



# THE NEXT WAVE

ADVANCES IN TREATMENT OF  
MODERATE TO SEVERE PSORIASIS

**ADDITIONAL RESOURCES**



# SHORT-TERM HEAD-TO-HEAD CLINICAL TRIALS AMONG BIOLOGICS USED FOR PSORIASIS

Head-to-head clinical trials can be highly informative when choosing among multiple biologic options for the treatment of moderate to severe psoriasis. To date, only relatively short-term (varying from 12 weeks for most studies and up to 52 weeks in one study) head-to-head comparisons among different agents are available, and these studies do not always utilize uniform endpoints. Some studies use 75% improvement in Psoriasis Area and Severity Index (PASI 75), while others use 90% improvement in PASI (PASI 90) or even 100% improvement in PASI (PASI 100). In addition, the time of the endpoints varies from study to study. Nevertheless, these relatively short-term, head-to-head studies help determine comparative efficacy among the different agents. This table shows the results of the currently available head-to-head clinical trials of biologic agents for the treatment of patients with moderate to severe psoriasis.

Greater Short-Term Efficacy	
Ustekinumab vs etanercept	Ustekinumab
Secukinumab vs etanercept	Secukinumab
Secukinumab vs ustekinumab	Secukinumab
Ixekizumab vs etanercept	Ixekizumab
Guselkumab vs adalimumab	Guselkumab
Brodalumab vs ustekinumab	Brodalumab
Ixekizumab vs ustekinumab	Ixekizumab

All doses used are FDA-approved doses. Etanercept dose is the high-dose 50 mg twice weekly.

Griffiths CE, et al. *N Engl J Med*. 2010; 362:118-128.

Langley RG, et al. *N Engl J Med*. 2014 371: 326-338.

Blauvelt A, et al. *J Am Acad Dermatol*. 2017; 76:60-69.

Griffiths CEM, et al. *Lancet*. 2015; 386:541-551.

Blauvelt A, et al. *J Am Acad Dermatol*. 2017; 76:405-417.

Lebwohl M et al. *N Engl J Med*. 2015; 373:1318-1328.

Reich K et al. *Br J Dermatol*. 2017 May 19. doi: 10.1111/bjd.15666. [Epub ahead of print]

# REFERENCES

- Armstrong AW, Siegel MP, Bagel J, et al. From the Medical Board of the National Psoriasis Foundation: Treatment targets for plaque psoriasis. *J Am Acad Dermatol*. 2017;76(2):290-298.
- Blauvelt A, Papp KA, Griffiths CE, et al. Efficacy and safety of guselkumab, an anti-interleukin-23 monoclonal antibody, compared with adalimumab for the continuous treatment of patients with moderate to severe psoriasis: Results from the phase III, double-blinded, placebo- and active comparator-controlled VOYAGE 1 trial. *J Am Acad Dermatol*. 2017; 76(3):405-417.
- Blauvelt A, Reich K, Tsai TF, Tying S, et al. Secukinumab is superior to ustekinumab in clearing skin of subjects with moderate-to-severe plaque psoriasis up to 1 year: Results from the CLEAR study. *J Am Acad Dermatol*. 2017;76(1):60-69.
- Doherty S, Van Voorhees A, Lebwohl MG, Korman NJ, Young MS, Hsu S, National Psoriasis Foundation. National Psoriasis Foundation consensus statement on screening for latent tuberculosis infection in patients with psoriasis treated with systemic and biologic agents. *J Am Acad Dermatol*. 2008;59(2):209-217.
- Dommasch E, Abuabara K, Shin DB, Nguyen J, Troxel AB, Gelfand JM. The risk of infection and malignancy with tumor necrosis factor antagonists in adults with psoriatic disease: A systematic review and meta-analysis of randomized controlled trials. *J Am Acad Dermatol*. 2011;64(6):1035-1050.
- Dommasch E, Gelfand JM. Is there truly a risk of lymphoma from biologic therapies? *Dermatol Ther*. 2009;22(5):418-430.
- Gordon KB, Duffin KC, Bissonnette R, et al. A phase 2 trial of guselkumab versus adalimumab for plaque psoriasis. *N Engl J Med*. 2015;373(2):136-144.
- Gordon KB, Papp KA, Langley RG, et al. Long-term safety experience of ustekinumab in patients with moderate to severe psoriasis (Part II of II): results from analyses of infections and malignancy from pooled phase II and III clinical trials. *J Am Acad Dermatol*. 2012;66(5):742-751.
- Griffiths CE, Reich K, Lebwohl M, et al. UNCOVER-2 and UNCOVER-3 investigators. Comparison of ixekizumab with etanercept or placebo in moderate-to-severe psoriasis (UNCOVER-2 and UNCOVER-3): results from two phase 3 randomised trials. *Lancet*. 2015;386:541-551.
- Griffiths CE, Strober BE, van de Kerkhof P, et al. Comparison of ustekinumab and etanercept for moderate-to-severe psoriasis. *N Engl J Med*. 2010;362:118-128.
- Hare NC, Hunt DP, Venugopal K, et al. Multiple sclerosis in the context of TNF blockade and inflammatory bowel disease. *QJM*. 2014;107(1):51-55.
- Hugh J, Van Voorhees AS, Nijhawan RI, et al. From the Medical Board of the National Psoriasis Foundation: the risk of cardiovascular disease in individuals with psoriasis and the potential impact of current therapies. *J Am Acad Dermatol*. 2014;70(1):168-177.
- Langley RG, Elewski BE, Lebwohl M, et al. Secukinumab in plaque psoriasis--results of two phase 3 trials. *N Engl J Med*. 2014;371(4):326-338.
- Lebwohl M, Strober B, Menter A, et al. Phase 3 studies comparing brodalumab with ustekinumab in psoriasis. *N Engl J Med*. 2015;373:1318-1328.

## REFERENCES (CONT.)

Menter A, Gottlieb A, Feldman SR, et al. Guidelines of care for the management of psoriasis and psoriatic arthritis: Section 1. Overview of psoriasis and guidelines of care for the treatment of psoriasis with biologics. *J Am Acad Dermatol*. 2008;58(5):826-850.

National Food and Drug administration. Access Data. FDA Approved Cosentyx® Label updated 01/2015. [http://www.accessdata.fda.gov/drugsatfda\\_docs/label/2015/125504s000lbl.pdf](http://www.accessdata.fda.gov/drugsatfda_docs/label/2015/125504s000lbl.pdf)

National Food and Drug administration. Access Data. FDA Approved Stelara® Label updated 03/2014. [http://www.accessdata.fda.gov/drugsatfda\\_docs/label/2014/125261s114lbl.pdf](http://www.accessdata.fda.gov/drugsatfda_docs/label/2014/125261s114lbl.pdf)

Navarro R, Vilarrasa E, Herranz P, et al. Safety and effectiveness of ustekinumab and antitumour necrosis factor therapy in patients with psoriasis and chronic viral hepatitis B or C: a retrospective, multicentre study in a clinical setting. *Br J Dermatol*. 2013;168(3):609-616.

Reich K, Pinter A, Lacour JP, et al. Comparison of ixekizumab with ustekinumab in moderate-to-severe psoriasis: 24-week results from IXORA-S, a Phase 3 study. *Br J Dermatol*. 2017 May 19. doi: 10.1111/bjd.15666. [Epub ahead of print]

Rustin MH. Long-term safety of biologics in the treatment of moderate-to-severe plaque psoriasis: review of current data. *Br J Dermatol*. 2012;167: suppl 3:3-11.

Sivamani R, Goodarzi H, Garcia MS, et al. Biologic therapies in the treatment of psoriasis: a comprehensive evidence-based basic science and clinical review and a practical guide to tuberculosis monitoring. *Clin Rev Allergy Immunol*. 2013;44(2):121-140.

Strangfeld A, Hierse F, Rau R, et al. Risk of incident or recurrent malignancies among patients with rheumatoid arthritis exposed to biologic therapy in the German biologics register RABBIT. *Arthritis Res Ther*. 2010;12(1):R5.

Theibich A, Dreyer L, Magyari M, Loch T. Demyelinating neurological disease after treatment with tumor necrosis factor alpha-inhibiting agents in a rheumatological outpatient clinic: description of six cases. *Clin Rheumatol*. 2014;33(5):719-723.