

**BRAND NAME:** COSENTYX

**PROPER NAME:** Secukinumab

**MANUFACTURER:** NOVARTIS PHARMS CORP

**INDICATION:** COSENTYX is a human interleukin-IL-17A antagonist indicated for the treatment of moderate to severe plaque psoriasis in adult patients who are candidates for systemic therapy or phototherapy.

**DESCRIPTION:** Secukinumab is a recombinant human monoclonal IgG1/k antibody that binds to IL-17A. It is expressed in a recombinant Chinese Hamster Ovary (CHO) cell line. Secukinumab has a molecular mass of approximately 151 kDa; both heavy chains of secukinumab contain oligosaccharide chains.

**BLA:** 125504

**REGULATORY MILESTONES:**

<b>US Approval</b>	January 21, 2015
<b>EU Approval</b>	January 14, 2015
<b>Health Canada Approval</b>	April 10, 2015
<b>Japan Approval</b>	May 11, 2016
<b>TGA</b>	December 26, 2014

**ADVISORY COMMITTEE:**

A Dermatologic and Ophthalmologic Drugs Advisory Committee meeting was convened on [October 20, 2014](#) to discuss the safety and efficacy results for this application.

**MANUFACTURING:**

PARAMETER	DATA	REFERENCE
<b>Manufacturer</b>	Novartis Pharmaceuticals Corporation	
<b>Indication</b>	COSENTYX is a human interleukin-IL-17A antagonist indicated for the treatment of moderate to severe plaque psoriasis in adult patients who are candidates for systemic therapy or phototherapy.	1
<b>Cell Substrate</b>	CHO (Chinese Hamster Ovary) cells MCB 060428 (CHO-HPT1 cell line)	3
<b>Manufacturing platform</b>	The cell culture process is conventional, expanding the culture via T-flasks and roller bottles to a fed batch bioreactor. The cell culture media used for inoculum preparation, for seed expansion, and for the production stage are serum-free, with low protein content and do not contain animal- or human-derived raw materials. The cell culture fluid is harvested as a single-harvest batch which is subsequently purified as a single active substance batch. The purification process consists of 9 steps including harvest, chromatography and filtration with final freezing and storage at $\leq -60^{\circ}\text{C}$ .	3
<b>Dose in vial/final container</b>	<ul style="list-style-type: none"> <li>• Injection: 150 mg/mL solution in a single-use Sensoready® pen</li> <li>• Injection: 150 mg/mL solution in a single-use prefilled syringe</li> <li>• For Injection: 150 mg, lyophilized powder in a single-use vial for reconstitution.</li> </ul>	1
<b>Dose to patient</b>	300 mg by subcutaneous injection at Weeks 0, 1, 2, 3 and 4 followed by 300 mg every 4 weeks. Each 300 mg dose is given as 2 subcutaneous injections of 150 mg.	1

1. Package insert - [COSENTYX](#)
2. EPAR full – [Cosentyx](#)
3. EPAR quality - [Cosentyx : EPAR - Public assessment report](#)
4. FDA Review - [COSENTYX \(secukinumab\)](#)

**CLINICAL TRIALS:**

NCT	TRIAL PHASE	NO OF PATIENTS ENROLLED	TITLE	COUNTRIES
<i>Placebo-controlled, active-controlled trials</i>				
NCT01365455	3	738	<a href="#">Efficacy and Safety of Subcutaneous Secukinumab for Moderate to Severe Chronic Plaque-type Psoriasis for up to 1 Year</a>	United States, Canada, Estonia, Colombia, Japan, Iceland, Israel, Latvia, Argentina, Lithuania, Taiwan, Mexico
NCT01358578	3	1306	<a href="#">Safety and Efficacy of Secukinumab Compared to Etanercept in Subjects with Moderate to Severe, Chronic Plaque-Type Psoriasis</a>	United States, Argentina, Italy, Australia, Belgium, Canada, Colombia, Egypt, Finland, France, Germany, Guatemala, India, Hungary, Iceland, Korea Republic of, Philippines, Spain, Poland, Romania, Singapore, Sweden, United Kingdom
NCT01555125	3	177	<a href="#">First Study of Secukinumab in Pre-filled Syringes in Subjects With Chronic Plaque-type Psoriasis: Response at 12 Weeks</a>	United States, Canada, Estonia, France, Germany
NCT01636687	3	182	<a href="#">Judging the Efficacy of Secukinumab in Patients With Psoriasis Using AutoiNjector: a Clinical Trial Evaluating Treatment Results (JUNCTURE)</a>	United States, Canada, Estonia, France, Germany
NCT01406938	3	967	<a href="#">Efficacy and Safety of Subcutaneous Secukinumab (AIN457) for Moderate to Severe Chronic Plaque-type</a>	United States, Austria, Bulgaria, Canada, Czech Republic, France, Germany, India,

			<a href="#">Psoriasis Assessing Different Doses and Dose Regimens</a>	Italy, Japan, Poland, Singapore, Slovakia, Vietnam, Switzerland, United Kingdom
NCT01412944	3	43	<a href="#">Efficacy and Safety of Intravenous and Subcutaneous Secukinumab in Moderate to Severe Chronic Plaque-type Psoriasis</a>	United States, Austria, Canada, Czech Republic, France, Germany, India, Japan, Slovakia
<i>Phase 2 studies in psoriasis</i>				
NCT01412944	2	404	<a href="#">AIN457 Regimen Finding Study in Patients with Moderate to Severe Psoriasis</a>	United States, France, Germany, Iceland, Israel, Japan, Norway
NCT00805480	2	130	<a href="#">Multiple-loading Dose Regimen Study in Patients with Chronic Plaque-type Psoriasis</a>	

**POST APPROVAL CHANGES**

DATE	TYPE OF CHANGE	DESCRIPTION	LINK