

ANNEX I
SUMMARY OF PRODUCT CHARACTERISTICS

▼ This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions. See section 4.8 for how to report adverse reactions.

1. NAME OF THE MEDICINAL PRODUCT

Adtralza 150 mg solution for injection in pre-filled syringe

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each pre-filled syringe contains 150 mg of tralokinumab in 1 mL solution (150 mg/mL).

Tralokinumab is produced in mouse myeloma cells by recombinant DNA technology.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection (injection)

Clear to opalescent, colourless to pale yellow solution, pH 5.5 and osmolarity approximately 280 mOsm/L

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Adtralza is indicated for the treatment of moderate-to-severe atopic dermatitis in adult patients who are candidates for systemic therapy.

4.2 Posology and method of administration

Treatment should be initiated by healthcare professionals experienced in the diagnosis and treatment of atopic dermatitis.

Posology

The recommended dose of tralokinumab for adult patients is an initial dose of 600 mg (four 150 mg injections) followed by 300 mg (two 150 mg injections) administered every other week as subcutaneous injection.

At prescriber's discretion, every fourth week dosing may be considered for patients who achieve clear or almost clear skin after 16 weeks of treatment. The probability of maintaining clear or almost clear skin may be lower with every fourth week dosing (see section 5.1).

Consideration should be given to discontinuing treatment in patients who have shown no response after 16 weeks of treatment. Some patients with initial partial response may subsequently improve further with continued treatment every other week beyond 16 weeks.

Tralokinumab can be used with or without topical corticosteroids. The use of topical corticosteroids, when appropriate, may provide an additional effect to the overall efficacy of tralokinumab (see

section 5.1). Topical calcineurin inhibitors may be used, but should be reserved for problem areas only, such as the face, neck, intertriginous and genital areas.

Missed dose

If a dose is missed, the dose should be administered as soon as possible. Thereafter, dosing should be resumed at the regular scheduled time.

Special populations

Elderly (≥ 65 years)

No dose adjustment is recommended for elderly patients (see section 5.2). Limited data is available in patients > 75 years of age.

Renal impairment

No dose adjustment is needed in patients with renal impairment. Very limited data are available in patients with severe renal impairment (see section 5.2).

Hepatic impairment

No dose adjustment is needed in patients with hepatic impairment. Very limited data are available in patients with moderate or severe hepatic impairment (see section 5.2).

High body weight

For patients with high body weight (>100 kg), who achieve clear or almost clear skin after 16 weeks of treatment, reducing the dosage to every fourth week might not be appropriate (see section 5.2).

Paediatric population

The safety and efficacy of tralokinumab in children below the age of 18 years have not yet been established. No data are available.

Method of administration

Subcutaneous use.

The pre-filled syringe should be not shaken. After removing the pre-filled syringes from the refrigerator, they should be allowed to reach room temperature by waiting for 30 minutes before injecting.

Tralokinumab is administered by subcutaneous injection into the thigh or abdomen, except the 5 cm around the navel. If somebody else administers the injection, the upper arm can also be used.

For the initial 600 mg dose, four 150 mg tralokinumab injections should be administered consecutively in different injection sites.

It is recommended to rotate the injection site with each dose. Tralokinumab should not be injected into skin that is tender, damaged or has bruises or scars.

A patient may self-inject tralokinumab or the patient's caregiver may administer tralokinumab if their healthcare professional determines that this is appropriate. Proper training should be provided to patients and/or caregivers on the administration of tralokinumab prior to use. Detailed instructions for use are included at the end of the package leaflet.

4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Traceability

In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

Hypersensitivity

If a systemic hypersensitivity reaction (immediate or delayed) occurs, administration of tralokinumab should be discontinued and appropriate therapy initiated.

Conjunctivitis

Patients treated with tralokinumab who develop conjunctivitis that does not resolve following standard treatment should undergo ophthalmological examination (see section 4.8).

Helminth infection

Patients with known helminth infections were excluded from participation in clinical studies. It is unknown if tralokinumab will influence the immune response against helminth infections by inhibiting IL-13 signalling.

Patients with pre-existing helminth infections should be treated before initiating treatment with tralokinumab. If patients become infected while receiving tralokinumab and do not respond to antihelminth treatment, treatment with tralokinumab should be discontinued until infection resolves.

Vaccinations

Live and live attenuated vaccines should not be given concurrently with tralokinumab as clinical safety and efficacy have not been established. Immune responses to the non-live tetanus and meningococcal vaccines were assessed (see section 4.5). It is recommended that patients should be brought up to date with live and live attenuated immunisations in agreement with current immunisation guidelines prior to treatment with tralokinumab.

Sodium content

This medicine contains less than 1 mmol sodium (23 mg) per 150 mg dose, that is to say essentially “sodium-free”.

4.5 Interaction with other medicinal products and other forms of interaction

The safety and efficacy of concurrent use of tralokinumab with live and live attenuated vaccines has not been studied.

Immune responses to non-live vaccines were assessed in a study in which adult patients with atopic dermatitis were treated with an initial dose of 600 mg (four 150 mg injections) followed by 300 mg every second (other) week administered as subcutaneous injection. After 12 weeks of tralokinumab administration, patients were vaccinated with a combined tetanus, diphtheria, and acellular pertussis vaccine, and a meningococcal vaccine and immune responses were assessed 4 weeks later. Antibody responses to both tetanus vaccine and meningococcal vaccine were similar in tralokinumab-treated and placebo-treated patients. No adverse interactions between either of the non-live vaccines or tralokinumab were noted in the study. Therefore, patients receiving tralokinumab may receive concurrent inactivated or non-live vaccinations.

For information on live and live attenuated vaccines, see section 4.4.

The effects of tralokinumab on the pharmacokinetics (PK) of CYP substrates have not been studied.

4.6 Fertility, pregnancy and lactation

Pregnancy

There is limited amount of data from the use of tralokinumab in pregnant women.

Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see section 5.3).

As a precautionary measure, it is preferable to avoid the use of tralokinumab during pregnancy.

Breast-feeding

It is unknown whether tralokinumab is excreted in human milk or absorbed systemically after ingestion. A decision must be made whether to discontinue breast-feeding or to discontinue tralokinumab therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.

Fertility

Animal studies did not show any effects on male and female reproductive organs and on sperm count, motility and morphology (see section 5.3).

4.7 Effects on ability to drive and use machines

Tralokinumab has no or negligible influence on the ability to drive and use machines.

4.8 Undesirable effects

Summary of the safety profile

The most common adverse reactions are upper respiratory tract infections (23.4%; mainly reported as common cold), injection site reactions (7.2%), conjunctivitis (5.4%) and conjunctivitis allergic (2.0%).

Tabulated list of adverse reactions

In a pool of 5 randomised, double-blind, placebo-controlled studies in patients with moderate to severe atopic dermatitis (ECZTRA 1, ECZTRA 2, and ECZTRA 3, a dose ranging trial and a vaccine-response study), 1 991 subjects were treated with subcutaneous injections of tralokinumab, with or without concomitant topical corticosteroids. A total of 807 patients were treated with tralokinumab for at least 1 year.

Listed in Table 1 are adverse reactions observed from clinical trials presented by system organ class and frequency, using the following categories: very common ($\geq 1/10$); common ($\geq 1/100$ to $< 1/10$); uncommon ($\geq 1/1\ 000$ to $< 1/100$); rare ($\geq 1/10\ 000$ to $< 1/1\ 000$); very rare ($< 1/10\ 000$). Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness. The frequencies are based on the initial treatment period of up to 16 weeks in the pool of 5 studies in the atopic dermatitis population.

Table 1: List of adverse reactions

MedDRA System Organ Class	Frequency	Adverse reaction
Infections and infestations	Very common Common	Upper respiratory tract infections Conjunctivitis
Blood and lymphatic system disorders	Common	Eosinophilia
Eye disorders	Common Uncommon	Conjunctivitis allergic Keratitis
General disorders and administration site conditions	Common	Injection site reactions

The long-term safety of tralokinumab was assessed in the 2 monotherapy studies up to 52 weeks and in 1 combination study with topical corticosteroids up to 32 weeks. The safety profile of tralokinumab through week 52 and week 32 respectively was consistent with the safety profile observed up to week 16.

Description of selected adverse reactions

Conjunctivitis and related events

Conjunctivitis occurred more frequently in atopic dermatitis patients who received tralokinumab (5.4%) compared to placebo (1.9%) in the initial treatment period of up to 16 weeks in the pool of 5 studies. Conjunctivitis was reported at a higher frequency in patients with severe atopic dermatitis compared to subjects with moderate atopic dermatitis in both the tralokinumab group (6.0 vs 3.3%; initial treatment period) and placebo group (2.2 vs 0.8%; initial treatment period). Most patients recovered or were recovering during the treatment period.

Keratitis was reported in 0.5% of subjects treated with tralokinumab during the initial treatment period. Of these, half were classified as keratoconjunctivitis, all were non-serious and mild or moderate in severity, and none led to treatment discontinuation.

Eosinophilia

Adverse reactions of eosinophilia were reported in 1.3% of patients treated with tralokinumab and 0.3% of patients treated with placebo during the initial treatment period of up to 16 weeks in the pool of 5 studies. Tralokinumab-treated patients had a greater mean initial increase from baseline in eosinophil count compared to patients treated with placebo. Eosinophilia ($\geq 5\ 000$ cells/mcL) was measured in 1.2% of tralokinumab-treated patients and 0.3% of placebo-treated patients in the initial treatment period. However, the increase in the tralokinumab-treated patients was transient, and mean eosinophil counts returned to baseline during continued treatment. The safety profile for subjects with eosinophilia was comparable to the safety profile for all subjects.

Eczema Herpeticum

Eczema herpeticum was reported in 0.3% of the subjects treated with tralokinumab and in 1.5% of subjects in the placebo group, in the initial treatment period of up to 16 weeks in the pool of 5 studies in atopic dermatitis. Across all treatment periods in the pool of 5 studies, all eczema herpeticum events reported in the tralokinumab group were non-serious, none were severe, and a single event led to permanent discontinuation of treatment.

Immunogenicity

As with all therapeutic proteins, there is a potential for immunogenicity with tralokinumab.

Anti-drug-antibody (ADA) responses were not associated with any impact on tralokinumab exposure, safety, or efficacy.

In ECZTRA 1, ECZTRA 2, ECZTRA 3, and the vaccine-response study, the incidence of ADA up to 16 weeks was 1.4% for patients treated with tralokinumab and 1.3% for patients treated with placebo;

neutralising antibodies were seen in 0.1% of patients treated with tralokinumab and 0.2% of patients treated with placebo.

Across all trial periods, the ADA incidence for subjects who received tralokinumab was 4.6%; 0.9% had persistent ADA and 1.0% had neutralising antibodies.

Injection site reactions

Injection site reactions (including pain and redness) occurred more frequently in patients who received tralokinumab (7.2%) compared to placebo (3.0%) in the initial treatment period of up to 16 weeks in the pool of 5 studies. Across all treatment periods in the 5 studies in atopic dermatitis, the vast majority (99%) of injection site reactions were mild or moderate in severity, and few patients (< 1%) discontinued tralokinumab treatment. Most injection site reactions reported had a short duration with approximately 76% of the events resolving within 1 to 5 days.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via [the national reporting system listed in Appendix V](#).

4.9 Overdose

There is no specific treatment for tralokinumab overdose. In clinical studies with tralokinumab, single intravenous doses of up to 30 mg/kg and multiple subcutaneous doses of 600 mg every 2 weeks for 12 weeks were found to be well tolerated.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Agents for dermatitis, excluding corticosteroids, ATC code: D11AH07.

Mechanism of action

Tralokinumab is a fully human IgG4 monoclonal antibody that specifically binds to the type 2 cytokine interleukin-13 (IL-13) and inhibits its interaction with the IL-13 receptors. Tralokinumab neutralises the biological activity of IL-13 by blocking its interaction with the IL-13R α 1/IL-4R α receptor complex. IL-13 is a major driver of human type 2 inflammatory disease, such as atopic dermatitis and inhibiting the IL-13 pathway with tralokinumab in patients decreases many of the mediators of type 2 inflammation.

Pharmacodynamic effects

In clinical trials, treatment with tralokinumab resulted in reduced levels of type 2 inflammation biomarkers in both lesional skin (CCL17, CCL18 and CCL26) and in blood (CCL17, periostin and IgE). In lesional skin, treatment with tralokinumab led also to reductions in epidermal thickness and to increase in marker of epithelial barrier integrity (loricrin). Skin colonization with *Staphylococcus aureus* was reduced more than 10-fold in patients treated with tralokinumab.

Clinical efficacy and safety

The efficacy and safety of tralokinumab as monotherapy and with concomitant topical corticosteroids were evaluated in three pivotal randomised, double-blind, placebo-controlled studies (ECZTRA 1, ECZTRA 2 and ECZTRA 3) in 1 976 patients 18 years of age and older with moderate to severe atopic dermatitis defined by Investigator's Global Assessment (IGA) score of 3 or 4 (moderate or severe), an Eczema Area and Severity Index (EASI) score of ≥ 16 at baseline, and a minimum body

surface area (BSA) involvement of $\geq 10\%$. Eligible patients enrolled into the three studies had previous inadequate response to topical medication.

In all three studies, patients received 1) an initial dose of 600 mg tralokinumab (four 150 mg injections) on day 1, followed by 300 mg every two weeks (Q2W) up to week 16 or 2) matching placebo. In ECZTRA 3, patients received concomitant topical corticosteroids on active lesions as needed. Tralokinumab was administered by subcutaneous (SC) injection in all studies.

In ECZTRA 1 and ECZTRA 2, to evaluate the maintenance of response, patients responding to the initial 16-week treatment with tralokinumab (i.e. achieved IGA 0 or 1, or EASI-75) were re-randomised to 1) tralokinumab 300 mg Q2W or 2) tralokinumab 300 mg Q4W (alternating tralokinumab 300 mg and placebo Q2W) or 3) placebo Q2W up to 52 weeks. The main endpoints for evaluating maintenance of response were IGA 0 or 1 and EASI-75 at week 52. Patients responding to the initial 16-week treatment with placebo continued on placebo. Subjects not achieving IGA 0 or 1 or EASI-75 at week 16 and subjects who did not maintain the response during the maintenance period were transferred to open-label treatment with tralokinumab 300 mg Q2W with optional use of topical corticosteroids. The studies had a treatment period of 52 weeks.

In ECZTRA 3, patients responding to the initial 16-week treatment with tralokinumab + TCS (i.e. achieved IGA 0 or 1, or EASI-75) were re-randomised to 1) tralokinumab 300 mg Q2W + TCS or 2) tralokinumab 300 mg Q4W + TCS (alternating tralokinumab 300 mg and placebo Q2W) up to 32 weeks. The main endpoints for evaluating maintenance of response were IGA 0 or 1 and EASI-75 at week 32. Patients responding to the initial 16-week treatment with placebo + TCS continued on placebo + TCS. Patients who at week 16 did not achieve IGA 0 or 1 or EASI-75 continued on tralokinumab 300 mg Q2W + TCS treatment, irrespectively of their initial treatment. The study had a treatment period of 32 weeks.

In ECZTRA 1, 802 patients were enrolled (199 to placebo, 603 to tralokinumab 300 mg Q2W).

In ECZTRA 2, 794 patients were enrolled (201 to placebo, 593 to tralokinumab 300 mg Q2W).

In ECZTRA 3, 380 patients were enrolled (127 to placebo + TCS, 253 to tralokinumab 300 mg Q2W + TCS).

Endpoints

In all three pivotal studies, the primary endpoints were achievement of IGA 0 or 1 (“clear” or “almost clear”) and a reduction of at least 75% in EASI (EASI-75) from baseline to week 16. Secondary endpoints included the reduction of itch as defined by at least a 4-point improvement in the Worst Daily Pruritus Numeric Rating Scale (NRS) from baseline to week 16, reduction in the SCORing Atopic Dermatitis (SCORAD) scale from baseline to week 16, and change from baseline to week 16 in the Dermatology Life Quality Index (DLQI). Additional secondary endpoints included reduction of at least 50% and 90% in EASI (EASI-50 and EASI-90, respectively) and reduction in Worst Daily Pruritus NRS (weekly average) from baseline to week 16. Other endpoints included change from baseline to week 16 in the Patient Oriented Eczema Measure (POEM), at least 4-point improvement in POEM, and Eczema-related Sleep NRS.

Baseline characteristics

In the monotherapy studies (ECZTRA 1 and ECZTRA 2), across all treatment groups, the mean age was 37.8 years, 5.0% of the patients were 65 years of age or older, the mean weight was 76.0 kg, 40.7% were female, 66.5% were white, 22.9% were Asian, and 7.5% were black. In these studies, 49.9% of patients had a baseline IGA score of 3 (moderate atopic dermatitis), 49.7% of patients had a baseline IGA of 4 (severe atopic dermatitis), and 42.5% of patients had received prior systemic immunosuppressants (cyclosporine, methotrexate, azathioprine and mycophenolate). The mean baseline EASI score was 32.3, mean baseline Worst Daily Pruritus NRS was 7.8, mean baseline DLQI was 17.3, the baseline mean SCORAD score was 70.4, the baseline mean POEM score was 22.8, and the baseline mean physical and mental components of SF-36 were 43.4 and 44.3, respectively.

In the concomitant topical corticosteroids study (ECZTRA 3), across both treatment groups, the mean age was 39.1 years, 6.3% of the patients were 65 years of age or older, the mean weight was 79.4 kg, 45.0% were female, 75.8% were white, 10.8% were Asian, and 9.2% were black. In this study, 53.2% of patients had a baseline IGA score of 3, 46.3% of patients had a baseline IGA of 4, and 39.2% of patients received prior systemic immunosuppressants. The baseline mean EASI score was 29.4, the baseline Worst Daily Pruritus NRS was 7.7, the baseline mean DLQI was 17.5, the baseline mean SCORAD score was 67.6, the baseline mean POEM score was 22.3.

Clinical response

Monotherapy studies (ECZTRA 1 and ECZTRA 2) – initial treatment period 0-16 weeks

In ECZTRA 1 and ECZTRA 2, from baseline to week 16, a significantly greater proportion of patients randomised and dosed to tralokinumab achieved IGA 0 or 1, EASI-75, and/or an improvement of ≥ 4 points on the Worst Daily Pruritus NRS compared to placebo (see Table 2).

Table 2: Efficacy results of tralokinumab monotherapy at week 16 in ECZTRA 1 and ECZTRA 2 (FAS)

Monotherapy				
	ECZTRA 1		ECZTRA 2	
	Week 16		Week 16	
	Placebo	Tralokinumab 300 mg Q2W	Placebo	Tralokinumab 300 mg Q2W
<i>Number of patients randomised and dosed (FAS)</i>	197	601	201	591
IGA 0 or 1, % responders ^{a,b)}	7.1	15.8 [#]	10.9	22.2 [§]
EASI-50, % responders ^{a)}	21.3	41.6 ^{§,e)}	20.4	49.9 ^{§,e)}
EASI-75, % responders ^{a)}	12.7	25.0 [§]	11.4	33.2 [§]
SCORAD, LS mean change from baseline (\pm SE) ^{c)}	-17.2 (\pm 1.98)	-24.9 [§] (\pm 1.23)	-13.8 (\pm 2.00)	-26.9 [§] (\pm 1.06)
Pruritus NRS (≥ 4 -point improvement, % responders) ^{a,d)}	10.3 (20/194)	20.0 [#] (119/594)	9.5 (19/200)	25.0 [§] (144/575)
DLQI, LS mean change from baseline (\pm SE) ^{c)}	-5.7 (\pm 0.63)	-7.5 [#] (\pm 0.41)	-5.2 (\pm 0.68)	-8.6 [§] (\pm 0.36)

LS=least squares; SE=standard error, FAS: Full Analysis Set - includes all patients randomised and dosed. If needed to control intolerable symptoms of atopic dermatitis, patients were permitted to receive rescue treatment at the discretion of the investigator.

- a) Patients who received rescue treatment or had missing data were considered non-responders.
- b) Responder was defined as a patient with IGA 0 or 1 (“clear“ or “almost clear” on a 0-4 IGA scale).
- c) Data after initiation of rescue medication or permanent discontinuation of treatment were considered missing. Placebo based multiple imputation of missing data.
- d) The percentage is calculated relative to the number of subjects with a baseline value > 4 .
- e) Not adjusted for multiplicity.

*p<0.05, #p<0.01, §p<0.001

In both monotherapy studies (ECZTRA 1 and ECZTRA 2), tralokinumab reduced itch, as measured by the percent change from baseline in Worst Daily Pruritus NRS, already at Week 1 compared to placebo. The reduction in itch was observed in parallel with improvements in objective signs and symptoms of atopic dermatitis and quality of life.

In the two studies, fewer patients randomised to Adtralza 300 mg Q2W needed rescue treatment (topical corticosteroids, systemic corticosteroids, non-steroidal immunosuppressants) as compared to

patients randomised to placebo (29.3% versus 45.3%, respectively, across both studies). Use of rescue treatment was higher if patients had severe atopic dermatitis at baseline (39.3% if under tralokinumab 300 mg Q2W treatment versus 56.7% in placebo group).

Monotherapy Studies (ECZTRA 1 and ECZTRA 2) – maintenance period (week 16-52)

To evaluate maintenance of response, 185 subjects from ECZTRA 1 and 227 subjects from ECZTRA 2 treated with tralokinumab 300 mg Q2W for 16 weeks who achieved IGA 0 or 1 or EASI-75 at week 16 were re-randomised to an additional 36-week treatment of 1) 300 mg tralokinumab every two weeks (Q2W) or 2) alternating tralokinumab 300 mg and placebo Q2W (tralokinumab Q4W) or 3) placebo Q2W, for a cumulative 52-week study treatment. Response rates (IGA 0/1 or EASI-75) at week 52 in the monotherapy pool were 56.2% and 50% for tralokinumab 300 mg Q2W and tralokinumab 300 mg Q4W among subjects achieving clinical response at week 16, respectively.

Table 3: Efficacy results (IGA 0 or 1 or EASI-75) at week 52 of subjects responding to tralokinumab 300 mg Q2W at week 16

Assessment at Week 52	ECZTRA 1			ECZTRA 2		
	Treatment regimen Week 16-52 ^{e)}			Treatment regimen Week 16-52 ^{e)}		
	Tralokinumab 300 mg Q2W	Tralokinumab 300 mg Q4W	Placebo	Tralokinumab 300 mg Q2W	Tralokinumab 300 mg Q4W	Placebo
IGA 0/1 ^{a)} % responders ^{f)}	51.3 ^{d)} (20/39)	38.9 ^{d)} (14/36)	47.4 (9/19)	59.3 ^{c)} (32/54)	44.9 ^{d)} (22/49)	25.0 (7/28)
EASI-75 ^{a)} % responders ^{g)}	59.6 ^{d)} (28/47)	49.1 ^{d)} (28/57)	33.3 (10/30)	55.8 ^{b)} (43/77)	51.4 ^{c)} (38/74)	21.4 (9/42)

If needed to control intolerable symptoms of atopic dermatitis, patients were permitted to receive rescue treatment at the discretion of the investigator.

- a) Subjects who received rescue treatment or had missing data were treated as non-responders. The percentage is calculated relative to the number of subjects with response at week 16.
- b) p<0.001 compared to placebo
- c) p<0.05 compared to placebo
- d) p>0.05 compared to placebo
- e) All patients were initially treated with tralokinumab 300 mg Q2W week 0 to week 16.
- f) IGA 0/1 at week 52 was evaluated in those subjects that had IGA 0/1 at week 16.
- g) EASI-75 at week 52 was evaluated in those subjects that had EASI-75 at week 16.

Of the subjects randomised to tralokinumab, who did not achieve IGA 0 or 1 or EASI-75 at week 16 and were transferred to open-label tralokinumab 300 mg Q2W + optional TCS, 20.8% in ECZTRA 1 and 19.3% in ECZTRA 2 achieved IGA 0 or 1 at week 52, and 46.1% in ECZTRA 1 and 39.3% in ECZTRA 2 achieved EASI-75 at week 52. The clinical response was mainly driven by continued tralokinumab treatment rather than optional topical corticosteroids treatment.

32-Week concomitant TCS study (ECZTRA 3) – initial treatment period 0-16 weeks

In ECZTRA 3 from baseline to week 16, a significantly greater proportion of patients randomised to tralokinumab 300 mg Q2W + TCS achieved IGA 0 or 1, EASI-75, and/or an improvement of ≥ 4 points on the Worst Daily Pruritus NRS compared to placebo + TCS (see Table 4).

Table 4: Efficacy results of tralokinumab combination therapy with TCS at week 16 in ECZTRA 3 (FAS)

Combination therapy		
	ECZTRA 3	
	Week 16	
	Placebo + TCS	Tralokinumab 300 mg Q2W + TCS
<i>Number of patients randomised and dosed (FAS)</i>	126	252
IGA 0 or 1, % responders ^{a,b)}	26.2	38.9*
EASI-50, % responders ^{a)}	57.9	79.4 ^{§, e)}
EASI-75, % responders ^{a)}	35.7	56.0 [§]
SCORAD, LS mean change from baseline (\pm SE) ^{c)}	-26.7 (\pm 1.83)	-37.5 [§] (\pm 1.27)
Pruritus NRS (\geq 4-point improvement, % responders) ^{a,d)}	34.1 (43/126)	45.4* (113/249)
DLQI, LS mean change from baseline (\pm SE) ^{c)}	-8.8 (\pm 0.57)	-11.6 [§] (\pm 0.40)

LS=least squares; SE=standard error, FAS: Full Analysis Set - includes all patients randomised and dosed. If needed to control intolerable symptoms of atopic dermatitis, patients were permitted to receive rescue treatment at the discretion of the investigator. The supplied TCS did not constitute rescue medication.

- a) Subjects who received rescue treatment or had missing data were treated as non-responders.
 - b) Responder was defined as a patient with IGA 0 or 1 (“clear“ or “almost clear” on a 0-4 IGA scale).
 - c) Data after initiation of rescue medication or permanent discontinuation of treatment were considered missing. Placebo based multiple imputation of missing data.
 - d) The percentage is calculated relative to the number of subjects with a baseline value \geq 4.
 - e) Not adjusted for multiplicity.
- *p<0.05, #p<0.01, §p<0.001.

In ECZTRA 3, subjects who received tralokinumab 300 mg Q2W from Week 0 to 16 used 50% less of the supplied topical corticosteroids at Week 16 as compared to subjects who received placebo.

In the concomitant TCS study (ECZTRA 3), tralokinumab + TCS reduced itch, as measured by the percent change from baseline in Worst Daily Pruritus NRS, already at Week 2 compared to placebo + TCS. The reduction in itch was observed in parallel with improvements in objective signs and symptoms of atopic dermatitis and quality of life.

32-Week concomitant TCS study (ECZTRA 3) – maintenance period 16-32 weeks

To evaluate maintenance of response, subjects treated with tralokinumab 300 mg + TCS for 16 weeks in the ECZTRA 3 study and who achieved IGA 0 or 1 or EASI-75 at week 16 were re-randomised to an additional 16-week treatment of 1) tralokinumab 300 mg every two weeks (Q2W) + TCS or 2) alternating tralokinumab 300 mg + TCS and placebo every two weeks (tralokinumab Q4W) for a cumulative 32-week study treatment. High maintenance of clinical efficacy at week 32 were seen across tralokinumab 300 mg Q2W + TCS and tralokinumab 300 mg Q4W + TCS among subjects achieving clinical response at week 16 (see Table 5).

Table 5: Efficacy results at week 32 of subjects achieving clinical response to tralokinumab 300 mg + TCS Q2W at week 16

	Tralokinumab 300 mg Q2W + TCS	Tralokinumab 300 mg Q4W + TCS
IGA 0/1 at week 32 ^{a)} % responders ^{b)}	89.6 (43/48)	77.6 (38/49)
EASI-75 at week 32 ^{a)} % responders ^{c)}	92.5 (62/67)	90.8 (59/65)

If needed to control intolerable symptoms of atopic dermatitis, patients were permitted to receive rescue treatment at the discretion of the investigator.

- a) Subjects who received rescue treatment or had missing data were treated as non-responders. The percentage is calculated relative to the number of subjects with response at week 16.
b) IGA 0/1 at week 32 was evaluated in those subjects that had IGA 0/1 at week 16.
c) EASI-75 at week 32 was evaluated in those subjects that had EASI-75 at week 16.

Among all the subjects who achieved either IGA 0 or 1 or EASI-75 at week 16, the mean percentage improvement in EASI score from baseline was 93.5% at week 32 when maintained on tralokinumab 300 mg Q2W + TCS and 91.5% at week 32 for subjects on tralokinumab 300 mg Q4W + TCS.

Of the subjects randomised to tralokinumab 300 mg Q2W + TCS who did not achieve IGA 0 or 1 or EASI-75 at week 16, 30.5 % achieved IGA 0/1 and 55.8 % achieved EASI-75 at week 32 when treated continuously with tralokinumab 300 mg Q2W + TCS for additional 16 weeks.

The continued improvement among the subjects who did not achieve IGA 0 or 1 or EASI-75 at week 16 occurred in conjunction with the improvement of Worst Daily Pruritus NRS and objective signs of atopic dermatitis including SCORAD.

Table 6: Efficacy results of tralokinumab with concomitant TCS at weeks 16 and 32 in ECZTRA 3 in patients initially treated with tralokinumab Q2W + TCS

	Treatment regimen Week 16-32^{d)}					
	Responders at Week 16^{e)}				Non-responders at Week 16	
	Q2W + TCS		Q4W + TCS		Q2W + TCS	
<i>Patients randomised</i>	N=69		N=69		N=95	
<i>Week number</i>	W16	W32	W16	W32	W16	W32
EASI-50, % responders ^{a)}	100.0	98.6	97.1	91.3	63.2	76.8
EASI-90, % responders ^{a)}	58.0	72.5	60.9	63.8	1.1	34.7
EASI, LS % mean change from baseline (SE) ^{b)}	-90.5 (2.7)	-93.2 (2.3)	-89.3 (2.7)	-91.5 (2.3)	-46.9 (2.4)	-73.5 (2.0)
Pruritus NRS (\geq 4-point improvement, % responders) ^{a,c)}	63.2	70.6	64.2	61.2	27.4	38.9

LS: Least squares, SE: Standard error

If needed to control intolerable symptoms of atopic dermatitis, patients were permitted to receive rescue treatment at the discretion of the investigator.

- a) Patients who received rescue treatment or had missing data were considered non-responders in the analyses.
b) Data after initiation of rescue medication or permanent discontinuation of treatment was excluded from the analyses.
c) The percentage is calculated relative to the number of subjects with a baseline value \geq 4.
d) All patients were initially treated with tralokinumab 300 mg Q2W + TCS from week 0 to week 16. They were subsequently treated with tralokinumab 300 mg Q2W + TCS or Q4W + TCS.
e) Responders at week 16 are identified as patients achieving either IGA 0/1 and/or EASI-75.

Patient-reported outcomes

In both monotherapy studies (ECZTRA 1 and ECZTRA 2) and in the concomitant TCS study (ECZTRA 3) tralokinumab improved patient-reported symptoms of atopic dermatitis, as measured by POEM, and the impact of atopic dermatitis on sleep, as measured by Eczema-related sleep NRS, at week 16 compared to placebo. A higher proportion of patients treated with tralokinumab had clinically meaningful reductions in POEM, (defined as at least 4 point improvement) from baseline to week 16 compared to placebo.

Paediatric population

The European Medicines Agency has deferred the obligation to submit the results of studies with tralokinumab in one or more subset of the paediatric population in atopic dermatitis (see section 4.2 for information on paediatric use).

5.2 Pharmacokinetic properties

Absorption

After subcutaneous (SC) dose of tralokinumab median time to maximum concentration in serum (t_{max}) were 5-8 days. The absolute bioavailability of tralokinumab following SC dosing was estimated by population PK analysis to be 76%. In a phase 1 trial (10 subjects per arm), bioavailability was estimated to be 62% for the 150 mg dose and 60% for the 300 mg dose.

Steady-state concentrations were achieved by week 16 following a 600 mg starting dose and 300 mg every other week. Across clinical studies (ECZTRA 1, ECZTRA 2 and ECZTRA 3), the mean \pm SD steady-state trough concentration ranged from 98.0 \pm 41.1 mcg/mL to 101.4 \pm 42.7 mcg/mL for 300 mg dose administered every other week.

Distribution

A volume of distribution for tralokinumab of approximately 4.2 L was estimated by population PK analysis.

Biotransformation

Specific metabolism studies were not conducted because tralokinumab is a protein. Tralokinumab is expected to degrade to small peptides and individual amino acids.

Elimination

Tralokinumab is eliminated through a non-saturable proteolytic pathway. Half-life is 22 days, consistent with the typical estimate for human IgG4 monoclonal antibodies targeting soluble cytokines. In ECZTRA 1, ECZTRA 2, and ECZTRA 3, clearance was estimated by population PK analysis to be 0.149 L/day. In phase 1 trials with IV dosing, clearance was estimated to be between 0.179 and 0.211 L/day

Linearity/non-linearity

Exposure of tralokinumab increases proportionally to the dose of tralokinumab between 150-600 mg.

Special populations

Gender

Gender was not found to be associated with any clinically meaningful impact on the systemic exposure of tralokinumab determined by population PK analysis.

Age

Age was not found to be associated with clinically relevant impact of systemic exposure of tralokinumab determined by population PK analysis. 109 subjects above 65 years were included in the analysis.

Race

Race was not found to be associated with any clinically meaningful impact on the systemic exposure of tralokinumab by population PK analysis.

Hepatic impairment

Tralokinumab, as a monoclonal antibody, is not expected to undergo significant hepatic elimination. No clinical studies have been conducted to evaluate the effect of hepatic impairment on the pharmacokinetics of tralokinumab. Mild hepatic impairment was not found to affect the PK of tralokinumab determined by population PK analysis. Very limited data are available in patients with moderate or severe hepatic impairment.

Renal impairment

Tralokinumab, as a monoclonal antibody, is not expected to undergo significant renal elimination. No clinical studies have been conducted to evaluate the effect of renal impairment on the pharmacokinetics of tralokinumab. Population PK analysis did not identify mild or moderate renal impairment as having a clinically meaningful influence on the systemic exposure of tralokinumab. Very limited data are available in patients with severe renal impairment.

High body weight

Tralokinumab trough concentrations were lower in subjects with higher body weight (see section 4.2).

Table 7: Area under the curve (AUC) by weight

Weight (kg)	75	100	120	140
AUC (mcg*day/mL)	1 532	1 192	1 017	889
Ratio AUC 75 kg	1	0.78	0.66	0.57

Calculated AUC at steady-state for the dosing interval for 300 mg Q2W for a subject of a certain weight based on the relation between Clearance and weight. $\text{Clearance} = 0.149 \times (W/75)^{0.873}$. $\text{AUC} = F \times \text{Dose} / \text{Clearance}$, where $F = 0.761$.

Paediatric population

The pharmacokinetics of tralokinumab in paediatric patients has not yet been studied.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of repeated dose toxicity (including safety pharmacology endpoints) and toxicity to reproduction and development.

The mutagenic potential of tralokinumab has not been evaluated; however monoclonal antibodies are not expected to alter DNA or chromosomes.

Carcinogenicity studies have not been conducted with tralokinumab. An evaluation of the available evidence related to IL-13 inhibition and animal toxicology data with tralokinumab does not suggest an increased carcinogenic potential for tralokinumab.

Enhanced pre- and postnatal studies with tralokinumab in monkeys did not identify adverse effects in maternal animals or their offspring up to 6 months post-partum.

No effects on fertility parameters such as reproductive organs, menstrual cycle and sperm analysis were observed in sexually mature monkeys treated subcutaneously with tralokinumab up to

350 mg/animal (females) or 600 mg/animal (males) (AUC exposure up to 15-fold higher than in human patients receiving tralokinumab 300 mg every 2 weeks).

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sodium acetate trihydrate (E262)

Acetic acid (E260)

Sodium chloride

Polysorbate 80 (E433)

Water for injections

6.2 Incompatibilities

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products.

6.3 Shelf life

3 years.

If necessary, pre-filled syringes may be kept at room temperature up to 25 °C for a maximum of 14 days, within its shelf-life, without being refrigerated again during this period. Do not store above 25 °C. If the carton needs to be removed permanently from refrigerator, the date of removal may be recorded on the carton. After removal from the refrigerator, Adtralza must be used within 14 days or discarded.

6.4 Special precautions for storage

Store in a refrigerator (2 °C-8 °C).

Do not freeze.

Store in the original package in order to protect from light.

6.5 Nature and contents of container

1 mL (150 mg) solution in a siliconised type-1 clear glass pre-filled syringe with 27 gauge ½ inch thin wall stainless steel staked needle, elastomer plunger stopper extended finger flange and needle guard.

Pack size:

- 2 pre-filled syringes
- Multipack containing 4 (2 packs of 2) pre-filled syringes
- Multipack containing 12 (6 packs of 2) pre-filled syringes.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal and other handling

The solution should be clear to opalescent, colourless to pale yellow. If the solution is cloudy, discoloured or contains visible particulate matter, the solution should not be used. Do not use if the pre-filled syringe is damaged or has been dropped on a hard surface.

After removing the pre-filled syringes from the refrigerator, they should be allowed to reach room temperature by waiting for 30 minutes before injecting Adtralza.

Adtralza is sterile. Discard any unused product remaining in the pre-filled syringe.

7. MARKETING AUTHORISATION HOLDER

LEO Pharma A/S
Industriparken 55
DK-2750 Ballerup
Denmark

8. MARKETING AUTHORISATION NUMBER(S)

EU/1/21/1554/001
EU/1/21/1554/002
EU/1/21/1554/003

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation:

10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency <http://www.ema.europa.eu>.

ANNEX II

- A. MANUFACTURER OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE**
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE**
- C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION**
- D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT**

A. MANUFACTURER OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer of the biological active substance

AstraZeneca Pharmaceuticals LP Frederick Manufacturing Center (FMC)
633 Research Court
Frederick, MD 21703
USA

Name and address of the manufacturer responsible for batch release

LEO Pharma A/S
Industriparken 55
DK-2750 Ballerup
Denmark

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to restricted medical prescription (see Annex I: Summary of Product Characteristics, section 4.2).

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

• **Periodic safety update reports (PSURs)**

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

The marketing authorisation holder (MAH) shall submit the first PSUR for this product within 6 months following authorisation.

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

• **Risk management plan (RMP)**

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the marketing authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

ANNEX III
LABELLING AND PACKAGE LEAFLET

A. LABELLING

**PARTICULARS TO APPEAR ON THE OUTER PACKAGING
OUTER CARTON**

1. NAME OF THE MEDICINAL PRODUCT

Adtralza 150 mg solution for injection in pre-filled syringe
tralokinumab

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled syringe contains 150 mg of tralokinumab in 1 mL solution (150 mg/mL).

3. LIST OF EXCIPIENTS

Excipients: sodium acetate trihydrate (E262), acetic acid (E260), sodium chloride, polysorbate 80 (E433) and water for injections.

4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection



2 pre-filled syringes

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Subcutaneous use

For single use only

Do not shake.

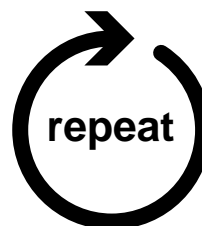
Open here

To be printed on the inside of the carton lid:

**Read the entire Instructions for Use
prior to injecting Adtralza**



Please wait 30 minutes
Before injecting, wait 30 minutes
to let the pre-filled syringes reach
room temperature.



Then, use both syringes
For a 300 mg dose, two 150 mg
syringes are required. Inject one
syringe after the other.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Store in refrigerator.
Do not freeze.
Store in the original package in order to protect from light.

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

LEO Pharma A/S
Industriparken 55
DK-2750 Ballerup
Denmark

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/21/1554/001 2 pre-filled syringes

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Adtralza 150 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC
SN
NN

**PARTICULARS TO APPEAR ON THE OUTER PACKAGING
OUTER CARTON FOR MULTIPACK (INCLUDING BLUE BOX)**

1. NAME OF THE MEDICINAL PRODUCT

Adtralza 150 mg solution for injection in pre-filled syringe
tralokinumab

2. STATEMENT OF ACTIVE SUBSTANCE(S)

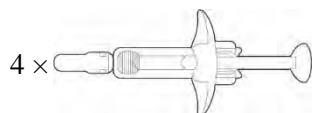
Each pre-filled syringe contains 150 mg of tralokinumab in 1 mL solution (150 mg/mL).

3. LIST OF EXCIPIENTS

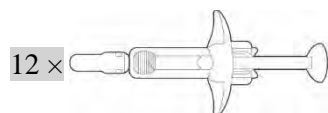
Excipients: sodium acetate trihydrate (E262), acetic acid (E260), sodium chloride, polysorbate 80 (E433) and water for injections.

4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection



Multipack: 4 (2 packs of 2) pre-filled syringes



Multipack: 12 (6 packs of 2) pre-filled syringes

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Subcutaneous use

For single use only

Do not shake.

Open here

Only on the multipack containing 4 (2 packs of 2) pre-filled syringes.

**6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT
OF THE SIGHT AND REACH OF CHILDREN**

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Store in refrigerator.
Do not freeze.
Store in the original package in order to protect from light.

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE**11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER**

LEO Pharma A/S
Industriparken 55
DK-2750 Ballerup
Denmark

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/21/1554/002 Multipack containing 4 (2 × 2) pre-filled syringes
EU/1/21/1554/003 Multipack containing 12 (6 × 2) pre-filled syringes

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY**15. INSTRUCTIONS ON USE****16. INFORMATION IN BRAILLE**

Adtralza 150 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN
NN

**PARTICULARS TO APPEAR ON THE OUTER PACKAGING
INTERMEDIATE CARTON OF MULTIPACK (WITHOUT BLUE BOX)**

1. NAME OF THE MEDICINAL PRODUCT

Adtralza 150 mg solution for injection in pre-filled syringe
tralokinumab

2. STATEMENT OF ACTIVE SUBSTANCE(S)

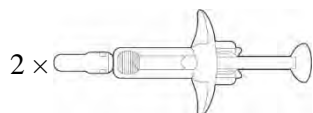
Each pre-filled syringe contains 150 mg of tralokinumab in 1 mL solution (150 mg/mL).

3. LIST OF EXCIPIENTS

Excipients: sodium acetate trihydrate (E262), acetic acid (E260), sodium chloride, polysorbate 80 (E433) and water for injections.

4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection



2 pre-filled syringes

Component of a multipack, can't be sold separately.

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Subcutaneous use

For single use only

Do not shake.

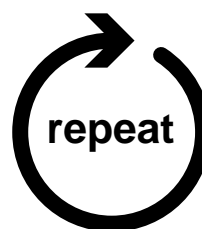
Open here

To be printed on the inside of the carton lid:

**Read the entire Instructions for Use
prior to injecting Adtralza**



Please wait 30 minutes
Before injecting, wait 30 minutes
to let the pre-filled syringes reach
room temperature.



Then, use both syringes
For a 300 mg dose, two 150 mg
syringes are required. Inject one
syringe after the other.

**6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT
OF THE SIGHT AND REACH OF CHILDREN**

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Store in refrigerator.
Do not freeze.
Store in the original package in order to protect from light.

**10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS
OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF
APPROPRIATE**

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

LEO Pharma A/S
Industriparken 55
DK-2750 Ballerup
Denmark

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/21/1554/002 Multipack containing 4 (2 × 2) pre-filled syringes
EU/1/21/1554/003 Multipack containing 12 (6 × 2) pre-filled syringes

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Adtralza 150 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS LABEL

1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION

Adtralza 150 mg injection
tralokinumab
SC

2. METHOD OF ADMINISTRATION

3. EXPIRY DATE

EXP

4. BATCH NUMBER

Lot

5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

6. OTHER

B. PACKAGE LEAFLET

Package leaflet: Information for the patient

Adtralza 150 mg solution for injection in pre-filled syringe tralokinumab

▼ This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

Read all of this leaflet carefully before you start using this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

1. What Adtralza is and what it is used for
2. What you need to know before you use Adtralza
3. How to use Adtralza
4. Possible side effects
5. How to store Adtralza
6. Contents of the pack and other information

1. What Adtralza is and what it is used for

Adtralza contains the active substance tralokinumab.

Tralokinumab is a monoclonal antibody (a type of protein) that blocks the action of a protein called IL-13. IL-13 plays a major role in causing the symptoms of atopic dermatitis.

Adtralza is used to treat adults with moderate-to-severe atopic dermatitis, also known as atopic eczema. Adtralza may be used with eczema medicines that you apply to the skin or it may be used on its own.

Using Adtralza for atopic dermatitis can improve your eczema and reduce the related itching and skin pain.

2. What you need to know before you use Adtralza

Do not use Adtralza:

- if you are allergic to tralokinumab or any of the other ingredients of this medicine (listed in section 6).

If you think you may be allergic, or you are not sure, ask your doctor, pharmacist or nurse for advice before using Adtralza.

Warnings and precautions

Talk to your doctor, pharmacist or nurse before using Adtralza.

Allergic reactions

Very rarely, medicines can cause allergic (hypersensitivity) reactions and severe allergic reactions called anaphylaxis. You must look out for signs of these reactions (such as breathing problems,

swelling of the face, mouth, and tongue, fainting, dizziness, feeling lightheaded (because of low blood pressure), hives, itching and skin rash) while you are using Adtralza.

Stop using Adtralza and tell your doctor or get medical help immediately if you notice any signs of an allergic reaction. Such signs are listed under “Serious side effects” in section 4.

Parasitic infection in the intestines

Adtralza may reduce your resistance to infections caused by parasites. Any parasitic infection should be treated before you start treatment with Adtralza. Tell your doctor if you have diarrhoea, gas, upset stomach, greasy stools, and dehydration which could be signs of a parasitic infection. If you live in a region where these infections are common or if you are travelling to such a region, tell your doctor.

Eye problems

Talk to your doctor if you have any new or worsening eye problems, including eye pain or changes in vision.

Children and adolescents

Do not give this medicine to children and adolescents below the age of 18 years because the safety and benefits of Adtralza are not yet known.

Other medicines and Adtralza

Tell your doctor or pharmacist

- If you are using, have recently used or might use any other medicines.
- If you have recently had a vaccination or are due to have one.

Pregnancy, breast-feeding and fertility

If you are pregnant or breast-feeding, think you may be pregnant or you are planning to have a baby, ask your doctor for advice before using this medicine. The effects of Adtralza in pregnant women are not known; therefore, it is preferable to avoid using it during pregnancy unless your doctor advises you to use it.

If applicable, you and your doctor should decide if you will breast-feed or use Adtralza. You should not do both.

Driving and using machines

Adtralza is unlikely to reduce your ability to drive and use machines.

Adtralza contains sodium

This medicine contains less than 1 mmol sodium (23 mg) per 150 mg that is to say essentially “sodium-free”.

3. How to use Adtralza

Always use this medicine exactly as your doctor, pharmacist or nurse has told you. Check with your doctor, pharmacist or nurse if you are not sure.

Each pre-filled syringe contains 150 mg of tralokinumab.

How much Adtralza is given and for how long

- Your doctor will decide how much Adtralza you need and for how long.
- The recommended first dose is 600 mg (four 150 mg injections), followed by 300 mg (two 150 mg injections) given every 2 weeks. Based on how well the medicine works, your doctor may decide that you can have a dose every 4 weeks.

Adtralza is given by injection under your skin (subcutaneous injection). You and your doctor or nurse can decide if you can inject Adtralza yourself.

Inject Adtralza yourself only after you have been trained by your doctor or nurse. A caregiver may also give you your Adtralza injection after proper training.

Do not shake the syringe.

Read the “Instructions for Use” before injecting Adtralza.

If you use more Adtralza than you should

If you use more of this medicine than you should or the dose has been given too early, talk to your doctor, pharmacist or nurse.

If you forget to use Adtralza

If you miss injecting a dose at the right time, inject Adtralza as soon as possible. Then the next dose should be injected at the regular scheduled time.

If you stop using Adtralza

Do not stop using Adtralza without speaking to your doctor first.

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them. Adtralza can cause serious side effects, including allergic (hypersensitivity) reactions such as anaphylaxis; the signs may include:

- breathing problems
- swelling of the face, mouth, and tongue
- fainting, dizziness, feeling lightheaded (low blood pressure)
- hives
- itching
- skin rash

Stop using Adtralza and tell your doctor or get medical help immediately if you notice any signs of allergic reaction.

Other side effects

Very common (may affect more than 1 in 10 people)

- upper respiratory tract infections (i.e. common cold and sore throat)

Common (may affect up to 1 in 10 people)

- eye redness and itching
- eye infection
- injection site reactions (i.e. redness, swelling)

Uncommon (may affect up to 1 in 100 people)

- eye inflammation which may cause eye pain or decreased vision

Reporting of side effects

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system listed in [Appendix V](#). By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store Adtralza

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the label and carton after EXP. The expiry date refers to the last day of that month.

Keep in the original package in order to protect from light.

Store in a refrigerator (2 °C to 8 °C). Do not freeze.

If necessary, Adtralza may be kept at room temperature up to 25 °C in the original package for a maximum of 14 days. Do not store above 25 °C. Throw away Adtralza if it is not used within 14 days of storage at room temperature.

If you need to permanently remove the carton from the refrigerator, write down the date of removal on the carton, and use Adtralza within 14 days. Adtralza must not be refrigerated again during this period.

Do not use this medicine if you notice that it is cloudy, discoloured or has particles in it.

Do not throw away any medicines via wastewater or household waste. Ask your doctor, pharmacist or nurse how to throw away medicines you no longer use. These measures will help protect the environment.

6. Contents of the pack and other information

What Adtralza contains

- The active substance is tralokinumab.
- Each pre-filled syringe contains 150 mg of tralokinumab in 1 mL solution for injection.
- The other ingredients are sodium acetate trihydrate (E262), acetic acid (E260), sodium chloride, polysorbate 80 (E433) and water for injections.

What Adtralza looks like and contents of the pack

Adtralza is a clear to opalescent, colourless to pale yellow solution, supplied in a glass pre-filled syringe with a needle guard.

Adtralza is available in unit packs containing 2 pre-filled syringes or in multipacks containing 4 (2 packs of 2) or 12 (6 packs of 2) pre-filled syringes.

Not all pack sizes may be marketed.

Marketing Authorisation Holder and Manufacturer

LEO Pharma A/S
Industriparken 55
DK-2750 Ballerup
Denmark

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

België/Belgique/Belgien

LEO Pharma N.V./S.A
Tél/Tel: +32 3 740 7868

България

Borola Ltd
Тел.: +359 2 9156 136

Lietuva

LEO Pharma A/S
Tel: +45 44 94 58 88

Luxembourg/Luxemburg

LEO Pharma N.V./S.A
Tél/Tel: +32 3 740 7868

Česká republika

LEO Pharma s.r.o.

Tel: +420 225 992 272

Danmark

LEO Pharma AB

Tlf: +45 70 22 49 11

Deutschland

LEO Pharma GmbH

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Detailed information on this medicine is available on the European Medicines Agency web site:
<http://www.ema.europa.eu>

The Instructions for Use with information about on how to inject Adtralza is shown on the other side of this leaflet.

Instructions for Use
Adtralza
tralokinumab
Solution for injection in pre-filled syringe

Read these instructions before you start using Adtralza pre-filled syringes and each time you get a new package. There may be new information. You should also talk to your healthcare professional about your medical condition or your treatment.

Keep this Instructions for Use so you can read it again if necessary.

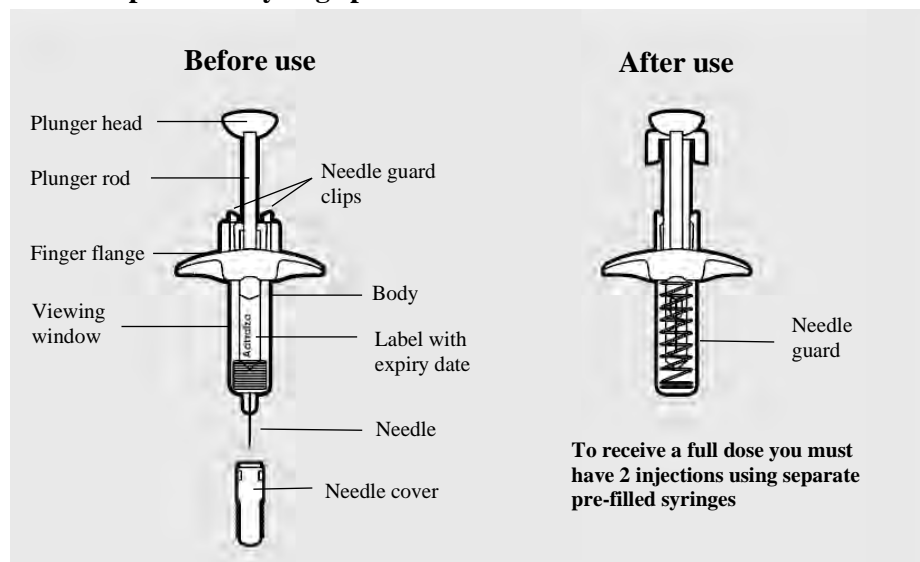
Each pre-filled syringe contains 150 mg of tralokinumab.
The Adtralza pre-filled syringes are for single-use only.

IMPORTANT INFORMATION

Important information you need to know before injecting Adtralza:

- Before you inject Adtralza for the first time, your healthcare professional will show you how to prepare and inject Adtralza using the pre-filled syringes.
- **Do not** inject Adtralza until you have been shown how to inject it the right way.
- Talk to your healthcare professional if you have any questions about how to inject Adtralza the right way.
- **To receive your full dose, you will need to have 2 Adtralza injections (1 set of injections). It is recommended that you use a different injection area for each new set of injections.**
- The Adtralza pre-filled syringes have a needle guard that will automatically cover the needle after the injection is finished.
- **Do not** remove the needle cover until just before you give the injection.
- **Do not** share or reuse your Adtralza pre-filled syringes.

Adtralza pre-filled syringe parts:



How to store Adtralza

- **Keep this medicine out of the sight and reach of children.**
- Store Adtralza pre-filled syringes in a refrigerator between 2 °C and 8 °C.
- Store Adtralza pre-filled syringes in the original package and protect from light until you are ready to use them.
- **Do not** freeze Adtralza pre-filled syringes. **Do not** use if they have been frozen.
- Adtralza can be stored in the original package at room temperature up to 25 °C for up to 14 days. If removed permanently from the refrigerator, write down the date of removal on the carton, and use Adtralza within 14 days. Discard syringes if left out of the refrigerator for more than 14 days.

Step 1: Setting up Adtralza injection



1a: Gather the supplies needed for your injection

For each Adtralza dose you will need:

- A clean, flat, well-lit work surface, like a table
- Adtralza carton with 2 Adtralza pre-filled syringes
- An alcohol swab (not included in the carton)
- Clean gauze pads or cotton balls (not included in the carton)
- A puncture-resistant sharps disposal container (not included in the carton)



1b: Take the Adtralza pre-filled syringe carton out of the refrigerator

- **Check the expiry date (EXP) on the carton. Do not** use if the expiry date on the carton has passed.
- Check to make sure the seal on the Adtralza carton is intact. **Do not** use the Adtralza pre-filled syringes if the seal on the carton is broken.

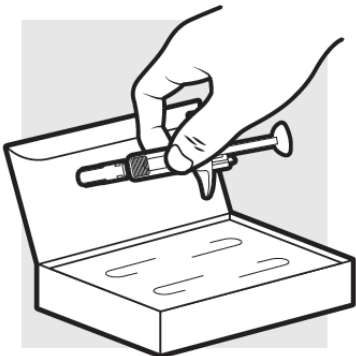
Do not use the Adtralza pre-filled syringes if the syringes have been stored at room temperature for more than 14 days.



1c: Let the Adtralza pre-filled syringes reach room temperature

Place the Adtralza carton on the flat surface and wait 30 minutes before you inject Adtralza to let the pre-filled syringes reach room temperature (20 °C to 25 °C). This will help to make injection of Adtralza more comfortable.

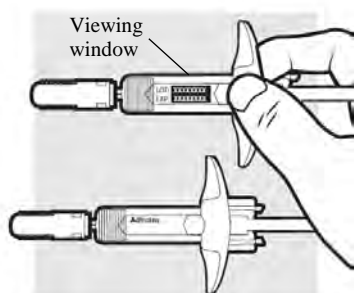
- **Do not** heat the pre-filled syringes in any way.
- **Do not** shake the syringes.
- **Do not** remove the needle cover on the pre-filled syringes until you have reached Step 3 and are ready to inject.
- **Do not** put the syringes back in the refrigerator once they have reached room temperature.



1d: Remove the Adtralza pre-filled syringes from the carton

Remove the 2 Adtralza pre-filled syringes one by one from the carton by grasping the body (not the plunger rod) of the Adtralza pre-filled syringes.

- **Do not** touch the needle guard clips to keep from activating the needle guard too soon.
- **Do not** remove the needle cover on the pre-filled syringes until you have reached Step 3 and are ready to inject.



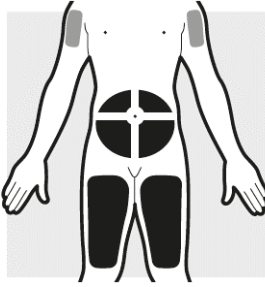
1e: Inspect the 2 Adtralza pre-filled syringes

- Make sure the labels show the correct name of the medicine, Adtralza.
- Check the expiry date on the syringes.
- Check the medicine through the viewing windows. The medicine should be clear to opalescent, colourless to pale yellow.
- Do not use the Adtralza pre-filled syringes if:
 - the expiry date on the syringes has passed
 - the medicine is cloudy, discoloured, or has particles in it
 - the pre-filled syringes look damaged or have been dropped

If you cannot use the syringes, dispose of them in a puncture-resistant container and use new syringes.

- You may see small air bubbles in the liquid. This is normal. You do not need to do anything about it.

Step 2: Choosing and preparing injection area



- Injection by caregiver only
- Self-injection or injection by caregiver

2a: Choose the area for your injections

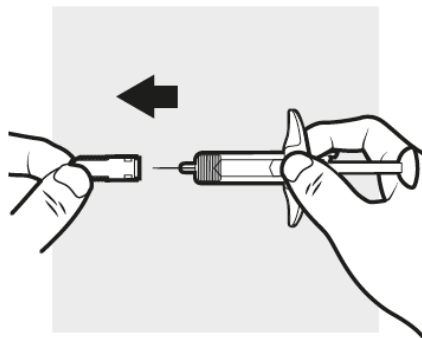
- You may inject into:
 - your stomach area (abdomen)
 - your thighs
 - your upper arm. To inject into your upper arm, you will need a caregiver to give you the injections.
- **Do not** inject where the skin is tender, bruised, scaly, scarred, damaged, hard or covered with eczema.
- **Do not** inject within 5 cm of your belly button (navel).



2b: Wash your hands and prepare your skin

- Wash your hands with soap and water.
- Clean the injection area for the 2 injections with an alcohol swab using a circular motion.
 - Let the area dry completely.
 - **Do not** blow on or touch the cleaned area before injecting.

Step 3: Injecting Adtralza

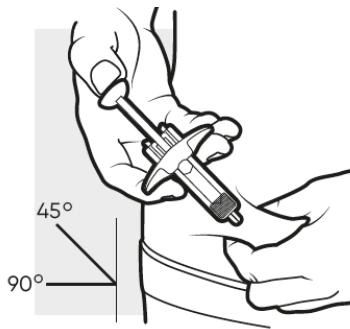


3a: Pull off the Adtralza needle cover

Hold the Adtralza pre-filled syringe body with one hand, pull the needle cover straight off with your other hand and throw it into the puncture-resistant container.

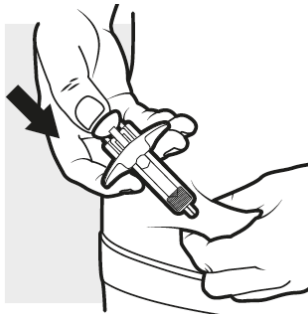
- **Do not try to recap the Adtralza pre-filled syringes.**
- **Do not** hold the plunger rod or plunger head while removing the needle cover.

- You may see a drop of liquid at the end of the needle. This is normal.
- **Do not** touch the needle, or let it touch any surface.



3b: Insert the needle

With one hand, gently pinch and hold a fold of skin where you cleaned the injection area. With the other hand, insert the needle completely into your skin at a 45-90 degree angle.



3c: Inject the medicine

Use your thumb to firmly push the plunger head all the way down. All the medicine is injected when you cannot push the plunger head any further.



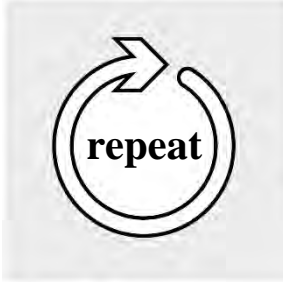
3d: Release and remove

Lift your thumb off the plunger head. The needle will automatically move back inside the syringe body and lock into place.

- Place a dry cotton ball or gauze pad over the injection area for a few seconds. Do not rub the injection area. If needed, cover the injection area with a small bandage.
- There may be a small amount of blood or liquid where you injected. This is normal.

Throw away the used Adtralza pre-filled syringe in a puncture-resistant container. **See Step 5 “Disposing of Adtralza”.**

Step 4: Injecting the second syringe



To get your full prescribed dose, you will need to give a second injection. Get a new Adtralza pre-filled syringe and repeat Steps 3 and 5.

Note

Make sure you give your **second injection** in the same body area, but at least 3 cm away from the first one.

Step 5: Disposing of Adtralza



- Put the used Adtralza pre-filled syringes in a puncture-resistant container straight away after use.
 - **Do not** throw the Adtralza pre-filled syringes in your household trash.
- If you do not have a puncture-resistant container, you may use a household container that is:
 - made of heavy-duty plastic,
 - can be closed with a tight-fitting, puncture-resistant lid, without sharps being able to come out,
 - upright and stable during use,
 - leak-resistant, and
 - properly labelled to warn of hazardous waste inside the container.
- When your puncture-resistant container is almost full, you will need to follow your community guidelines for the right way to dispose of your puncture-resistant container.
- **Do not** recycle your used puncture-resistant container.