

Cosentyx[®] clinical trial program in psoriasis¹⁻⁹

- There are four pivotal trials for Cosentyx[®] (secukinumab) in psoriasis
- Four extension studies are exploring the long-term sustainability of Cosentyx
- Two head-to-head trials demonstrate the superiority of Cosentyx over Enbrel^{®*} and Stelara^{®**}
- Three trials demonstrate the efficacy of Cosentyx in difficult-to-treat scalp psoriasis, nail psoriasis, and palmoplantar psoriasis (of the hands and feet)
- More than 10,000 patients have been treated with Cosentyx across multiple indications in the clinical trial program

Pivotal trials in psoriasis

The Cosentyx clinical trial program in psoriasis was made up of 10 Phase II and Phase III studies.

Pivotal studies: strength, speed and sustainability

The approval of Cosentyx in psoriasis is based on four pivotal Phase III trials: ERASURE², FIXTURE², FEATURE³ and JUNCTURE⁴, which involved 2,403 patients with moderate-to-severe plaque psoriasis¹. Across all trials, the co-primary endpoints were the proportion of patients who achieved a reduction in Psoriasis Area Severity Index (PASI) score of at least 75% (PASI 75 response) from baseline to Week 12 and treatment success (clear or almost clear skin) on the Investigator's Global Assessment modified 2011 (IGA 0/1)¹.

ERASURE: A randomized, double-blind, placebo-controlled study, in 738 patients with moderate-to-severe chronic plaque-type psoriasis, to assess safety and efficacy at 12 weeks of either Cosentyx 300 mg or 150 mg with long-term follow up to 52 weeks^{1,2}.

FIXTURE: A randomized, double-blind, double-dummy study, in 1,306 patients with moderate-to-severe chronic plaque type psoriasis, to assess the safety and efficacy at 12 weeks of either Cosentyx 300 mg or 150 mg, Enbrel (etanercept) 50 mg, or placebo with long-term follow up to 52 weeks^{1,2}.

FEATURE: A randomized, double-blind, placebo-controlled study, in 117 patients, to assess the safety, tolerability and usability of a self-administered pre-filled syringe of Cosentyx 300 mg or 150 mg or placebo over 12 weeks^{1,3}.

JUNCTURE: A randomized, double-blind, placebo-controlled study, in 182 patients, to assess the safety, tolerability and usability of the SensoReady pen in patients who self-administered of either Cosentyx 300 mg or 150 mg or placebo over 12 weeks^{1,4}.

Results

- All primary endpoints were achieved with Cosentyx 300 mg and 150 mg

*Enbrel is a registered trademark of Amgen Inc. **Stelara is a registered trademark of Janssen Biotech Inc.

PASI 75 response achieved at Week 12¹

	150 mg	300 mg	Placebo
ERASURE	72%	82%	5%
FIXTURE	67%	77%	5%
FEATURE	70%	76%	0%
JUNCTURE	72%	87%	3%

IGA mod 2011 0/1 scores (clear or almost clear skin)¹

	150 mg	300 mg	Placebo
ERASURE	51%	55%	2%
FIXTURE	51%	62%	3%
FEATURE	53%	69%	0%
JUNCTURE	53%	73%	0%

- In the ERASURE study, Cosentyx was associated with a fast onset of efficacy with a 50% reduction in mean PASI response by Week Three for the 300 mg dose^{1,2}

Extension studies

Extension studies exploring sustainability

Researchers are following patients in the ERASURE, FIXTURE, SCULPTURE and STATURE trials which have all been extended to capture long-term safety and efficacy data for Cosentyx over five years^{1,2,5}.

Results so far from the SCULPTURE study:

- Clear or almost clear skin (PASI 90 response) was achieved by 69% of patients at Year One and by 66% of patients at Year Five⁵
- Completely clear skin (PASI 100 response) was achieved by 44% of patients at Year One and by 41% of patients at Year Five⁵
- With Cosentyx almost 100% of PASI 90 and PASI 100 response rates are maintained from Year One to Year Five⁵
- The current treatment goal of PASI 75 response was achieved by 89% of patients at Year One and maintained by 89% of patients at Year Five⁵
- 66% of patients reported no impact of skin problems on their quality of life at Year Five, maintained from 73% at Year One (as measured by DLQI – Dermatology Life Quality Index)⁵

Head-to-head trials

CLEAR study: Cosentyx shows superiority to Stelara

A 52-week, randomized, double-blind, head-to-head study, in 669 patients with moderate-to-severe plaque psoriasis, comparing the efficacy, long-term safety and tolerability of Cosentyx 300 mg versus Stelara (ustekinumab, dosing per label)^{6,7}.



Results so far:

- Cosentyx was superior to Stelara in achieving and sustaining PASI 90 response (79% versus 58%) at Week 16^{6,7}
- Cosentyx remained consistently superior to Stelara in achieving and sustaining a PASI 90 response (76% versus 61%) and significantly better in achieving PASI 100 (clear skin) response (46% versus 36%) at Week 52^{†6,7}
- Response rates with Cosentyx were maintained to Week 104, with a 75% PASI 90 response (compared to 78% at Week 52), and a 47% PASI 100 response (compared to 48% at Week 52)¹¹. Cosentyx showed significantly greater and sustained DLQI 0/1 responses versus Stelara (72% versus 59%) at Week 52[†]
- This remained high over two years, with 66% achieving DLQI 0/1 responses at Week 104 compared to 72% at Week 52¹¹
- Patients in the Stelara arm of the study discontinued after the Week 52 database lock

[†]Exploratory endpoints

Difficult-to-treat psoriasis

SCALP

A 24-week, randomized, double-blind, placebo-controlled study in 102 patients with moderate-to-severe scalp psoriasis to assess the safety and efficacy of Cosentyx 300 mg or 150 mg or placebo⁸.

TRANSFIGURE

A 128-week, randomized, double-blind, placebo-controlled study in 198 patients with moderate-to-severe psoriasis and significant nail involvement to assess the safety and efficacy of Cosentyx 300 mg or 150 mg or placebo¹².

GESTURE

A 132-week, randomized, double-blind, placebo-controlled study in 201 patients with moderate-to-severe palmoplantar psoriasis to assess the safety and efficacy of Cosentyx 300 mg or 150 mg or placebo⁹.

Results so far:

- In the SCALP study, PSSI 90 responses were achieved by a significantly greater percentage of patients receiving Cosentyx 300 mg (52.9%) than placebo (2.0%) at Week 12 ($P < 0.001$)⁸
- In the TRANSFIGURE study, a mean -38% NAPSI improvement from baseline (Nail Psoriasis Severity Index) was observed with Cosentyx 300 mg and -14% with Cosentyx 150 mg¹². At Week 32, PASI 90 responses were achieved in 72% of patients receiving Cosentyx 300 mg and 61% receiving Cosentyx 150 mg. PASI 100 responses were achieved in 37% of patients receiving Cosentyx 300 mg and 28% receiving Cosentyx 150 mg¹²
- In the GESTURE study, approximately 60% of patients receiving Cosentyx 300 mg achieved clear or almost clear palms and soles with Cosentyx, as measured by ppIGA response (palmoplantar Investigator's Global Assessment) at 1.5 years¹³

Safety and tolerability


Safety

- Cosentyx has been shown to have a favorable safety profile in clinical trials across multiple indications in which more than 10,000 patients have been treated with Cosentyx. A further 100,000 patients have been treated with Cosentyx in the post-marketing setting¹⁴
- The risk-benefit assessment for Cosentyx has not changed in the post-market setting
- The most common side effects in psoriasis studies were nasopharyngitis, headache and upper respiratory tract infection^{1,2}

The Cosentyx clinical trial program includes long-term extension studies that will continue to collect safety information and data over an extended period of time. In addition, an eight-year psoriasis registry study consisting of more than 3,000 patients exposed to Cosentyx will also provide long-term safety data¹³.

References

1. Cosentyx Summary of Product Characteristics. Novartis Europharm Limited. Available at: http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Product_Information/human/003729/WC500183129.pdf. Last accessed August 2017.
2. Langley RG *et al.* Secukinumab in plaque psoriasis – results of two phase three trials. *New England Journal of Medicine*. 2014;371(4):326–338.
3. Blauvelt A *et al.* Secukinumab administration by pre-filled syringe: efficacy, safety and usability results from a randomized controlled trial in psoriasis (FEATURE). *British Journal of Dermatology*. 2015;172(2):484–93.
4. Paul C *et al.* Efficacy, safety, and usability of secukinumab administration by autoinjector/pen in psoriasis: a randomized, controlled trial (JUNCTURE). *Journal of the European Academy of Dermatology and Venereology*. 2015 Jun;29(6):1082–90.
5. Bissonnette R *et al.* Secukinumab demonstrates high sustained efficacy and a favorable safety profile through 5 years of treatment in moderate to severe psoriasis. Presented as a late breaking abstract at the European Academy of Dermatology and Venereology 2017. 16th September 2017.
6. Thaçi D *et al.* Secukinumab is superior to ustekinumab in clearing skin of subjects with moderate to severe plaque psoriasis: CLEAR, a randomized controlled trial. *Journal of the American Academy of Dermatology*. 2015 Sep;73(3):400–9.
7. Blauvelt A *et al.* Secukinumab demonstrates superior sustained efficacy vs. ustekinumab in clearing skin of subjects with moderate to severe plaque psoriasis: 52-week results from the CLEAR study. Abstract presented at the 74th Annual Meeting of the American Academy of Dermatology. 2016 March 4-8; Washington DC.
8. Bagel J *et al.* Secukinumab is Efficacious in Clearing Moderate-to-Severe Scalp Psoriasis: 12 Week Results of a Randomized Phase IIIb Study. Publication. Presented as an abstract at the 25th European Academy of Dermatology and Venereology. Vienna, Austria. 1st October 2016.
9. Gottlieb A *et al.* Secukinumab shows significant efficacy in palmoplantar psoriasis: Results from GESTURE, a randomized controlled trial. *Journal of the American Academy of Dermatology*. 2017 Jan;76(1):70-80.
10. Blauvelt A *et al.* Continuous treatment with secukinumab 300 mg demonstrates sustained efficacy in clearing skin and improving patient-reported outcomes in moderate to severe plaque psoriasis: two-year results from the CLEAR study. Abstract presented at the 26th European Academy of Dermatology and Venereology. Geneva, Switzerland. 13 September 2017.
11. Reich K *et al.* Secukinumab shows significant efficacy in nail psoriasis: Week 32 results from The Transfigure Study *Annals of the Rheumatic Diseases* 2016;75:603-604.

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12. Gottlieb A *et al.* Secukinumab is effective in subjects with moderate to severe palmoplantar psoriasis: 1.5 year results from the GESTURE study. Presented as an abstract at the 25th European Academy of Dermatology and Venerology. Vienna, Austria. 1st October 2016.
 13. Novartis data on file, November 2015.