

Biologic Recapture Failure Rates

Biologic	Inhibition	Retreatment Week	PASI 75	PASI 90	PASI 100	PGA <2	IGA <2
Adalimumab (Humira) ¹	TNFalpha	16	12.8%				
Infliximab (Remicade) ²	TNFalpha	26	26.2%	57.9%			
Infliximab (Remicade) ²	TNFalpha	50	30.1%	69.7%			
Etanercept (Enbrel) ³	TNFalpha	24				17.3%	
Certolizumab (Cimzia) ⁴ 200 mg	TNFalpha	12	32.4%	64.7%			
Certolizumab (Cimzia) ⁴ 400 mg	TNFalpha	12	13.5%	51.4%			
Dupilumab (Dupixent)	IL-4 and IL-13	52					~50%
Risankizumab (Skyrizi)	IL-23A	16				16.3%	
Guselkumab (Tremfya) ⁵	IL-23	24-28		12.4%			
Ixekizumab (Taltz) ⁶ q2 weeks then q4weeks	IL-17A	24	13.0%	36.6%		29.3%	
Ixekizumab (Taltz) ⁶ q4 weeks then q4weeks	IL-17A	24	4.9%	21.6%		17.7%	
Secukinumab (Cosentyx) ⁷	IL-17A	12	5.2%	29.7%	61.6%		
Brodalumab (Siliq) ⁸	IL-17A	16	7.9%	8.8%	9.5%		
Ustekinumab (Stelara) ⁹ 45mg	IL-12 and IL-23	12	17.1%			20.4%	
Ustekinumab (Stelara) ⁹ 90mg	IL-12 and IL-23	12	12.7%			13.8%	

Adapted from Adapted from Mark Lebwohl, MD. Fall Clinical COVID-19 Webinar. *COVID-19: Impact of Biologics and Other Dermatologic Therapies Part I*. March 19, 2020.

Biologic Recapture Failure Rates

References

1. Gordon, K., Gottlieb, A., Langely, R., van de Kerkhof, P., Belasco, K., Sundaram, M., Okun, M. and Serra, L. (2015), Adalimumab retreatment successfully restores clinical response and health-related quality of life in patients with moderate to severe psoriasis who undergo therapy interruption. *J Eur Acad Dermatol Venereol*, 29: 767-776. doi:10.1111/jdv.12677
2. Menter A, Feldman SR, Weinstein GD, et al. A randomized comparison of continuous vs. intermittent infliximab maintenance regimens over 1 year in the treatment of moderate-to-severe plaque psoriasis. *Journal of the American Academy of Dermatology*. 2007;56(1). doi:10.1016/j.jaad.2006.07.017
3. Ortonne, J.-P., Taïeb, A., Ormerod, A., Robertson, D., Foehl, J., Pedersen, R., Molta, C. and Freundlich, B. (2009), Patients with moderate-to-severe psoriasis recapture clinical response during re-treatment with etanercept. *British Journal of Dermatology*, 161: 1190-1195. doi:10.1111/j.1365-2133.2009.09238.x
4. Reich, K., Ortonne, J.-P., Gottlieb, A., Terpstra, I., Coteur, G., Tasset, C. and Mease, P. (2012), Successful treatment of moderate to severe plaque psoriasis with the PEGylated Fab' certolizumab pegol: results of a phase II randomized, placebo-controlled trial with a re-treatment extension. *British Journal of Dermatology*, 167: 180-190. doi:10.1111/j.1365-2133.2012.10941.x
5. Gordon K, Menter A, Ferris L, Martorell A, et al. Consistency of response (PASI 90 or 100 and IGA 0 or 0/1) in patients with moderate to severe psoriasis treated with guselkumab: Results from the VOYAGE 1 and 2 trials. *Journal of the American Academy of Dermatology*. 2018;79(3) Supplement 1: p. AB87. doi:10.1016/j.jaad.2018.05.377
6. Blauvelt, A., Papp, K., Sofen, H., Augustin, M., Yosipovitch, G., Katoh, N., Mrowietz, U., Ohtsuki, M., Poulin, Y., Shrom, D., Burge, R., See, K., Mallbris, L. and Gordon, K. (2017), Continuous dosing versus interrupted therapy with ixekizumab: an integrated analysis of two phase 3 trials in psoriasis. *J Eur Acad Dermatol Venereol*, 31: 1004-1013. doi:10.1111/jdv.14163
7. Blauvelt A, Langley R, Szepietowski J, Sirgurgeirsson B, et al. Secukinumab withdrawal leads to loss of treatment responses in a majority of subjects with plaque psoriasis with retreatment resulting in rapid regain of responses: A pooled analysis of two phase 3 trials. *Journal of the American Academy of Dermatology*. 2016;74(5) Supplement 1: p. AB273. doi:10.1016/j.jaad.2016.02.1055
8. Armstrong A, Blauvelt A, Wu J, Keegan B, et al. Retreatment with brodalumab results in high response rates in patients with psoriasis after treatment interruption. *Journal of the American Academy of Dermatology*. 2018;79(3) Supplement 1: p. AB246. doi:10.1016/j.jaad.2018.05.978
9. Griffiths CEM, Gordon K, Szapary PO, Li S, Fakharzadeh S and Papp K (2011), P-55 Response to retreatment with ustekinumab after withdrawal from therapy in patients with moderate to severe psoriasis: results from the PHOENIX 1 and ACCEPT phase 3 clinical trials, Bristol Cup Posters. *British Journal of Dermatology*, 165: 43. doi:10.1111/j.1365-2133.2011.10277.x