ash ZR et al. *Ann Rheum Dis* 2012;71:553-6; 8. Nestle FO et al. *N Engl J Med* 2009;361:496-509.

La psoriasis está asociada a muchas **comorbilidades**





SHORT REPORT

Psoriasis and hypertension: a case-control study

S. Armesto,[†] P. Coto-Segura,[‡] C.G. Osuna,[‡] P.M. Cambor,[§] J. Santos-Juanes^{‡,¶,*}

Abstract

Background Several studies stated that patient with psoriasis carried an increased risk of psoriasis but some studies did not demonstrate this association.

Objectives The aim of this study was to evaluate the prevalence of hypertension in psoriasis based on a sample of Spanish population.

Methods This was a hospital-based case-control study involving 661 psoriatic patients (cases) and 661 control matched by gender and age. Meta-analysis of the previous studies was made.

Results The prevalence of hypertension was significantly higher in psoriasis patients than controls (30.3%, 21.3%, respectively, $P < 0.001$). In a multivariate analysis, hypertension was associated with psoriasis after controlling for age, gender, diabetes, obesity and smoking (OR = 1.44, 95% confidence interval: 1.07–1.94).

Conclusion The results of this study support the association between psoriasis and hypertension.

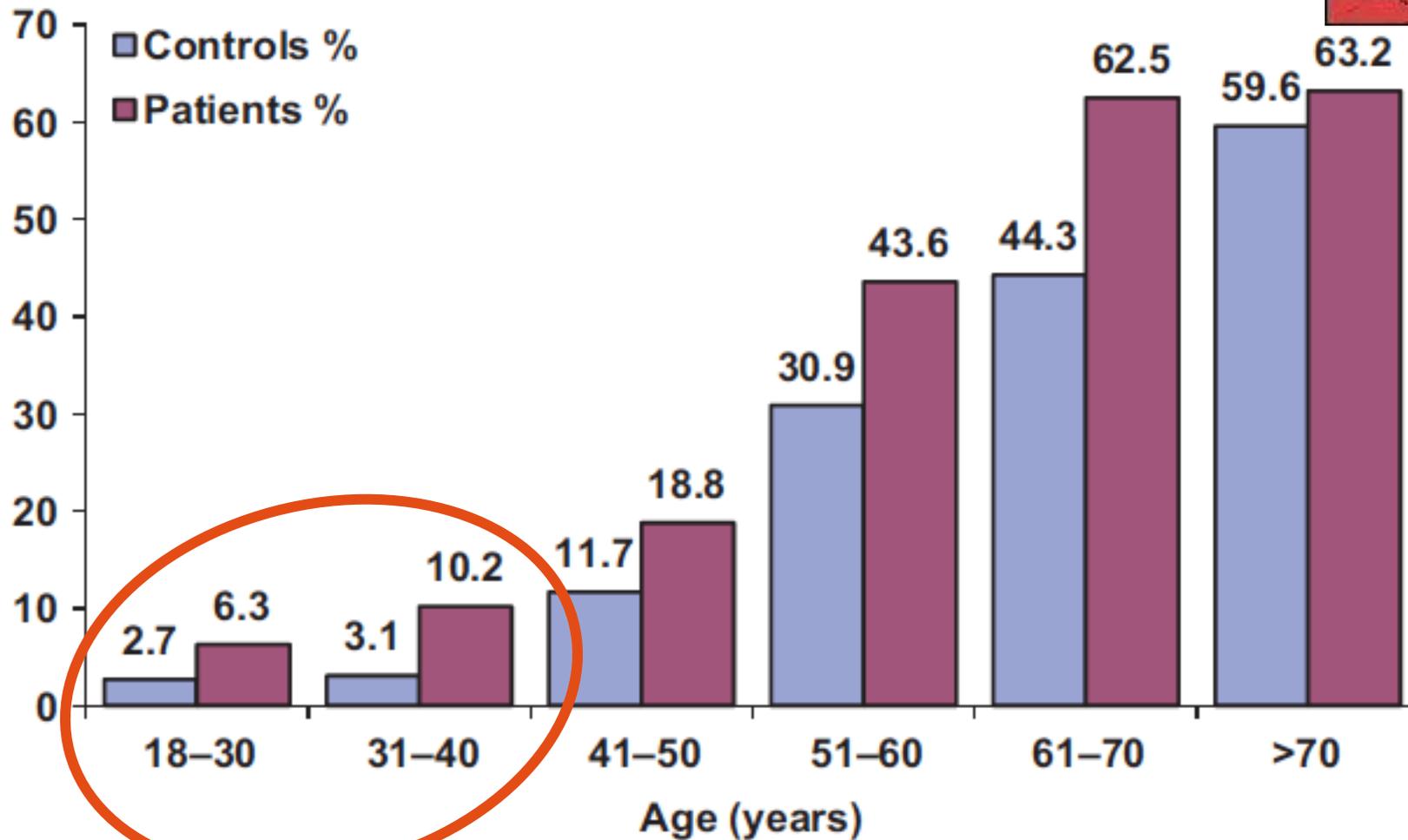
Received: 6 December 2010; Accepted: 20 April 2011



SHORT REPORT

Psoriasis and hypertension: a case-control study

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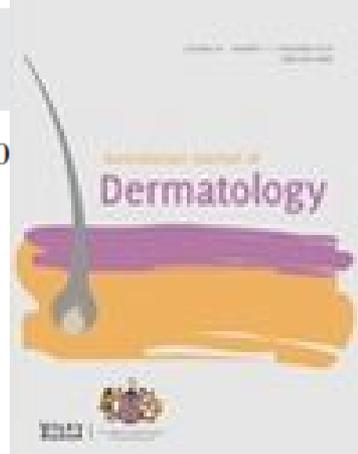
Psoriasis Vulgaris with or without Arthritis and Independent of Disease Severity or Duration Is a Risk Factor for Hypercholesterolemia

Jorge Santos-Juanes^a Pablo Coto-Segura^b Ivan Fernández-Vega^a
 Susana Armesto^d Pablo Martínez-Cambor^{c, e}

tion. **Methods:** A prospective hospital-based study was conducted. A total of 661 Caucasian patients with chronic plaque Ps and 661 sex- and age-matched controls were enrolled.

Table 2. Univariate and multivariate analysis for abnormal lipid levels (logistic regression models) controlled for gender, age, BMI, alcohol consumption, current smoking, HT and DM

Lipid level	Controls, n (%)	Ps, n (%)	Univariate analysis		Multivariate analysis	
			OR (95% CI)	p value	OR (95% CI)	p value
TCh >200 mg/dl	293 (44.3)	352 (53.3)	1.429 (1.150–1.777)	0.001	1.406 (1.115–1.773)	0.004
TGs >150 mg/dl	142 (21.5)	168 (25.4)	1.245 (0.964–1.067)	0.105	1.041 (0.783–1.385)	0.780
LDL >130 mg/dl	253 (38.3)	310 (46.9)	1.424 (1.144–1.773)	0.002	1.375 (1.088–1.738)	0.003
HDL <40 mg/dl	55 (8.3)	84 (12.7)	0.620 (0.433–0.888)	0.009	0.881 (0.599–1.297)	0.522



Psoriasis and type 2 diabetes risk among psoriatic patients in a Spanish population

Susana Armesto,¹ Jorge Santos-Juanes,² Cristina Galache-Osuna,² Pablo Martinez-Cambor⁵
 Elicer Coto⁴ and Pablo Coto-Segura²

Table 2. Psoriatic patients also suffered more from DM2 than non-psoriatic patients (12% vs. 6.1%, $P < 0.001$, OR: 2.11 (1.59–3.20)). After adjustment for age, sex, BMI, HT, DL, smoking and alcohol consumption this difference remained significant ($P = 0.001$, OR = 2.138 (1.577–3.530)).

Alcohol consumption	232 (35.1)	223 (33.7)	0.60;1.06 (0.84–1.34)
BMI >30	182 (27.5)	91 (13.8)	<0.001; 2.38 (1.78–3.18)
DL	256 (38.7)	287 (43.4)	0.08;0.83 (0.66–1.03)
HT	200 (30.3)	141 (21.3)	<0.001; 1.60 (1.24–2.07)
DM2	79 (12)	40 (6.1)	<0.001; 2.11 (1.59–3.20)
IC	43 (6.5)	33 (5)	0.23; 1.32 (0.81–2.17)



Psoriasis, psoriatic arthritis and type 2 diabetes mellitus: a systematic review and meta-analysis

P. Coto-Segura,^{1,2} N. Eiris-Salvado,^{1,2} L. González-Lara,¹ R. Queiro-Silva,^{2,3} P. Martínez-Cambor,⁴ C. Maldonado-Seral,¹ B. García-García,¹ L. Palacios-García,¹ S. Gomez-Bernal,¹ J. Santos-Juanes¹ and E. Coto^{2,5}

calculated. Forty-four observational studies (in 37 articles) were identified for the final analysis. The pooled OR from random-effects analysis was determined to be 1.76 (95% CI 1.59–1.96). The highest risk was for patients suffering from PsA (OR 2.18, 95% CI 1.36–3.50). We also observed a dose effect in the risk of suffering from type 2 diabetes mellitus, as patients considered as having severe psoriasis had higher risk (OR 2.10, 95% CI 1.73–2.55) than the pooled OR. We



Study or Subgroup	Case		Control		Weight	Odds Ratio	M-H, Random, 95% CI
	Events	Total	Events	Total			
Tam 2008	19	102	2	82	0.4%	9.16 [2.07, 40.59]	
Alexander 2001	8	69	3	64	0.5%	2.67 [0.68, 10.53]	
Warnecke 2011	10	62	6	124	0.7%	3.78 [1.31, 10.95]	
Nisa and Qazi 2010	27	150	8	150	1.0%	3.90 [1.71, 8.89]	
Warnecke 2011	21	100	10	100	1.1%	2.39 [1.06, 5.39]	
Brownstein 1966	18	94	19	94	1.2%	0.93 [0.46, 1.92]	
Takahashi 2010	28	151	14	154	1.3%	2.28 [1.15, 4.52]	
Driessen 2009	14	107	35	396	1.4%	1.55 [0.80, 3.01]	
Naldi 2008	21	560	22	690	1.5%	1.18 [0.64, 2.17]	
Tseng 2013	62	371	25	370	1.8%	2.77 [1.70, 4.52]	
Armesto 2012	79	661	40	661	2.0%	2.11 [1.42, 3.13]	
Gisondi 2007	65	338	70	334	2.1%	0.90 [0.62, 1.31]	
Al-Mutairi 2010	54	129	294	1835	2.1%	3.77 [2.60, 5.47]	
Sommer 2006	68	581	61	1044	2.2%	2.14 [1.49, 3.07]	
Xu 2012	72	400	86	1000	2.2%	2.33 [1.66, 3.27]	
Li 2012	52	543	1638	24146	2.4%	1.46 [1.09, 1.95]	
Qureshi 2009	60	1813	1500	76248	2.4%	1.71 [1.31, 2.22]	
Xiao 2009	162	1619	107	1521	2.5%	1.47 [1.14, 1.90]	
Cohen 2007	95	340	1298	6643	2.5%	1.60 [1.25, 2.04]	

Total (95% CI) 557697 5186485 100.0% 1.76 [1.59, 1.96]

Total events 34547 229379

Heterogeneity: $\tau^2 = 0.10$; $\chi^2 = 2174.24$, $df = 43$ ($P < 0.00001$); $I^2 = 98\%$

Test for overall effect: $Z = 10.56$ ($P < 0.00001$)

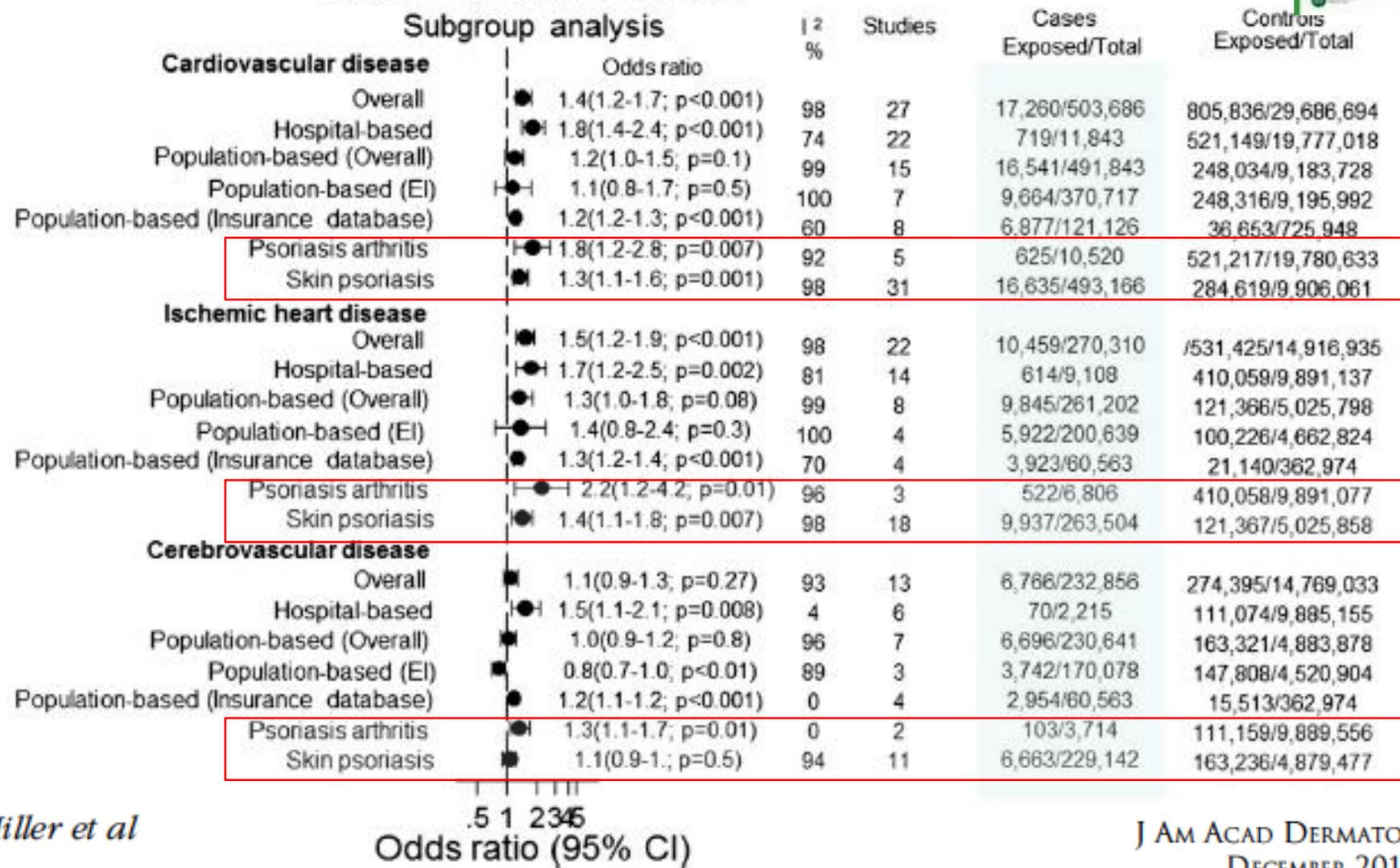
0.1 0.2 0.5 1 2 5 10
 Favours control Favours cases

Neimann 2006	272	3854	457	14065	2.7%	2.26 [1.94, 2.64]
Schmitt 2010	421	3147	357	3147	2.7%	1.21 [1.04, 1.40]
Mehta 2011	270	3603	737	14330	2.7%	1.49 [1.29, 1.73]
Vena 2010	299	3516	1257	17580	2.8%	1.21 [1.06, 1.38]
Han 2006	346	3066	895	12264	2.8%	1.62 [1.42, 1.84]
Brauchli 2008	626	32856	435	32856	2.8%	1.45 [1.28, 1.64]
Langan 2012	454	4065	3445	40650	2.8%	1.36 [1.22, 1.51]
Kaye 2008	1198	44164	4482	219784	2.8%	1.34 [1.26, 1.43]
Cohen* 2008	2324	16850	3556	48677	2.9%	2.03 [1.92, 2.15]
Cohen 2008	2326	16851	4013	74987	2.9%	2.83 [2.68, 2.99]
Solomon 2010	1564	40346	10732	442033	2.9%	1.62 [1.54, 1.71]
Kimball 2008	2605	25556	8336	101507	2.9%	1.27 [1.21, 1.33]
Shapiro 2007	1959	46095	58285	1579037	2.9%	1.16 [1.11, 1.21]
Kimball 2008	2750	20614	9398	82456	2.9%	1.20 [1.14, 1.25]
Azfar 2012	3992	108132	14537	430716	2.9%	1.10 [1.06, 1.14]
Augustin 2010	4118	33981	78738	1310090	2.9%	2.16 [2.09, 2.23]
Neimann 2006	5564	127706	15161	465252	2.9%	1.35 [1.31, 1.40]
Total (95% CI)	557697	5186485	100.0%	1.76 [1.59, 1.96]		
Total events	34547	229379				
Heterogeneity: $\tau^2 = 0.10$; $\chi^2 = 2174.24$, $df = 43$ ($P < 0.00001$); $I^2 = 98\%$						
Test for overall effect: $Z = 10.56$ ($P < 0.00001$)						

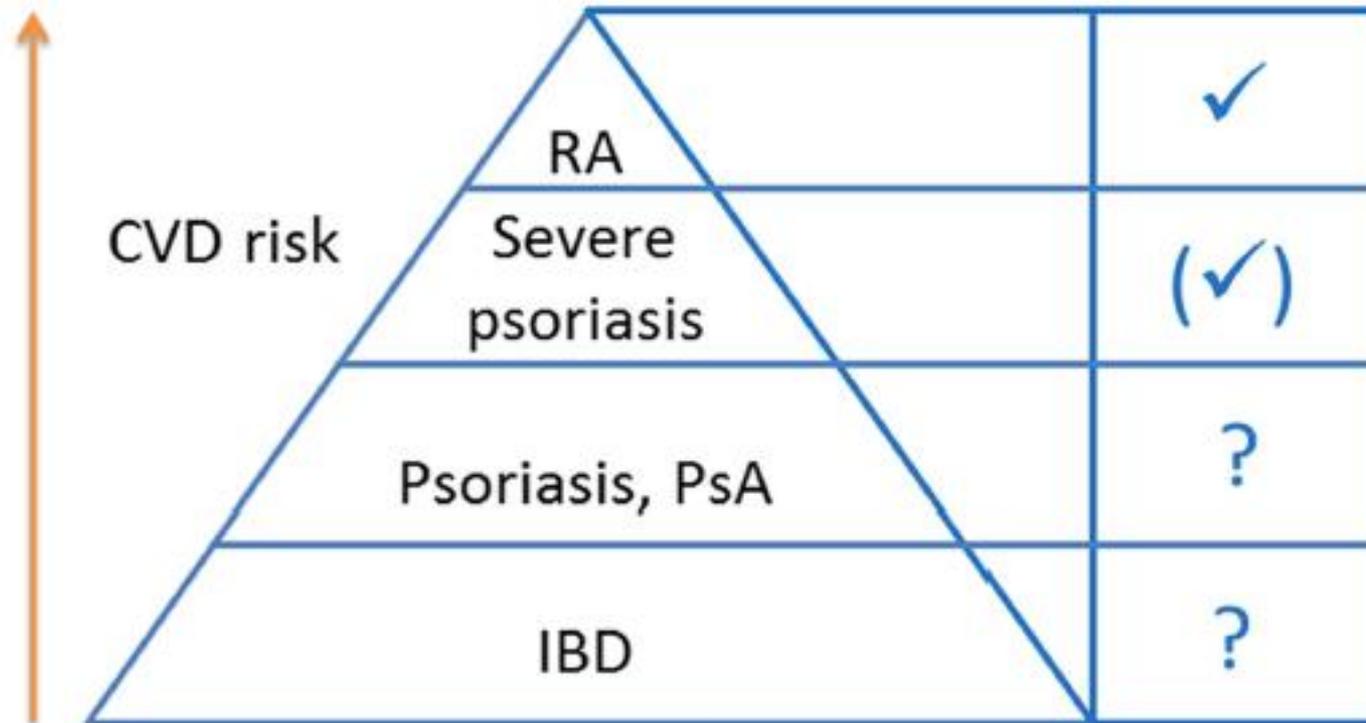
0.1 0.2 0.5 1 2 5 10
 Favours control Favours cases

Meta-analysis of psoriasis, cardiovascular disease, and associated risk factors

Cardiovascular disease



Include in
CVD risk score



conditions are associated with CVD. From available evidence, it is clear that rheumatoid arthritis (RA) presents an independent risk factor for CVD and requires a risk multiplier as introduced in the JBS3 guidelines. The present study suggests relative risk levels may be similarly elevated in patients with psoriasis receiving disease-modifying antirheumatic drugs, which makes a case to risk-score patients with severe psoriasis in a similar way to those with RA. Future guidelines will look at this. It is also clear that more evidence is needed for patients with psoriatic arthritis (PsA).

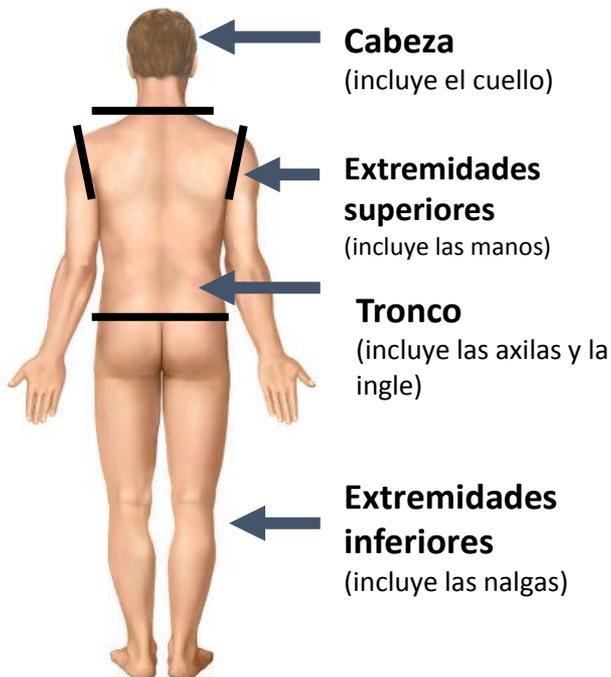
¿cuál debe ser nuestro objetivo?



Índice de intensidad y extensión de la psoriasis (PASI)

El índice PASI aúna la evaluación de la intensidad de las lesiones y el área afectada en una única puntuación.

4 zonas corporales

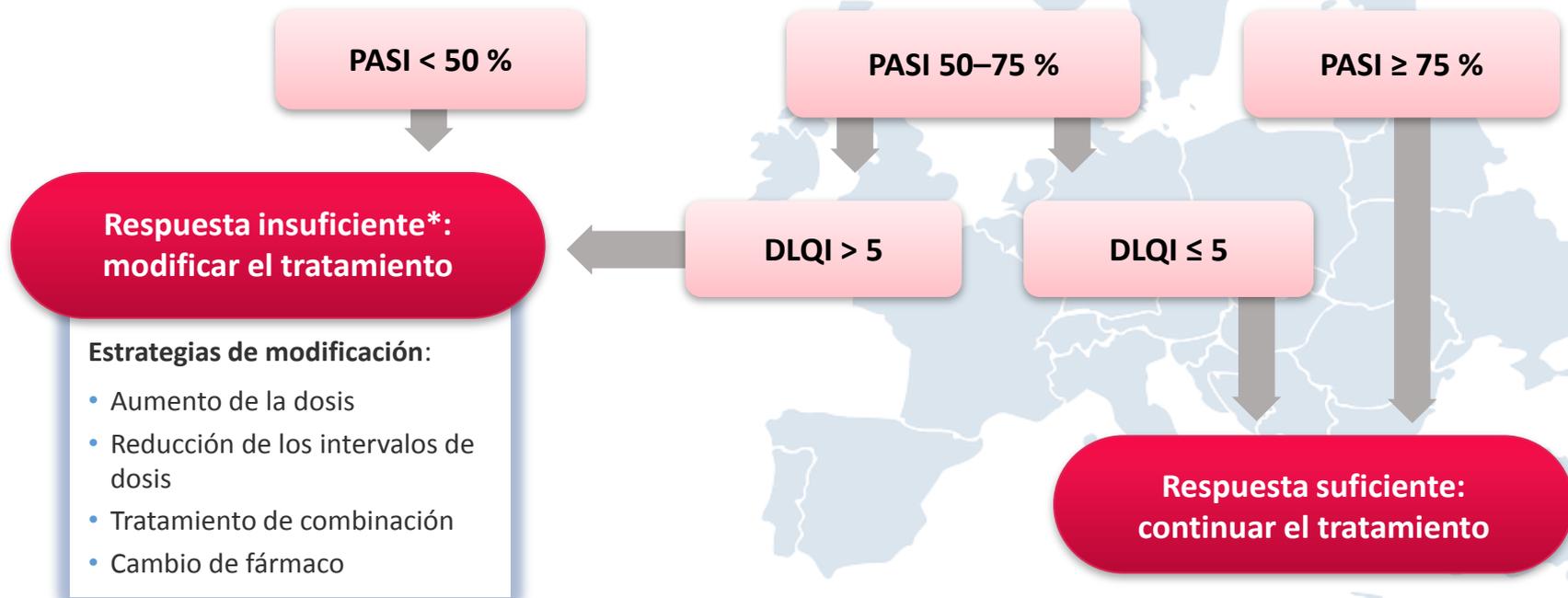


Clasificación de las placas psoriásicas

Intensidad	Ausencia Puntuación 0	Leve Puntuación 1	Moderado Puntuación 2	Intenso Puntuación 3	Muy intenso Puntuación 4
Eritema					
Induración					
Descamación					

Objetivos del tratamiento propuestos para la psoriasis de conformidad con las Directrices Europeas

Para los pacientes **es importante presentar una piel sin placas y una mejora de la calidad de vida** y ambas ideas se reflejan en los objetivos de tratamiento actuales:



En un paciente con Psoriasis grave (PASI >20). PASI=40

¿Es PASI75 un buen desenlace?



PASI 75

- PASI 10
- PGA 3-4
- Moderate
- No controlable con tópicos
- ¿DLQI?



PASI 90

- PASI 4
- PGA 0-1
- Clear/Almost clear
- Controlable con tópicos
- ¿DLQI?

PASI BASAL= 23



PASI 75 (PASI= 5)



PASI 90 (PASI = 1.8)



PASI BASAL = 26



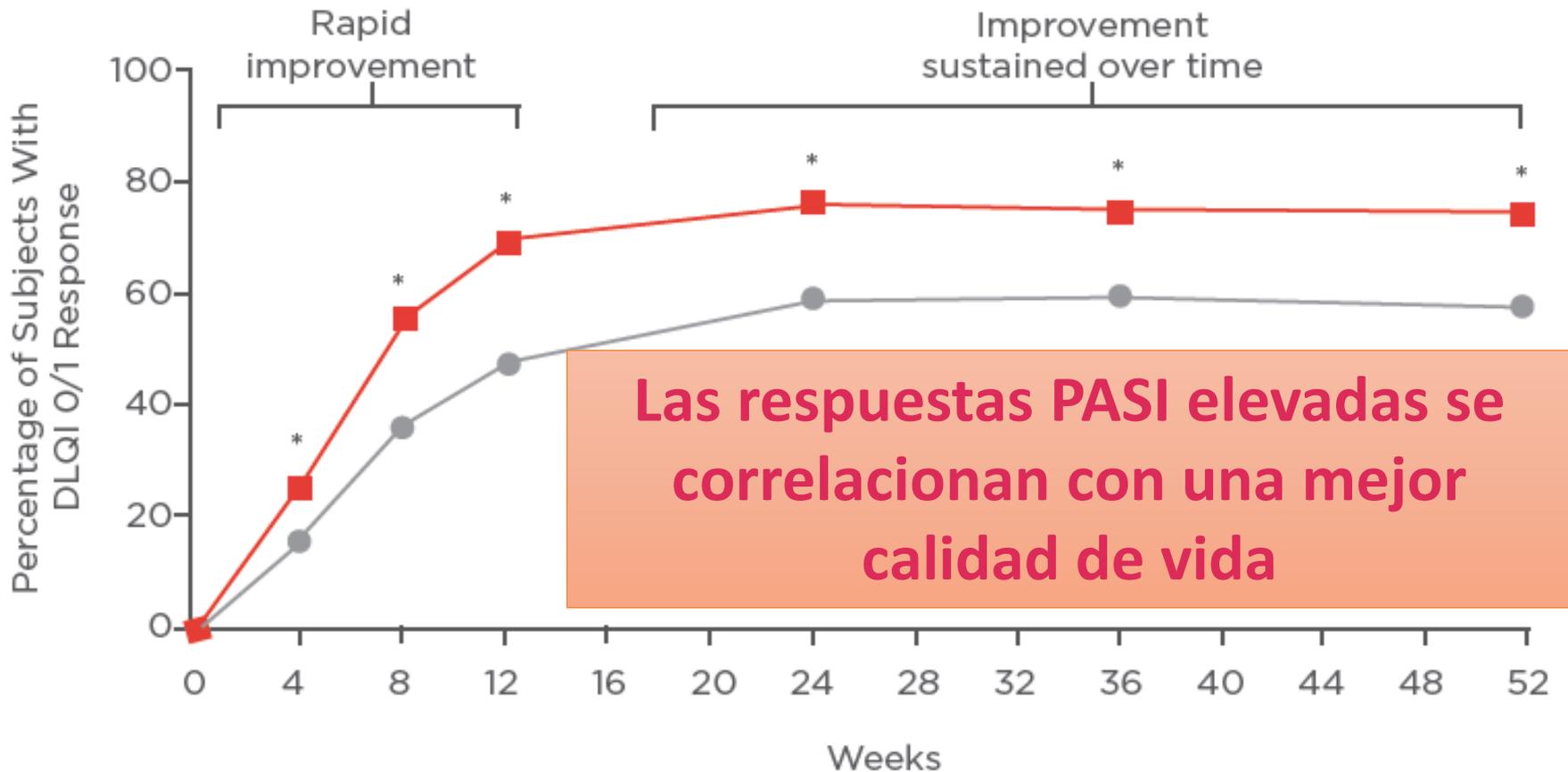
PASI 75 (PASI=4)



PASI 90 (PASI = 1.2)



Achieving almost clear skin (PASI 90) correlates with a better QoL* outcome than PASI 75



PASI 90 were estimated to have a 50% higher likelihood of achieving a DLQI 0/1 response than those who achieved PASI 75-89.

Spanish Evidence-Based Guidelines on the Treatment of Psoriasis With Biologic Agents, 2013. Part 1: On Efficacy and Choice of Treatment☆



The ideal outcome for psoriasis treatment is to achieve and maintain in the long term complete or almost complete clearing (PGA \leq 1, with minimum BSA involvement) or, failing that, a minimal and localized affected area that can be controlled with topical therapy (PGA \leq 2, PASI < 5).¹⁰

The therapeutic goal during the induction phase is to achieve at least a PASI 75 response and an optimal response

Meta-analyses of efficacy parameters based on patient evaluation (patient-reported outcomes) and non-PASI outcomes do not adequately differentiate between the biologic agents currently available for the treatment of psoriasis.⁵⁸ If the achievement of a DLQI score of 0 or 1 is used as a therapeutic goal, a PASI 90 response or better correlates much more closely with this objective than a PASI 75 response,⁵⁹ and the improvement in DLQI compared to baseline is also higher in patients with an optimal response.⁶⁰



CONCLUSIONES

- La Psoriasis es una enfermedad que afecta **todas las esferas de la vida**
- Se asocia a un riesgo aumentado de **comorbilidades**
 - ✓ Enfermedad Psoriásica
- Nuevos tratamientos permiten redefinir los **objetivos terapéuticos:**
 - PASI 90
 - PASI ABSOLUTO (<3)
 - DLQI 0/1
 - REDUCCIÓN PICOR