# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

#### 1. NAME OF THE MEDICINAL PRODUCT

Kevzara 150 mg solution for injection in pre-filled syringe Kevzara 150 mg solution for injection in pre-filled pen Kevzara 200 mg solution for injection in pre-filled syringe Kevzara 200 mg solution for injection in pre-filled pen

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Kevzara 150 mg solution for injection in pre-filled syringe

Each pre-filled syringe contains 150 mg sarilumab in 1.14 ml solution (131.6 mg/ml).

Kevzara 150 mg solution for injection in pre-filled pen

Each pre-filled pen contains 150 mg sarilumab in 1.14 ml solution (131.6 mg/ml).

Kevzara 200 mg solution for injection in pre-filled syringe

Each pre-filled syringe contains 200 mg sarilumab in 1.14 ml solution (175 mg/ml).

Kevzara 200 mg solution for injection in pre-filled pen

Each pre-filled pen contains 200 mg sarilumab in 1.14 ml solution (175 mg/ml).

Sarilumab is a human monoclonal antibody produced in Chinese Hamster Ovary cells by recombinant DNA technology.

For the full list of excipients see section 6.1.

#### 3. PHARMACEUTICAL FORM

Solution for injection (injection)

Clear, colourless to pale yellow sterile solution of approximately pH 6.0.

# 4. CLINICAL PARTICULARS

# 4.1 Therapeutic indications

Kevzara in combination with methotrexate (MTX) is indicated for the treatment of moderately to severely active rheumatoid arthritis (RA) in adult patients who have responded inadequately to, or who are intolerant to one or more disease modifying anti rheumatic drugs (DMARDs). Kevzara can be given as monotherapy in case of intolerance to MTX or when treatment with MTX is inappropriate (see section 5.1).

#### 4.2 Posology and method of administration

Treatment should be initiated and supervised by healthcare professionals experienced in the diagnosis and treatment of rheumatoid arthritis. Patients should be given the patient alert card.

# **Posology**

The recommended dose of sarilumab is 200 mg once every 2 weeks administered as a subcutaneous injection.

Reduction of dose from 200 mg once every 2 weeks to 150 mg once every 2 weeks is recommended for management of neutropenia, thrombocytopenia, and liver enzyme elevations.

# Dose modification

Treatment with sarilumab should be withheld in patients who develop a serious infection until the infection is controlled.

Initiating treatment with sarilumab is not recommended in patients with a low neutrophil count, i.e. absolute neutrophil count (ANC) less than  $2 \times 10^9$ /L.

Initiating treatment with sarilumab is not recommended in patients with a platelet count below  $150 \times 10^3 / \mu L$ .

Table 1: Recommended dose modifications in case of neutropenia, thrombocytopenia, or liver enzyme elevations (see sections 4.4 and 4.8):

Low Absolute Neutrophil Count (see section 5.1)			
Lab Value (cells x 10 <sup>9</sup> /L)	Recommendation		
ANC greater than 1	Current dose of sarilumab should be maintained.		
ANC 0.5-1	Treatment with sarilumab should be withheld until >1 x 10 <sup>9</sup> /L.		
	Sarilumab can then be resumed at 150 mg every 2 weeks and increased		
	to 200 mg every 2 weeks as clinically appropriate.		
ANC less than 0.5	Treatment with sarilumab should be discontinued.		

<b>Low Platelet Count</b>	
Lab Value (cells x	Recommendation
$10^3/\mu$ L)	
50 to 100	Treatment with sarilumab should be withheld until $\geq 100 \text{ x } 10^3/\mu\text{L}$ .
	Sarilumab can then be resumed at 150 mg every 2 weeks and increased
	to 200 mg every 2 weeks as clinically appropriate.
Less than 50	If confirmed by repeat testing, treatment with sarilumab should be
	discontinued.

Liver Enzyme Abnormalities			
Lab Value	Recommendation		
ALT > 1 to 3 x Upper	Clinically appropriate dose modification of concomitant DMARDs		
Limit of Normal (ULN)	should be considered.		
ALT > 3 to 5 x ULN	Treatment with sarilumab should be withheld until < 3 x ULN.		
	Sarilumab can then be resumed at 150 mg every 2 weeks and increased		
	to 200 mg every 2 weeks as clinically appropriate.		
$ALT > 5 \times ULN$	Treatment with sarilumab should be discontinued.		

# Missed dose

If a dose of sarilumab is missed and it has been 3 days or less since the missed dose, the next dose should be administered as soon as possible. The subsequent dose should be administered at the regularly scheduled time. If it has been 4 days or more since the missed dose, the subsequent dose should be administered at the next regularly scheduled time, the dose should not be doubled.

#### Special populations

# Renal impairment

No dose adjustment is required in patients with mild to moderate renal impairment. Sarilumab has not been studied in patients with severe renal impairment (see section 5.2).

#### Hepatic impairment

The safety and efficacy of sarilumab have not been studied in patients with hepatic impairment, including patients with positive hepatitis B virus (HBV) or hepatitis C virus (HCV) serology (see section 4.4).

#### **Elderly**

No dose adjustment is required in patients over 65 years of age (see section 4.4).

# Paediatric population

The safety and efficacy of sarilumab in children up to 18 years of age have not been established. No data are available.

#### Method of administration

#### Subcutaneous use.

The total content (1.14 ml) of the pre-filled syringe/pre-filled pen should be administered as a subcutaneous injection. Injection sites (abdomen, thigh and upper arm) should be rotated with each injection. Sarilumab should not be injected into skin that is tender, damaged, or has bruises or scars.

A patient may self-inject sarilumab or the patient's caregiver may administer sarilumab if their healthcare professional determines that it is appropriate. Proper training should be provided to patients and/or caregivers on the preparation and administration of sarilumab prior to use.

Comprehensive instructions for administration of this medicinal product are given in the package leaflet.

#### 4.3 Contraindications

Hypersensitivity to the active substance or any of the excipients listed in section 6.1. Active, severe infections (see section 4.4).

# 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.

#### Serious infections

Patients should be closely monitored for the development of signs and symptoms of infection during treatment with sarilumab (see sections 4.2 and 4.8). As there is a higher incidence of infections in the elderly population in general, caution should be used when treating the elderly.

Sarilumab should not be administered in patients with an active infection, including localised infections. The risks and benefits should be considered prior to initiating treatment in patients who have:

- chronic or recurrent infection;
- a history of serious or opportunistic infections;
- HIV infection;

- underlying conditions that may predispose them to infection;
- been exposed to tuberculosis; or
- lived in or travelled to areas of endemic tuberculosis or endemic mycoses.

Treatment with sarilumab should be withheld if a patient develops a serious infection or an opportunistic infection.

A patient who develops an infection during treatment should also undergo prompt and complete diagnostic testing appropriate for an immunocompromised patient; appropriate antimicrobial therapy should be initiated, and the patient should be closely monitored.

Serious and sometimes fatal infections due to bacterial, mycobacterial, invasive fungal, viral, or other opportunistic pathogens have been reported in patients receiving immunosuppressive agents including sarilumab for RA. The most frequently observed serious infections with sarilumab included pneumonia and cellulitis (see section 4.8). Among opportunistic infections, tuberculosis, candidiasis, and pneumocystis were reported with sarilumab. In isolated cases, disseminated rather than localised infections were observed in patients often taking concomitant immunosuppressants such as MTX or corticosteroids, which in addition to RA may predispose them to infections.

#### **Tuberculosis**

Patients should be evaluated for tuberculosis risk factors and tested for latent infection prior to initiating treatment with sarilumab. Patients with latent or active tuberculosis should be treated with standard antimycobacterial therapy before initiating treatment. Anti-tuberculosis therapy should be considered prior to initiation of treatment in patients with a past history of latent or active tuberculosis in whom an adequate course of treatment cannot be confirmed, and for patients with a negative test for latent tuberculosis but having risk factors for tuberculosis infection. When considering anti-tuberculosis therapy, consultation with a physician with expertise in tuberculosis may be appropriate.

Patients should be closely monitored for the development of signs and symptoms of tuberculosis including patients who tested negative for latent tuberculosis infection prior to initiating therapy.

#### Viral reactivation

Viral reactivation has been reported with immunosuppressive biologic therapies. Cases of herpes zoster were observed in clinical studies with sarilumab (see section 4.8). No cases of Hepatitis B reactivation were reported in the clinical studies; however patients who were at risk for reactivation were excluded.

#### <u>Laboratory parameters</u>

#### Neutrophil count

Treatment with sarilumab was associated with a higher incidence of decrease in ANC (see section 4.8). Decrease in ANC was not associated with higher incidence of infections, including serious infections.

- Initiating treatment with sarilumab is not recommended in patients with a low neutrophil count, i.e., ANC less than 2 x 10<sup>9</sup>/L. In patients who develop an ANC less than 0.5 x 10<sup>9</sup>/L, treatment with sarilumab should be discontinued (see section 4.2).
- Neutrophil count should be monitored 4 to 8 weeks after start of therapy and according to clinical judgment thereafter. For recommended dose modifications based on ANC results, see section 4.2.
- Based on the pharmacodynamics of the changes in ANC, results obtained at the end of the dosing interval should be used when considering dose modification (see section 5.1).

#### Platelet count

Treatment with sarilumab was associated with a reduction in platelet counts in clinical studies. Reduction in platelets was not associated with bleeding events (see section 4.8).

- Initiating treatment with sarilumab is not recommended in patients with a platelet count below  $150 \times 10^3 / \mu L$ . In patients who develop a platelet count less than  $50 \times 10^3 / \mu L$ , treatment with sarilumab should be discontinued.
- Platelet count should be monitored 4 to 8 weeks after start of therapy and according to clinical judgment thereafter. For recommended dose modifications based on platelet counts, see section 4.2.

#### Liver enzymes

Treatment with sarilumab was associated with a higher incidence of transaminase elevations. These elevations were transient and did not result in any clinically evident hepatic injury in clinical studies (see section 4.8). Increased frequency and magnitude of these elevations were observed when potentially hepatotoxic medicinal products (e.g., MTX) were used in combination with sarilumab.

Initiating treatment with sarilumab is not recommended in patients with elevated transaminases, ALT or AST greater than 1.5 x ULN. In patients who develop elevated ALT greater than 5 x ULN, treatment with sarilumab should be discontinued (see section 4.2).

ALT and AST levels should be monitored 4 to 8 weeks after start of therapy and every 3 months thereafter. When clinically indicated, consider other liver function tests such as bilirubin. For recommended dose modifications based on transaminase elevations, see section 4.2.

#### Lipid abnormalities

Lipid levels may be reduced in patients with chronic inflammation. Treatment with sarilumab was associated with increases in lipid parameters such as LDL cholesterol, HDL cholesterol, and/or triglycerides (see section 4.8). Lipid parameters should be assessed approximately 4 to 8 weeks following initiation of treatment with sarilumab, then at approximately 6 month intervals. Patients should be managed according to clinical guidelines for the management of hyperlipidaemia.

# Gastrointestinal perforation and diverticulitis

Cases of gastrointestinal perforation and diverticulitis have been reported in association with sarilumab. Gastrointestinal perforation has been reported in patients with and without diverticulitis. Sarilumab should be used with caution in patients with previous history of intestinal ulceration or diverticulitis. Patients presenting with new onset abdominal symptoms such as persistent pain with fever should be evaluated promptly (see section 4.8).

#### Malignancies

Treatment with immunosuppressants may result in an increased risk of malignancies. The impact of treatment with sarilumab on the development of malignancies is not known but malignancies were reported in clinical studies (see section 4.8).

#### Hypersensitivity reactions

Hypersensitivity reactions have been reported in association with sarilumab (see section 4.8). Injection site rash, rash, and urticaria were the most frequent hypersensitivity reactions. Patients should be advised to seek immediate medical attention if they experience any symptoms of a hypersensitivity reaction. If anaphylaxis or other hypersensitivity reaction occurs, administration of Sarilumab should be stopped immediately (see section 4.3).

#### Hepatic impairment

Treatment with sarilumab is not recommended in patients with active hepatic disease or hepatic impairment (see sections 4.2 and 4.8).

#### Vaccinations

Concurrent use of live vaccines as well as live attenuated vaccines should be avoided during treatment with sarilumab as clinical safety has not been established. No data are available on the secondary transmission of infection from persons receiving live vaccines to patients receiving sarilumab. Prior to initiating treatment, it is recommended that all patients be brought up to date with all immunisations in agreement with current immunisation guidelines. The interval between live vaccinations and initiation of therapy should be in accordance with current vaccination guidelines regarding immunosuppressive agents (see section 4.5).

#### Cardiovascular risk

RA patients have an increased risk for cardiovascular disorders and risk factors (e.g. hypertension, hyperlipidaemia) should be managed as part of usual standard of care.

#### 4.5 Interaction with other medicinal products and other forms of interaction

Sarilumab exposure was not affected when coadministered with MTX based on the population pharmacokinetic analyses and across study comparisons. MTX exposure is not expected to be changed by sarilumab coadministration; however, no clinical data was collected. Sarilumab has not been investigated in combination with Janus kinase (JAK) inhibitors or biological DMARDs such as Tumor Necrosis Factor (TNF) antagonists.

Various *in vitro* and limited *in vivo* human studies have shown that cytokines and cytokine modulators can influence the expression and activity of specific cytochrome P450 (CYP) enzymes (CYP1A2, CYP2C9, CYP2C19, and CYP3A4) and therefore have the potential to alter the pharmacokinetics of concomitantly administered medicinal products that are substrates of these enzymes. Elevated levels of interleukin-6 (IL-6) may down-regulate CYP activity such as in patients with RA and hence increase drug levels compared to subjects without RA. Blockade of IL-6 signalling by IL-6Rα antagonists such as sarilumab might reverse the inhibitory effect of IL-6 and restore CYP activity, leading to altered medicinal products concentrations.

The modulation of IL-6 effect on CYP enzymes by sarilumab may be clinically relevant for CYP substrates with a narrow therapeutic index, where the dose is individually adjusted. Upon initiation or discontinuation of sarilumab in patients being treated with CYP substrate medicinal products, therapeutic monitoring of effect (e.g., warfarin) or drug concentration (e.g., theophylline) should be performed and the individual dose of the medicinal product should be adjusted as needed.

Caution should be exercised in patients who start sarilumab treatment while on therapy with CYP3A4 substrates (e.g., oral contraceptives or statins), as sarilumab may reverse the inhibitory effect of IL-6 and restore CYP3A4 activity, leading to decreased exposure and activity of CYP3A4 substrate (see section 5.2). Interaction of sarilumab with substrates of other CYPs (CYP2C9, CYP 2C19, CYP2D6) has not been studied.

#### 4.6 Fertility, pregnancy and lactation

## Women of childbearing potential

Women of childbearing potential should use effective contraception during and up to 3 months after treatment.

#### **Pregnancy**

There are no or limited amount of data from the use of sarilumab in pregnant women. Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity (see section 5.3).

Sarilumab should not be used during pregnancy unless the clinical condition of the woman requires treatment with sarilumab.

# **Breast-feeding**

It is unknown whether sarilumab is excreted in human milk or absorbed systemically after ingestion. The excretion of sarilumab in milk has not been studied in animals (see section 5.3). Because IgG1 are excreted in human milk, a decision must be made whether to discontinue breast-feeding or to discontinue sarilumab therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.

#### **Fertility**

No data are available on the effect of sarilumab on human fertility. Animal studies showed no impairment of male or female fertility (see section 5.3).

# 4.7 Effects on ability to drive and use machines

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

#### 4.8 Undesirable effects

# Summary of the safety profile

The most frequent adverse reactions are neutropenia (14.2%), upper respiratory infections (7.1%), increased ALT (6.8%), urinary tract infections (5.7%), and injection site erythema (5.3%). The most common serious adverse reactions are infections (2.9%) (see section 4.4).

#### Tabulated list of adverse reactions

Adverse reactions listed in the table have been reported in controlled clinical studies. The frequency of adverse reactions listed below is defined using the following convention: very common ( $\geq 1/10$ ); common ( $\geq 1/100$ ); uncommon ( $\geq 1/1,000$ ); 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.

**Table 2: Adverse reactions** 

System Organ Class	Frequency	Adverse reaction
Infections and infestations	Common	Upper respiratory tract
		infection
		Urinary tract infection
		Nasopharyngitis
		Oral herpes
	Uncommon	Pneumonia
		Cellulitis
		Diverticulitis
Blood and lymphatic system disorders	Very	Neutropenia
	common	
	Common	Thrombocytopenia
		Leukopenia
Metabolism and nutrition disorders	Common	Hypercholesterolemia
		Hypertriglyceridemia
Gastrointestinal disorders	Rare	Gastrointestinal perforation
Hepatobiliary disorders	Common	Transaminases increased
General disorders and administration site	Common	Injection site erythema
conditions		Injection site pruritus

# Description of selected adverse reactions

#### Infections

In the placebo-controlled population, the rates of infections were 84.5, 81.0, and 75.1 events per 100 patient-years, in the 200 mg and 150 mg sarilumab + DMARDs and placebo + DMARDs groups respectively. The most commonly reported infections (5% to 7% of patients) were upper respiratory tract infections, urinary tract infections, and nasopharyngitis. The rates of serious infections were 4.3, 3.0, and 3.1 events per 100 patient-years, in the 200 mg, 150 mg sarilumab + DMARDs, and placebo + DMARDs groups, respectively.

In the sarilumab +DMARDs long-term safety population, the rates of infections and serious infection were 57.3 and 3.4 events per 100-patient years, respectively.

The most frequently observed serious infections included pneumonia and cellulitis. Cases of opportunistic infection have been reported (see section 4.4).

The overall rates of infections and serious infections in the sarilumab monotherapy population were consistent with rates in the sarilumab + DMARDs population.

## Gastrointestinal perforation

Gastrointestinal perforation was reported in patients with and without diverticulitis. Most patients who developed gastrointestinal perforations were taking concomitant nonsteroidal anti-inflammatory medicinal products (NSAIDs), corticosteroids, or methotrexate. The contribution of these concomitant medications relative to sarilumab in the development of gastrointestinal perforations is not known (see section 4.4).

# Hypersensitivity reactions

In the placebo-controlled population, the proportion of patients who discontinued treatment due to hypersensitivity reactions was higher among those treated with sarilumab (0.9% in 200 mg group, 0.5% in 150 mg group) than placebo (0.2%). The rates of discontinuations due to hypersensitivity in the sarilumab + DMARDs long-term safety population and the sarilumab monotherapy population were consistent with the placebo-controlled population. In the placebo-controlled population, 0.2% of

the patients treated with sarilumab 200 mg every two weeks (q2w) + DMARD reported serious adverse reactions of hypersensitivity reactions, and none from sarilumab 150 mg q2w + DMARD group.

#### *Injection site reactions*

In the placebo-controlled population, injection site reactions were reported in 9.5%, 8%, and 1.4% of patients receiving sarilumab 200 mg, 150 mg, and placebo respectively. These injection site reactions (including erythema and pruritus) were mild to moderate in severity for the majority of patients (99.5%, 100%, and 100%, for sarilumab 200 mg, 150 mg, and placebo respectively). Two patients on sarilumab (0.2%) discontinued treatment due to injection site reactions.

#### Laboratory abnormalities

To allow for a direct comparison of frequency of laboratory abnormalities between placebo and active treatment, data from weeks 0-12 were used as this was prior to patients being permitted to switch from placebo to sarilumab.

#### Neutrophil count

Decreases in neutrophil counts below 1 x 10<sup>9</sup>/L occurred in 6.4% and 3.6% of patients in the 200 mg and 150 mg sarilumab + DMARDs group, respectively, compared to no patients in the placebo + DMARDs group. Decreases in neutrophil counts below 0.5 x 10<sup>9</sup>/L occurred in 0.8% and 0.6% of patients in the 200 mg and 150 mg sarilumab+ DMARDs groups, respectively. In patients experiencing a decrease in absolute neutrophil count (ANC), modification of treatment regimen such as interruption of sarilumab or reduction in dose resulted in an increase or normalisation of ANC (see section 4.2). Decrease in ANC was not associated with higher incidence of infections, including serious infections.

In the sarilumab + DMARDs long-term safety population and the sarilumab monotherapy population, the observations on neutrophil counts were consistent with those seen in the placebo-controlled population (see section 4.4).

#### Platelet count

Decreases in platelet counts below  $100 \times 10^3/\mu$ L occurred in 1.2% and 0.6% of patients on 200 mg and 150 mg sarilumab + DMARDs, respectively, compared to no patients on placebo + DMARDs.

In the sarilumab + DMARDs long-term safety population and the sarilumab monotherapy population, the observations on platelet counts were consistent with those seen in the placebo-controlled population.

There were no bleeding events associated with decreases in platelet count.

## Liver enzymes

Liver enzyme abnormalities are summarised in Table 3. In patients experiencing liver enzyme elevation, modification of treatment regimen, such as interruption of treatment or reduction in dose, resulted in decrease or normalisation of liver enzymes (see section 4.2). These elevations were not associated with clinically relevant increases in direct bilirubin, nor were they associated with clinical evidence of hepatitis or hepatic insufficiency (see section 4.4).

Table 3: Incidence of liver enzyme abnormalities in controlled clinical studies

	Placebo + DMARD N = 661	Sarilumab 150 mg + DMARD N = 660	Sarilumab 200 mg + DMARD N = 661	Sarilumab monotherapy any Dose N = 467
AST				
>3 x ULN –	0%	1.2%	1.1%	1.1%
5 x ULN				
>5 x ULN	0%	0.6%	0.2%	0%
ALT				
>3 x ULN –	0.6%	3.2%	2.4%	1.9%
5 x ULN				
>5 x ULN	0%	1.1%	0.8%	0.2%

#### Lipids

Lipid parameters (LDL, HDL, and triglycerides) were first assessed at 4 weeks following initiation of sarilumab+ DMARDs in the placebo-controlled population. At week 4 the mean LDL increased by 14 mg/dL; mean triglycerides increased by 23 mg/dL; and mean HDL increased by 3 mg/dL. After week 4 no additional increases were observed. There were no meaningful differences between doses.

In the sarilumab + DMARDs long-term safety population and the sarilumab monotherapy population, the observations in lipid parameters were consistent with those seen in the placebo-controlled population.

#### *Immunogenicity*

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

In the placebo-controlled population, 4.0%, 5.6%, and 2.0% of patients treated with sarilumab 200 mg + DMARDs, sarilumab 150 mg + DMARDs and placebo + DMARDs respectively, exhibited a positive response in the anti-drug antibody (ADA) assay. Positive responses in the neutralising antibody (NAb) assay were detected in 1.0%, 1.6%, and 0.2% of patients on sarilumab 200 mg, sarilumab 150 mg, and placebo respectively.

In the sarilumab monotherapy population, observations were consistent with the sarilumab + DMARDs population.

Anti Drug Antibody (ADA) formation may affect pharmacokinetics of sarilumab. No correlation was observed between ADA development and either loss of efficacy or adverse reactions.

The detection of an immune response is highly dependent on the sensitivity and specificity of the assays used and testing conditions. For these reasons, comparison of the incidence of antibodies to sarilumab with the incidence of antibodies to other products may be misleading.

#### Malignancies

In the placebo-controlled population, malignancies occurred at the same rate in patients receiving either sarilumab + DMARDs or placebo + DMARDs (1.0 events per 100 patient-years).

In the sarilumab + DMARDs long-term safety population and the sarilumab monotherapy population, the rates of malignancies were consistent with the rate observed in the placebo-controlled population (see section 4.4).

#### 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 Kevzara overdose. In the event of an overdose, the patient should be closely monitored, treated symptomatically, and supportive measures instituted as required.

#### 5. PHARMACOLOGICAL PROPERTIES

# 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Immunosupressants, Interleukin inhibitors, ATC code: L04AC14

## Mechanism of action

Sarilumab is a human monoclonal antibody (IgG1 subtype) that specifically binds to both soluble and membrane-bound IL-6 receptors (IL-6R $\alpha$ ), and inhibits IL-6-mediated signalling which involves ubiquitous signal-transducing glycoprotein 130 (gp130) and the Signal Transducer and Activator of Transcription-3 (STAT-3).

In functional human cell-based assays, sarilumab was able to block the IL-6 signalling pathway, measured as STAT-3 inhibition, only in the presence of IL-6.

IL-6 is a pleiotropic cytokine that stimulates diverse cellular responses such as proliferation, differentiation, survival, and apoptosis and can activate hepatocytes to release acute-phase proteins, including C-reactive protein (CRP) and serum amyloid A. Elevated levels of IL-6 are found in the synovial fluid of patients with rheumatoid arthritis and play an important role in both the pathologic inflammation and joint destruction which are hallmarks of RA. IL-6 is involved in diverse physiological processes such as migration and activation of T-cells, B-cells, monocytes, and osteoclasts leading to systemic inflammation, synovial inflammation, and bone erosion in patients with RA.

The activity of sarilumab in reducing inflammation is associated with laboratory changes such as decrease in ANC and elevation in lipids (see section 4.4).

# Pharmacodynamic effects

Following single-dose subcutaneous (SC) administration of sarilumab 200 mg and 150 mg in patients with RA rapid reduction of CRP levels was observed. Levels were reduced to normal as early as 4 days after treatment initiation. Following single-dose sarilumab administration, in patients with RA, ANC decreased to the nadir between 3 to 4 days and thereafter recovered towards baseline (see section 4.4). Treatment with sarilumab resulted in decreases in fibrinogen and serum amyloid A, and increases in haemoglobin and serum albumin.

# Clinical efficacy

The efficacy and safety of sarilumab were assessed in three randomised, double-blind, controlled multicentre studies (MOBILITY and TARGET were placebo-controlled studies and MONARCH was an active comparator-controlled study) in patients older than 18 years with moderately to severely active rheumatoid arthritis diagnosed according to American College of Rheumatology (ACR) criteria. Patients had at least 8 tender and 6 swollen joints at baseline.

#### Placebo-controlled studies

MOBILITY evaluated 1197 patients with RA who had inadequate clinical response to MTX. Patients received sarilumab 200 mg, sarilumab 150 mg, or placebo every 2 weeks with concomitant MTX. The primary endpoints were the proportion of patients who achieved an ACR20 response at week 24, changes from baseline in Health Assessment Questionnaire – Disability Index (HAQ-DI) score at week 16, and change from baseline in van der Heijde-modified Total Sharp Score (mTSS) at week 52.

TARGET evaluated 546 patients with RA who had an inadequate clinical response or were intolerant to one or more TNF-α antagonists. Patients received sarilumab 200 mg, sarilumab 150 mg, or placebo every 2 weeks with concomitant conventional DMARDs (cDMARDs). The primary endpoints were the proportion of patients who achieved an ACR20 response at week 24 and the changes from baseline HAQ-DI score at week 12.

#### Clinical response

The percentages of sarilumab + DMARDs-treated patients achieving ACR20, ACR50, and ACR70 responses in MOBILITY and TARGET are shown in Table 4. In both studies, patients treated with either 200 mg or 150 mg of sarilumab + DMARDs every two weeks had higher ACR20, ACR50, and ACR70 response rates versus placebo-treated patients at week 24. These responses persisted through 3 years of therapy in an open-label extension study.

In MOBILITY, a greater proportion of patients treated with sarilumab 200 mg or 150 mg every two weeks plus MTX achieved remission, defined as Disease Activity Score 28-C-Reactive Protein (DAS28-CRP) < 2.6 compared with placebo + MTX at week 52. Results at 24 weeks in TARGET were similar to the results at 52 weeks in MOBILITY (see Table 4).

Table 4: Clinical response at weeks 12, 24, and 52 in placebo-controlled studies, MOBILITY and **TARGET** 

	Percentage of patients					
	MOBILITY			TARGET		
	MTX inadequate responders		TNF inhibitor inadequate responders			
	Placebo	Sariluma	Sarilumab	Placebo	Sarilumab	Sarilumab
	+ MTX	b 150 mg	200 mg	+ cDMA	150 mg	200 mg
	N = 398	+ MTX	+ MTX	RDs*	+ cDMARD	+ cDMARD
		N = 400	N=399	N = 181	s*	s*
					N = 181	N = 184
Week 12						
DAS28-CRP		***	***		***	***
remission (< 2.6)	4.8%	18.0% †††	23.1% <sup>†††</sup>	3.9%	17.1%	17.9%
ACR20	34.7%	54.0% †††	64.9%	37.6%	54.1% <sup>†</sup>	62.5% <sup>†††</sup>
ACR50	12.3%	26.5% †††	36.3% †††	13.3%	30.4%	33.2% †††
ACR70	4.0%	11.0% <sup>††</sup>	17.5% <sup>†††</sup>	2.2%	13.8% <sup>†††</sup>	14.7%
Week 24						
DAS28-CRP		***				***
remission (< 2.6)	10.1%	27.8% <sup>†††</sup>	34.1% <sup>†††</sup>	7.2%	24.9% <sup>†††</sup>	28.8% <sup>†††</sup>
ACR20 <sup>‡</sup>	33.4%	58.0% †††	66.4%	33.7%	55.8% †††	60.9%
ACR50	16.6%	37.0% †††	45.6% †††	18.2%	37.0%	$40.8\%^{\dagger\dagger\dagger}$
ACR70	7.3%	19.8% <sup>†††</sup>	$24.8\%^{\dagger\dagger\dagger}$	7.2%	19.9% <sup>††</sup>	16.3% <sup>†</sup>
Week 52						
DAS28-CRP		***	***			
remission (< 2.6)	8.5%	31.0% <sup>†††</sup>	34.1% <sup>†††</sup>	NA§	NA§	NA§
ACR20	31.7%	53.5% <sup>†††</sup>	58.6% <sup>†††</sup>			
ACR50	18.1%	$40.0\%^{\dagger\dagger\dagger}$	$42.9\%^{\dagger\dagger\dagger}$			
ACR70	9.0%	24.8%	26.8%			
Major clinical						
response <sup>¶</sup>	3.0%	12.8% <sup>†††</sup>	$14.8\%^{\dagger\dagger\dagger}$			

<sup>\*</sup>cDMARDs in TARGET included MTX, sulfasalazine, leflunomide and hydroxychloroquine

<sup>†</sup>p-value <0.01 for difference from placebo ††p-value <0.001 for difference from placebo

<sup>†††</sup>p-value <0.0001 for difference from placebo

<sup>‡</sup> Primary endpoint

<sup>§</sup> NA=Not Applicable as TARGET was a 24-week study

<sup>¶</sup> Major clinical response = ACR70 for at least 24 consecutive weeks during the 52-week period

In both MOBILITY and TARGET, higher ACR20 response rates were observed within 2 weeks compared to placebo and were maintained for the duration of the studies (see Figures 1 and 2).

**Figure 1:** Percent of ACR20 response by visit for MOBILITY

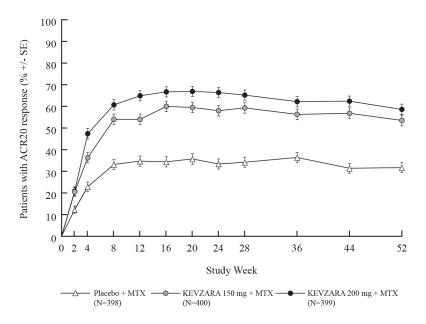
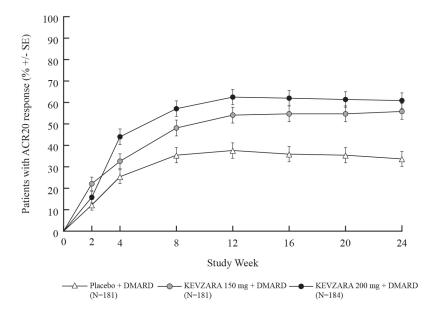


Figure 2: Percent of ACR20 response by visit for TARGET



The results of the components of the ACR response criteria at week 24 for MOBILITY and TARGET are shown in Table 5. Results at 52 weeks in MOBILITY were similar to the results at 24 weeks for TARGET.

Table 5: Mean reductions from baseline to week 24 in components of ACR score

		MOBILITY			TARGET	
Component (range)	Placebo + MTX (N = 398)	Sarilumab 150 mg q2w* + MTX (N = 400)	Sarilumab 200 mg q2w* + MTX (N = 399)	Placebo + cDMARDs (N = 181)	Sarilumab 150 mg q2w* + cDMARDs (N = 181)	Sarilumab 200 mg q2w* + cDMARDs (N = 184)
Tender Joints (0-68)	-14.38	-19.25†††	-19.00†††	-17.18	-17.30 <sup>†</sup>	-20.58†††
Swollen Joints (0-66)	-8.70	-11.84 <sup>†††</sup>	-12.43 <sup>†††</sup>	-12.12	-13.04 <sup>††</sup>	-14.03 <sup>†††</sup>
Pain VAS <sup>†</sup> (0-100 mm)	-19.43	-30.75 <sup>†††</sup>	-34.35 <sup>†††</sup>	-27.65	-36.28 <sup>††</sup>	-39.60†††
Physician global VAS <sup>‡</sup> (0-100 mm)	-32.04	-40.69 <sup>†††</sup>	-42.65 <sup>†††</sup>	-39.44	-45.09†††	-48.08†††
Patient global VAS <sup>‡</sup> (0-100 mm)	-19.55	-30.41***	-35.07 <sup>†††</sup>	-28.06	-33.88††	-37.36†††
HAQ-DI (0-3)	-0.43	-0.62***	-0.64***	-0.52	-0.60 <sup>†</sup>	-0.69 <sup>††</sup>
CRP	-0.14	-13.63 <sup>†††</sup>	-18.04 <sup>†††</sup>	-5.21	-13.11***	-29.06†††

<sup>\*</sup> q2w = every 2 weeks

# Radiographic response

In MOBILITY, structural joint damage was assessed radiographically and expressed as change in van der Heijde-modified Total Sharp Score (mTSS) and its components, the erosion score, and joint space narrowing score at week 52. Radiographs of hands and feet were obtained at baseline, 24 weeks, and 52 weeks and scored independently by at least two well-trained readers who were blinded to treatment group and visit number.

Both doses of sarilumab + MTX were superior to placebo + MTX in the change from baseline in mTSS at 24 and 52 weeks (see Table 6). Less progression of both erosion and joint space narrowing scores at 24 and 52 weeks was reported in the sarilumab treatment groups compared to the placebo group.

Treatment with sarilumab + MTX was associated with significantly less radiographic progression of structural damage as compared with placebo. At week 52, 55.6% of patients receiving sarilumab 200 mg and 47.8% of patients receiving sarilumab 150 mg had no progression of structural damage (as defined by a change in the TSS of zero or less) compared with 38.7% of patients receiving placebo.

<sup>&</sup>lt;sup>‡</sup>Visual analogue scale

<sup>†</sup>p-value <0.01 for difference from placebo

<sup>††</sup>p-value <0.001 for difference from placebo

<sup>†††</sup>p-value <0.0001 for difference from placebo

Treatment with sarilumab 200 mg and 150 mg + MTX inhibited the progression of structural damage by 91% and 68%, respectively, compared to placebo + MTX at week 52.

The efficacy of sarilumab with concomitant DMARDs on inhibition of radiographic progression that was assessed as part of the primary endpoints at week 52 in MOBILITY was sustained up to three years from the start of treatment.

Table 6: Mean radiographic change from baseline at week 24 and week 52 in MOBILITY

	MOBILITY MTX Inadequate responders			
	Placebo + MTX (N = 398)	Sarilumab 150 mg q2w* + MTX (N = 400)	Sarilumab 200 mg q2w* + MTX (N = 399)	
Mean change at week 24				
Modified Total Sharp Score (mTSS)	1.22	$0.54^{\dagger}$	0.13 <sup>††</sup>	
Erosion score (0-280) Joint space narrowing score	0.68 0.54	0.26 <sup>†</sup> 0.28	$0.02^{\dagger\dagger} \ 0.12^{\dagger}$	
Mean change at week 52 Modified Total Sharp Score (mTSS) <sup>‡</sup>	2.78	$0.90^{\dagger\dagger}$	$0.25^{\dagger\dagger}$	
Erosion score (0-280) Joint space narrowing score	1.46 1.32	0.42 <sup>††</sup> 0.47 <sup>†</sup>	$0.05^{\dagger\dagger} \ 0.20^{\dagger\dagger}$	

<sup>\*</sup> q2w=every two weeks

#### Physical function response

In MOBILITY and TARGET, physical function and disability were assessed by the Health Assessment Questionnaire Disability Index (HAQ-DI). Patients receiving sarilumab 200 mg or 150 mg + DMARDs every two weeks demonstrated greater improvement from baseline in physical function compared to placebo at week 16 and week 12 in MOBILITY and TARGET, respectively.

MOBILITY demonstrated significant improvement in physical function, as measured by the HAQ-DI at week 16 compared to placebo (-0.58, -0.54, and -0.30 for sarilumab 200 mg + MTX, sarilumab 150 mg + MTX, and placebo + MTX, every two weeks, respectively). TARGET demonstrated significant improvement in HAQ-DI scores at week 12 compared to placebo (-0.49, -0.50, and -0.29 for sarilumab 200 mg + DMARDs, sarilumab 150 mg + DMARDs, and placebo + DMARDs, every two weeks, respectively).

In MOBILITY, the improvement in physical functioning as measured by HAQ-DI was maintained up to week 52 (-0.75, -0.71, and -0.46 for sarilumab 200 mg + MTX, sarilumab 150 mg + MTX, and placebo + MTX treatment groups, respectively).

Patients treated with sarilumab + MTX (47.6% in the 200 mg treatment group and 47.0% in the 150 mg treatment group) achieved a clinically relevant improvement in HAQ-DI (change from baseline of  $\geq$ 0.3 units) at week 52 compared to 26.1% in the placebo + MTX treatment group.

#### Patient reported outcomes

General health status was assessed by the Short Form health survey (SF-36). In MOBILITY and TARGET, patients receiving sarilumab 200 mg + DMARDs every two weeks or sarilumab 150 mg + DMARDs every two weeks demonstrated greater improvement from baseline compared to placebo + DMARDs in physical component summary (PCS) and no worsening on the mental component

<sup>†</sup> p-value < 0.001

 $<sup>^{\</sup>dagger\dagger}$ p-value < 0.0001

<sup>&</sup>lt;sup>‡</sup> Primary end point

summary (MCS) at week 24. Patients receiving sarilumab 200 mg + DMARDs reported greater improvement relative to placebo in the domains of *Physical Functioning, Role Physical, Bodily Pain, General Health Perception, Vitality, Social Functioning, and Mental Health.* 

Fatigue was assessed by the FACIT-Fatigue scale. In MOBILITY and TARGET, patients receiving sarilumab 200 mg + DMARDs every two weeks or sarilumab 150 mg + DMARDs every two weeks demonstrated greater improvement from baseline compared to placebo + DMARDs.

# Active Comparator-controlled Study

MONARCH was a 24 –week randomised double-blind, double-dummy study that compared sarilumab 200 mg monotherapy with adalimumab 40 mg monotherapy administered subcutaneously every two weeks in 369 patients with moderately to severely active RA who were inappropriate for treatment with MTX including those who were intolerant of or inadequate responders to MTX.

Sarilumab 200 mg was superior to adalimumab 40 mg in reducing disease activity and improving physical function, with more patients achieving clinical remission over 24 weeks (see Table 7).

Table 7: Efficacy results for MONARCH

	Adalimumab 40 mg q2w* (N=185)	Sarilumab 200 mg q2w (N=184)
DAS28-ESR (primary endpoint) p-value versus adalimumab	-2.20 (0.106)	-3.28 (0.105) < 0.0001
DAS28-ESR remission (< 2.6), n (%) p-value versus adalimumab	13 (7.0%)	49 (26.6%) < 0.0001
ACR20 response, n (%) p-value versus adalimumab	108 (58.4%)	132 (71.7%) 0.0074
ACR50 response, n (%) p-value versus adalimumab	55 (29.7%)	84 (45.7%) 0.0017
ACR70 response, n (%) p-value versus adalimumab	22 (11.9%)	43 (23.4%) 0.0036
HAQ-DI p-value versus adalimumab	-0.43(0.045)	-0.61(0.045) 0.0037

<sup>\*</sup>Includes patients who increased the frequency of dosing of adalimumab 40 mg to every week because of an inadequate response

#### Paediatric population

The European Medicines Agency has deferred the obligation to submit the results of studies with Kevzara (sarilumab) in one or more subsets of the paediatric population in chronic idiopathic arthritis (including rheumatoid arthritis, spondylarthritis, psoriatic arthritis and juvenile idiopathic arthritis) (see section 4.2 for information on paediatric use).

#### 5.2 Pharmacokinetic properties

The pharmacokinetics of sarilumab were characterised in 2186 patients with RA treated with sarilumab which included 751 patients treated with 150 mg and 891 patients treated with 200 mg subcutaneous doses every two weeks for up to 52 weeks.

#### Absorption

The absolute bioavailability for sarilumab after SC injection was estimated to be 80% by population PK analysis. The median  $t_{max}$  after a single subcutaneous dose was observed in 2 to 4 days. After multiple dosing of 150 to 200 mg every two weeks, steady state was reached in 12 to 16 weeks with a 2- to 3-fold accumulation compared to single dose exposure.

For the 150 mg every two weeks dose regimen, the estimated mean ( $\pm$  standard deviation, SD) steady-state area under curve (AUC),  $C_{min}$ , and  $C_{max}$  of sarilumab were  $210 \pm 115$  mg.day/L,  $6.95 \pm 7.60$  mg/L, and  $20.4 \pm 8.27$  mg/L, respectively.

For the 200 mg every two weeks dose regimen, the estimated mean ( $\pm$  SD) steady-state AUC,  $C_{min}$  and  $C_{max}$  of sarilumab were 396  $\pm$  194 mg.day/L, 16.7  $\pm$  13.5 mg/L, and 35.4  $\pm$  13.9 mg/L, respectively. In a usability study sarilumab exposure after 200 mg Q2W was slightly higher ( $C_{max}$  + 24-34%, AUC<sub>(0-2w)</sub> +7-21%) after use of a pre-filled pen compared to the pre-filled syringe.

#### Distribution

In patients with RA, the apparent volume of distribution at steady state was 8.3 L.

#### Biotransformation

The metabolic pathway of sarilumab has not been characterised. As a monoclonal antibody sarilumab is expected to be degraded into small peptides and amino acids via catabolic pathways in the same manner as endogenous IgG.

#### **Elimination**

Sarilumab is eliminated by parallel linear and non-linear pathways. At higher concentrations, the elimination is predominantly through the linear, non-saturable proteolytic pathway, while at lower concentrations, non-linear saturable target-mediated elimination predominates. These parallel elimination pathways result in an initial half-life of 8 to 10 days, and at steady-state an effective half-life of 21 days is estimated.

After the last steady state dose of 150 mg and 200 mg sarilumab, the median times to non-detectable concentration are 30 and 49 days, respectively.

Monoclonal antibodies are not eliminated via renal or hepatic pathways.

#### Linearity/non-linearity

A more than dose-proportional increase in pharmacokinetic exposure was observed in patients with RA. At steady state, exposure over the dosing interval measured by AUC increased approximately 2-fold with a 1.33-fold increase in dose from 150 to 200 mg every two weeks.

#### Interactions with CYP450 substrates

Simvastatin is a CYP3A4 and OATP1B1 substrate. In 17 patients with RA, one week following a single 200-mg subcutaneous administration of sarilumab, exposure of simvastatin and simvastatin acid decreased by 45% and 36%, respectively (see section 4.5).

# Special populations

Age, gender, ethnicity and body weight

Population pharmacokinetic analyses in adult patients with RA (ranging in age from 18 to 88 years with 14% over 65 years) showed that age, gender and race did not meaningfully influence the pharmacokinetics of sarilumab.

Body weight influenced the pharmacokinetics of sarilumab. In patients with higher body weight (>100 Kg) both 150 mg and 200 mg doses demonstrated efficacy; however, patients weighing >100 Kg had greater therapeutic benefit with the 200 mg dose.

#### Renal impairment

No formal study of the effect of renal impairment on the pharmacokinetics of sarilumab was conducted. Mild to moderate renal impairment did not affect the pharmacokinetics of sarilumab. No

dose adjustment is required in patients with mild to moderate renal impairment. Patients with severe renal impairment were not studied.

# Hepatic impairment

No formal study of the effect of hepatic impairment on the pharmacokinetics of sarilumab was conducted (see section 4.2).

# 5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of repeated-dose toxicity, carcinogenic risk assessment and toxicity to reproduction and development.

No long-term animal studies have been performed to establish the carcinogenicity potential of sarilumab. The weight of evidence for IL-6R $\alpha$  inhibition mainly indicates anti-tumour effects mediated by multiple mechanisms predominantly involving STAT-3 inhibition. *In vitro* and *in vivo* studies with sarilumab using human tumour cell lines showed inhibition of STAT-3 activation and inhibition of tumour growth in human tumour xenograft animal models.

Fertility studies conducted in male and female mice using a murine surrogate antibody against mouse  $IL-6R\alpha$  showed no impairment of fertility.

In an enhanced pre-/postnatal developmental toxicity study, pregnant Cynomolgus monkeys were administered sarilumab once-weekly intravenously from early gestation to natural birth (approximately 21 weeks) Maternal exposure up to approximately 83 times the human exposure based on AUC after subcutaneous doses of 200 mg every 2 weeks, did not cause any maternal or embryo-foetal effects. Sarilumab had no effect on maintenance of pregnancy or on the neonates evaluated up to 1 month after birth in body weight measurements, in parameters of functional or morphological development including skeletal evaluations, in immunophenotyping of peripheral blood lymphocytes, and in microscopic evaluations. Sarilumab was detected in the serum of neonates up to 1 month. The excretion of sarilumab in Cynomolgus monkey's milk has not been studied.

#### 6. PHARMACEUTICAL PARTICULARS

#### 6.1 List of excipients

Histidine Arginine Polysorbate 20 Sucrose 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.

Once removed from the refrigerator, Kevzara should be administered within 14 days and should not be stored above 25 °C.

#### 6.4 Special precautions for storage

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

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

#### 6.5 Nature and contents of container

All presentations contain a 1.14 ml solution in a syringe (type 1 glass) equipped with a stainless steel staked needle and an elastomer plunger stopper.

#### Pre-filled syringe 150 mg

The single-use pre-filled syringe has a styrene-butadiene elastomer needle cap and is equipped with a white polystyrene plunger rod and a light-orange polypropylene finger flange.

# Pre-filled syringe 200 mg

The single-use pre-filled syringe has a styrene-butadiene elastomer needle cap and is equipped with a white polystyrene plunger rod and a dark-orange polypropylene finger flange.

#### Pre-filled pen 150 mg

The syringe components are pre-assembled into a single-use pre-filled pen with a yellow needle cover and light-orange cap.

# Pre-filled pen 200 mg

The syringe components are pre-assembled into a single-use pre-filled pen with a yellow needle cover and dark-orange cap.

#### Pack sizes:

- 1 pre-filled syringe
- 2 pre-filled syringes
- Multipack containing 6 (3 packs of 2) pre-filled syringes
- 1 pre-filled pen
- 2 pre-filled pens
- Multipack containing 6 (3 packs of 2) pre-filled pens

Not all pack sizes may be marketed.

#### 6.6 Special precautions for disposal and other handling

The pre-filled syringe/pre-filled pen should be inspected before use. The solution should not be used if it is cloudy, discoloured, or contains particles, or if any part of the device appears to be damaged.

After removing the pre-filled syringe/pre-filled pen from the refrigerator, it should be allowed to reach room temperature (<25°C) by waiting 30 minutes for the pre-filled syringe or 60 minutes for the pre-filled pen as applicable, before injecting Kevzara.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements. After use, the pre-filled syringe/ pre-filled pen should be placed into a puncture-resistant container and discarded as required by local regulations.

# 7. MARKETING AUTHORISATION HOLDER

Sanofi Winthrop Industrie 82 avenue Raspail 94250 Gentilly France

# 8. MARKETING AUTHORISATION NUMBERS

EU/1/17/1196/001

EU/1/17/1196/002

EU/1/17/1196/003

EU/1/17/1196/004

EU/1/17/1196/005

EU/1/17/1196/006

EU/1/17/1196/007

EU/1/17/1196/008

EU/1/17/1196/009

EU/1/17/1196/010

EU/1/17/1196/011

EU/1/17/1196/012

# 9. DATE OF FIRST AUTHORISATION / RENEWAL OF THE AUTHORISATION

Date of first authorisation: 23 June 2017 Date of latest renewal: 25 April 2022

# 10. DATE OF REVISION OF THE TEXT

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

# ANNEX II

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

Name and address of the manufacturer of the biological active substance

Regeneron Pharmaceuticals Inc. 81 Columbia Turnpike Rensselaer 12144 United States

Sanofi Chimie 9 quai Jules Guesde 94403 Vitry-sur-Seine Cedex France

Name and address of the manufacturer(s) responsible for batch release

Sanofi Winthrop Industrie Boulevard Industriel, Zone Industrielle, Le Trait, 76580, France

Sanofi-Aventis Deutschland GmbH Brueningstrasse 50 Industriepark Hochst 65926 Frankfurt am Main Germany

Genzyme Ireland Ltd IDA Industrial Park Old Kilmeaden Road Waterford, Ireland

The printed package leaflet of the medicinal product must state the name and address of the manufacturer responsible for the release of the concerned batch.

#### 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.

# 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.

#### Additional risk minimisation measures

Prior to launch of Kevzara in each Member State the MAH must agree about the content and format of patient alert card, including communication media, distribution modalities, and any other aspects, with the National Competent Authority.

The MAH shall ensure that in each Member State where Kevzara is marketed, all healthcare professionals who are expected to prescribe Kevzara have access to the patient alert card.

The patient alert card shall contain the following key messages:

- A warning message for HCPs treating the patient at any time, including in conditions of emergency, that the patient is using Kevzara.
- That Kevzara treatment may increase the risks of serious infections, neutropenia and intestinal perforation.
- Educate patients on signs or symptoms that could represent serious infections or gastrointestinal perforations to seek for medical attention immediately.
- Contact details of the prescriber for Kevzara.

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGING
OUTER CARTON
1. NAME OF THE MEDICINAL PRODUCT
KEVZARA 150 mg solution for injection in pre-filled syringe sarilumab
2. STATEMENT OF ACTIVE SUBSTANCE(S)
Each pre-filled syringe contains 150 mg sarilumab in 1.14 ml solution (131.6 mg/ml).
3. LIST OF EXCIPIENTS
Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections.
4. PHARMACEUTICAL FORM AND CONTENTS
solution for injection 1 pre-filled syringe 2 pre-filled syringes
5. METHOD AND ROUTE(S) OF ADMINISTRATION
Subcutaneous use For single use only Read the package leaflet before use. Open here
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 a refrigerator.

Date	of removal from the refrigerator:/
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
82 av	fi Winthrop Industrie venue Raspail 0 Gentilly ce
12.	MARKETING AUTHORISATION NUMBER(S)
	/17/1196/009 1 pre-filled syringe /17/1196/001 2 pre-filled syringes
13.	BATCH NUMBER
Lot	
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
kevza	ara 150 mg syringe
17.	UNIQUE IDENTIFIER – 2D BARCODE
2D b	arcode carrying the unique identifier included.
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN	

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

#### PARTICULARS TO APPEAR ON THE OUTER PACKAGING

## **OUTER CARTON FOR MULTIPACK (WITH BLUE BOX)**

# 1. NAME OF THE MEDICINAL PRODUCT

KEVZARA 150 mg solution for injection in pre-filled syringe sarilumab

# 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled syringe contains 150 mg sarilumab in 1.14 ml solution (131.6 mg/ml).

# 3. LIST OF EXCIPIENTS

Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections.

# 4. PHARMACEUTICAL FORM AND CONTENTS

solution for injection

Multipack: 6 (3 packs of 2) pre-filled syringes.

# 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Subcutaneous use

For single use only

Read the package leaflet before use.

Open here

# 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 a refrigerator.

Do not freeze.

Store in the original carton 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
Sano 82 av	fi Winthrop Industrie venue Raspail 0 Gentilly
12.	MARKETING AUTHORISATION NUMBER(S)
EU/1	/17/1196/002 6 pre-filled syringes (3 packs of 2)
13.	BATCH NUMBER
Lot	
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
kevz	ara 150 mg syringe
17.	UNIQUE IDENTIFIER – 2D BARCODE
2D b	arcode carrying the unique identifier included.
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN	

#### PARTICULARS TO APPEAR ON THE OUTER PACKAGING

INNER CARTON without Blue Box - 2 PRE-FILLED SYRINGES (MULTIPACK PRESENTATION)

# 1. NAME OF THE MEDICINAL PRODUCT

KEVZARA 150 mg solution for injection in pre-filled syringe sarilumab

# 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled syringe contains 150 mg sarilumab in 1.14 ml solution (131.6 mg/ml).

# 3. LIST OF EXCIPIENTS

Excipients: histidine, arginine, polysorbate 20, sucrose, 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

Subcutaneous use

For single use only

Read the package leaflet before use.

Open here

# 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 a refrigerator.

Do not freeze.

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

Date of removal from the	he refrigerator://
--------------------------	--------------------

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS
OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
AFFRUFRIATE
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
Sanofi Winthrop Industrie
82 avenue Raspail 94250 Gentilly
France
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1196/002 6 pre-filled syringes (3 packs of 2)
EO/1/1//1190/002 o pre-fined syringes (3 packs of 2)
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
Medicinal product subject to medical prescription.
15. INSTRUCTIONS ON USE
13. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
kevzara 150 mg syringe
17. UNIQUE IDENTIFIER – 2D BARCODE
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS	
PRE-FILLED SYRINGE	
1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION	
KEVZARA 150 mg injection sarilumab SC	
2. METHOD OF ADMINISTRATION	
3. EXPIRY DATE	
EXP	
4. BATCH NUMBER	
Lot	
5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT	
1.14 ml	
6. OTHER	

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING **OUTER CARTON** NAME OF THE MEDICINAL PRODUCT KEVZARA 200 mg solution for injection in pre-filled syringe sarilumab 2. STATEMENT OF ACTIVE SUBSTANCE(S) Each pre-filled syringe contains 200 mg sarilumab in 1.14 ml solution (175 mg/ml). 3. LIST OF EXCIPIENTS Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections. PHARMACEUTICAL FORM AND CONTENTS 4. solution for injection 1 pre-filled syringe 2 pre-filled syringes 5. METHOD AND ROUTE(S) OF ADMINISTRATION Subcutaneous use For single use only Read the package leaflet before use. Open here SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT 6. 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**

Store in a refrigerator.

SPECIAL STORAGE CONDITIONS

Do not freeze.

9.

Store in the original carton in order to protect from light.
Date of removal from the refrigerator://
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 MADVETTING ANTHONY AND DED
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
Sanofi Winthrop Industrie 82 avenue Raspail 94250 Gentilly France
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1196/010 1 pre-filled syringe EU/1/17/1196/003 2 pre-filled syringes
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
kevzara 200 mg syringe
17. UNIQUE IDENTIFIER – 2D BARCODE
2D barcode carrying the unique identifier included.
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN

#### **OUTER CARTON FOR MULTIPACK (WITH BLUE BOX)**

### 1. NAME OF THE MEDICINAL PRODUCT

KEVZARA 200 mg solution for injection in pre-filled syringe sarilumab

## 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled syringe contains 200 mg sarilumab in 1.14 ml solution (175 mg/ml).

### 3. LIST OF EXCIPIENTS

Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections.

### 4. PHARMACEUTICAL FORM AND CONTENTS

solution for injection

Multipack: 6 (3 packs of 2) pre-filled syringes.

### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Subcutaneous use

For single use only

Read the package leaflet before use.

Open here

# 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 a refrigerator.

Do not freeze.

OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
Sanofi Winthrop Industrie 82 avenue Raspail 94250 Gentilly France
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1196/004 6 pre-filled syringes (3 packs of 2)
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
kevzara 200 mg syringe
17. UNIQUE IDENTIFIER – 2D BARCODE
2D barcode carrying the unique identifier included.
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS

INNER CARTON without Blue Box - 2 PRE-FILLED SYRINGES (MULTIPACK PRESENTATION)

### 1. NAME OF THE MEDICINAL PRODUCT

KEVZARA 200 mg solution for injection in pre-filled syringe sarilumab

## 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled syringe contains 200 mg sarilumab in 1.14 ml solution (175 mg/ml).

### 3. LIST OF EXCIPIENTS

Excipients: histidine, arginine, polysorbate 20, sucrose, 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

Subcutaneous use

For single use only

Read the package leaflet before use.

Open here

# 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 a refrigerator.

Do not freeze.

Date of removal fro	m the refrigerator:	//
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10.	SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS
	OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF
I	APPROPRIATE
<b>11.</b> 1	NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
82 avei	Winthrop Industrie nue Raspail Gentilly
<b>12.</b> I	MARKETING AUTHORISATION NUMBER(S)
EU/1/1	7/1196/004 6 pre-filled syringes (3 packs of 2)
13. I	BATCH NUMBER
Lot	
14.	GENERAL CLASSIFICATION FOR SUPPLY
Medici	inal product subject to medical prescription.
15. I	INSTRUCTIONS ON USE
16. l	INFORMATION IN BRAILLE
kevzara	a 200 mg syringe
17. I	UNIQUE IDENTIFIER – 2D BARCODE
<u> </u>	
18. U	UNIQUE IDENTIFIER - HUMAN READABLE DATA
	-

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS	
PRE-FILLED SYRINGE	
1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION	
KEVZARA 200 mg injection sarilumab SC	
2. METHOD OF ADMINISTRATION	
3. EXPIRY DATE	
EXP	
4. BATCH NUMBER	
Lot	
5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT	
1.14 ml	
6. OTHER	

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING **OUTER CARTON** NAME OF THE MEDICINAL PRODUCT KEVZARA 150 mg solution for injection in pre-filled pen sarilumab 2. STATEMENT OF ACTIVE SUBSTANCE(S) Each pre-filled pen contains 150 mg sarilumab in 1.14 ml solution (131.6 mg/ml). 3. LIST OF EXCIPIENTS Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections. PHARMACEUTICAL FORM AND CONTENTS 4. solution for injection 1 pre-filled pen 2 pre-filled pens 5. METHOD AND ROUTE(S) OF ADMINISTRATION Subcutaneous use For single use only Read the package leaflet before use. Open here SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT 6. 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**

Store in a refrigerator.

SPECIAL STORAGE CONDITIONS

Do not freeze.

9.

Store in the original carton in order to protect from light.
Date of removal from the refrigerator://
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
Sanofi Winthrop Industrie 82 avenue Raspail 94250 Gentilly France
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1196/011 1 pre-filled pen EU/1/17/1196/005 2 pre-filled pens
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
kevzara 150 mg pen
17. UNIQUE IDENTIFIER – 2D BARCODE
2D barcode carrying the unique identifier included.
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN

#### **OUTER CARTON FOR MULTIPACK (WITH BLUE BOX)**

### 1. NAME OF THE MEDICINAL PRODUCT

KEVZARA 150 mg solution for injection in pre-filled pen sarilumab

## 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen contains 150 mg sarilumab in 1.14 ml solution (131.6 mg/ml).

### 3. LIST OF EXCIPIENTS

Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections.

### 4. PHARMACEUTICAL FORM AND CONTENTS

solution for injection

Multipack: 6 (3 packs of 2) pre-filled pens.

### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Subcutaneous use

For single use only

Read the package leaflet before use.

Open here

# 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 a refrigerator.

Do not freeze.

OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
Sanofi Winthrop Industrie 82 avenue Raspail 94250 Gentilly France
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1196/006 6 pre-filled pens (3 packs of 2)
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
kevzara 150 mg pen
17. UNIQUE IDENTIFIER – 2D BARCODE
2D barcode carrying the unique identifier included.
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS

INNER CARTON without Blue Box – 2 PRE-FILLED PENS (MULTIPACK PRESENTATION)

### 1. NAME OF THE MEDICINAL PRODUCT

KEVZARA 150 mg solution for injection in pre-filled pen sarilumab

## 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen contains 150 mg sarilumab in 1.14 ml solution (131.6 mg/ml).

### 3. LIST OF EXCIPIENTS

Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections.

## 4. PHARMACEUTICAL FORM AND CONTENTS

solution for injection

2 pre-filled pens. Component of a multipack, can't be sold separately.

### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Subcutaneous use

For single use only

Read the package leaflet before use.

Open here

# 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 a refrigerator.

Do not freeze.

Date of removal	from the	refrigerator:	//
Date of Telliova	. II OIII tiie	reningerator.	•••/ •••/ •••

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
Sanofi Winthrop Industrie 82 avenue Raspail 94250 Gentilly France
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1196/006 6 pre-filled pens (3 packs of 2)
13. BATCH NUMBER
TO DITTORING MEDIC
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
Medicinal product subject to medical prescription.
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
kevzara 150 mg pen
17. UNIQUE IDENTIFIER – 2D BARCODE
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS	•
PRE-FILLED PEN	
1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION	
KEVZARA 150 mg injection sarilumab Subcutaneous use	
2. METHOD OF ADMINISTRATION	
3. EXPIRY DATE	
EXP	
4. BATCH NUMBER	
Lot	
5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT	
1.14 ml	
6. OTHER	

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING **OUTER CARTON** NAME OF THE MEDICINAL PRODUCT KEVZARA 200 mg solution for injection in pre-filled pen sarilumab 2. STATEMENT OF ACTIVE SUBSTANCE(S) Each pre-filled pen contains 200 mg sarilumab in 1.14 ml solution (175 mg/ml). 3. LIST OF EXCIPIENTS Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections. PHARMACEUTICAL FORM AND CONTENTS 4. solution for injection 1 pre-filled pen 2 pre-filled pens 5. METHOD AND ROUTE(S) OF ADMINISTRATION Subcutaneous use For single use only Read the package leaflet before use. Open here SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT 6. 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**

Store in a refrigerator.

SPECIAL STORAGE CONDITIONS

Do not freeze.

9.

Store in the original carton in order to protect from light.
Date of removal from the refrigerator://
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
Sanofi Winthrop Industrie
82 avenue Raspail
94250 Gentilly
France
12. MARKETING AUTHORISATION NUMBER(S)
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1196/012 1 pre-filled pen
EU/1/17/1196/007 2 pre-filled pens
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
kevzara 200 mg pen
kevzara 200 mg pen
17. UNIQUE IDENTIFIER – 2D BARCODE
2D barcode carrying the unique identifier included.
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC
SN NN
NN

#### **OUTER CARTON FOR MULTIPACK (WITH BLUE BOX)**

### 1. NAME OF THE MEDICINAL PRODUCT

KEVZARA 200 mg solution for injection in pre-filled pen sarilumab

## 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen contains 200 mg sarilumab in 1.14 ml solution (175 mg/ml).

### 3. LIST OF EXCIPIENTS

Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections.

### 4. PHARMACEUTICAL FORM AND CONTENTS

solution for injection

Multipack: 6 (3 packs of 2) pre-filled pens.

### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Subcutaneous use

For single use only

Read the package leaflet before use.

Open here

# 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 a refrigerator.

Do not freeze.

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
82 av	fi Winthrop Industrie venue Raspail 0 Gentilly ce
12.	MARKETING AUTHORISATION NUMBER(S)
EU/1	/17/1196/008 6 pre-filled pens (3 packs of 2)
13.	BATCH NUMBER
Lot	
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
kevz	ara 200 mg pen
17.	UNIQUE IDENTIFIER – 2D BARCODE
2D b	arcode carrying the unique identifier included.
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN	

INNER CARTON without Blue Box – 2 PRE-FILLED PENS (MULTIPACK PRESENTATION)

### 1. NAME OF THE MEDICINAL PRODUCT

KEVZARA 200 mg solution for injection in pre-filled pen sarilumab

## 2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each pre-filled pen contains 200 mg sarilumab in 1.14 ml solution (175 mg/ml).

### 3. LIST OF EXCIPIENTS

Excipients: histidine, arginine, polysorbate 20, sucrose, water for injections.

## 4. PHARMACEUTICAL FORM AND CONTENTS

solution for injection

2 pre-filled pens. Component of a multipack, can't be sold separately.

### 5. METHOD AND ROUTE(S) OF ADMINISTRATION

Subcutaneous use

For single use only

Read the package leaflet before use.

Open here

# 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 a refrigerator.

Do not freeze.

Date of removal	from the	refrigerator:	//
Date of Telliova	. II OIII tiie	reningerator.	•••/ •••/ •••

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
Sanofi Winthrop Industrie 82 avenue Raspail 94250 Gentilly France
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1196/008 6 pre-filled pens (3 packs of 2)
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
Medicinal product subject to medical prescription.
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
kevzara 200 mg pen
17. UNIQUE IDENTIFIER – 2D BARCODE
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS
DDE EH I ED DEN
PRE-FILLED PEN
1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION
KEVZARA 200 mg injection
sarilumab
Subcutaneous use
2. METHOD OF ADMINISTRATION
3. EXPIRY DATE
EXP
4. BATCH NUMBER
Lot
5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT
5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT
1.14 ml
וווו דו.ו וווו דו.ו
6. OTHER

B. PACKAGE LEAFLET

#### Package leaflet: Information for the patient

## Kevzara 150 mg solution for injection in pre-filled syringe Kevzara 200 mg solution for injection in pre-filled syringe sarilumab

# 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.

In addition to this leaflet, you will be given a patient alert card, which contains important safety information that you need before and during treatment with Kevzara.

#### What is in this leaflet

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

#### 1. What Keyzara is and what it is used for

#### What Kevzara is

Kevzara contains the active substance sarilumab. It is a type of protein called a monoclonal antibody.

#### What Kevzara is used for

Kevzara is used to treat adults with moderately to severely active rheumatoid arthritis if previous therapy did not work well enough or was not tolerated. Kevzara can be used alone or together with a medicine called methotrexate.

It may help you by:

- slowing down damage to joints
- improving your ability to perform daily activities.

#### How Kevzara works

- Kevzara attaches to another protein called interleukin-6 (IL-6) receptor and blocks its action.
- IL-6 plays a major role in the symptoms of rheumatoid arthritis such as pain, swollen joints, morning stiffness, and fatigue.

### 2. What you need to know before you use Kevzara

#### Do not use Kevzara:

- if you are allergic to sarilumab or any of the other ingredients of this medicine (listed in section 6).
- if you have an active severe infection.

#### Warnings and precautions

Talk to your doctor, pharmacist, or nurse if:

- you have any infection or you get a lot of infections. Kevzara can lower your body's ability to fight infection: this means it can make you more likely to get infections or make your infection worse.
- you have tuberculosis (TB), symptoms of TB (persistent cough, weight loss, listlessness, mild fever), or have been in close contact with someone with TB. Before you are given Kevzara, your doctor will check you for TB.
- you have had viral hepatitis or other liver disease. Before you use Kevzara, your doctor will do a blood test to check your liver function.
- you have had diverticulitis (a condition of the lower bowel) or ulcers in your stomach or intestines, or develop symptoms such as fever and stomach (abdominal) pain that does not go away.
- you have ever had any type of cancer.
- you have recently had any vaccination or are going to have a vaccination.

If any of the above apply to you (or you are not sure), talk to your doctor, pharmacist or nurse before using Kevzara.

You will have blood tests before you are given Kevzara. You will also have the tests during your treatment. This is to check for low blood cell count, liver problems, or changes in your cholesterol levels.

#### Children and adolescents

Do not give this medicine to children and adolescents under 18 years of age.

### Other medicines and Kevzara

Tell your doctor or pharmacist if you are using, have recently used, or might use any other medicines. This is because Kevzara can affect the way some other medicines work. Also some other medicines can affect the way Kevzara works.

In particular, do not use Kevzara and tell your doctor or pharmacist if you are using:

- a group of medicines called "Janus kinase (JAK) inhibitors" (used for diseases like rheumatoid arthritis and cancer)
- other biological medicines used in the treatment of rheumatoid arthritis

If any of the above apply to you (or you are not sure), talk to your doctor or pharmacist.

Kevzara can affect the way some medicines work: this means the dose of other medicines may need changing. If you are using any of the following medicines, tell your doctor or pharmacist before using Kevzara:

- statins, used to reduce cholesterol level
- oral contraceptives
- theophylline, used to treat asthma
- warfarin, used to prevent blood clots.

If any of the above apply to you (or you are not sure), talk to your doctor or pharmacist.

#### **Pregnancy and breast-feeding**

Talk to your doctor before using Kevzara if you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby.

- Do not take Kevzara if you are pregnant unless your doctor specifically recommends it.
- The effects of Kevzara on an unborn baby are not known.
- You and your doctor should decide if you should use Kevzara if you are breast-feeding.

## **Driving and using machines**

The use of Kevzara is not expected to affect your ability to drive or use machines. However, if you are feeling tired or unwell after you use Kevzara, you should not drive or use machines.

#### 3. How to use Kevzara

Treatment should be started by a doctor experienced in the diagnosis and treatment of rheumatoid arthritis. Always use this medicine exactly as your doctor or pharmacist has told you. Check with your doctor or pharmacist if you are not sure.

The recommended dose is one 200 mg injection every two weeks.

• Your doctor may adjust the dose of your medicine based on results of blood tests.

Kevzara is given as an injection under the skin (called "subcutaneous" injection).

#### Learning how to use the pre-filled syringe

- Your doctor, pharmacist, or nurse will show you how to inject Kevzara. Following these instructions, Kevzara can be self-injected or administered by a care-giver.
- Carefully follow the "Instructions for Use" provided in the carton.
- Use the pre-filled syringe exactly as described in the "Instructions for Use".

#### If you use more Kevzara than you should

If you have used more Kevzara than you should, talk to your doctor, pharmacist or nurse.

## If you miss a dose of Kevzara

If it has been 3 days or less since the missed dose:

- inject your missed dose as soon as you can.
- then inject your next dose at your regular time.

If it has been 4 days or more, inject the next dose at your regular time. Do not inject a double dose to make up for a forgotten injection.

If you are unsure when to inject your next dose: ask your doctor, pharmacist or nurse for instructions.

#### If you stop using Kevzara

Do not stop using Kevzara without talking to your doctor.

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.

#### Serious side effect

**Tell your doctor straight away** if you think you have an **infection** (which may affect up to 1 in every 10 people). The symptoms may include fever, sweats, or chills.

## Other side effects

Tell your doctor, pharmacist, or nurse if you notice any of the following side effects:

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

• Low white blood cell counts shown by blood tests

#### **Common** (may affect up to 1 in 10 people)

- infections in your sinuses or throat, blocked or runny nose and sore throat (upper respiratory tract infection)
- urinary tract infection
- cold sores (oral herpes)
- low platelet counts shown by blood tests
- high cholesterol, high triglycerides shown by blood tests

- abnormal liver function tests
- injection-site reactions (including redness and itching).

## **Uncommon** (may affect up to 1 in 100 people)

- infection of the lungs
- inflammation of the deep skin tissue
- diverticulitis (a disease affecting the gut often with stomach (abdominal) pain, nausea and vomiting, fever, and constipation, or less commonly diarrhoea)

## Rare (may affect up to 1 in 1000 people)

• perforation in stomach or intestines (a hole that develops in the wall of the gut)

## 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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store Keyzara

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.

## Store in a refrigerator (2°C to 8°C).

- Do not freeze.
- Once taken out of the refrigerator, do not store Kevzara above 25 °C.
- Write down the date of removal from the refrigerator in the space provided on the outer carton.
- Use the syringe within 14 days after taking it out of the refrigerator or the insulated bag.
- Keep the syringe in the original carton in order to protect from light.

Do not use this medicine if the solution in the syringe is cloudy, discoloured or contains particles, or if any part of the pre-filled syringe looks damaged.

After use, put the syringe into a puncture-resistant container. Always keep the container out of the sight and reach of children. Ask your doctor, pharmacist, or nurse how to throw away the container.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist 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 Keyzara contains

- The active substance is sarilumab.
- The other ingredients are arginine, histidine, polysorbate 20, sucrose, and water for injections.

#### What Kevzara looks like and contents of the pack

Kevzara is a clear, colourless to pale yellow solution for injection that comes in a pre-filled syringe.

Each pre-filled syringe contains 1.14 ml of solution delivering one single dose. Kevzara is available in packs containing 1 or 2 pre-filled syringes and in multipacks comprising 3 cartons, each containing 2 pre-filled syringes.

Not all pack sizes may be marketed.

Kevzara is available as 150 mg or 200 mg pre-filled syringes.

## **Marketing Authorisation Holder**

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#### Manufacturer

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This leaflet was last revised in .

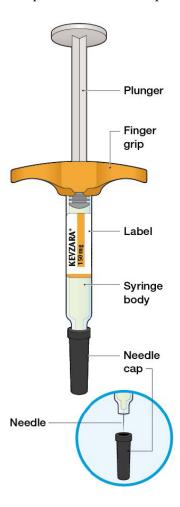
Detailed information on this medicine is available on the European Medicines Agency web site: http://www.ema.europa.eu.

\_\_\_\_\_\_

# Kevzara 150 mg solution for injection in a pre-filled syringe sarilumab

#### Instructions for use

The parts of the Kevzara pre-filled syringe are shown in this picture.



### **Important information**

This device is a single-dose pre-filled syringe (called "syringe" in these instructions). It contains 150 mg of Kevzara for injection under the skin (subcutaneous injection) once every two weeks.

Ask your healthcare professional to show you the right way to use the syringe before your first injection.

#### Do

- ✓ Read all of the instructions carefully before using a syringe.
- ✓ Check that you have the correct medicine and the correct dose.
- ✓ Keep unused syringes in the original carton and store in the refrigerator between 2°C and 8°C.
- ✓ Keep the carton in an insulated bag with an ice pack when travelling.
- ✓ Let the syringe warm up to room temperature for at least 30 minutes before using.
- ✓ Use the syringe within 14 days after taking it out of the refrigerator or insulated bag.
- ✓ Keep the syringe out of the sight and reach of children.

#### Do not

- X Do not use the syringe if it has been damaged or the needle cap is missing or not attached.
- X Do not remove the needle cap until just before you are ready to inject.
- X Do not touch the needle.
- X Do not try to put the cap back on the syringe.
- X Do not re-use the syringe.
- X Do not freeze or heat the syringe.
- X Once removed from the refrigerator, do not store the syringe above 25°C.
- **X** Do not expose the syringe to direct sunlight.
- X Do not inject through your clothes.

### If you have any further questions, ask your doctor, pharmacist or nurse.

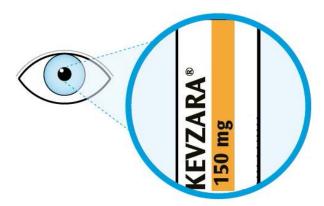
#### Step A: Get ready for an injection

### 1. Prepare all the equipment you will need on a clean, flat working surface.

- You will need an alcohol wipe, a cotton ball or gauze, and a puncture-resistant container.
- Take one syringe out of the packaging by holding the middle of the syringe body. Keep the remaining syringe in the carton in the refrigerator.

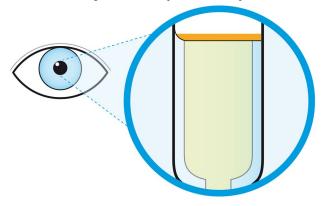
#### 2. Look at the label.

- Check that you have the correct medicine and the correct dose.
- Check the expiry date (EXP).
- **X** Do not use the syringe if the date has passed.



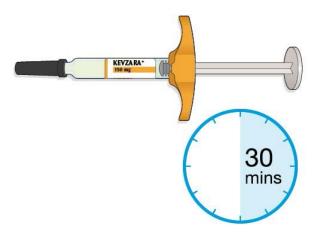
#### 3. Look at the medicine.

- Check that the liquid is clear and colourless to pale yellow.
- You may see an air bubble, this is normal.
- **X** Do not inject if the liquid is cloudy, discoloured or contains particles.



# 4. Lay the syringe on a flat surface and allow it to warm up to room temperature (<25°C) for at least 30 minutes.

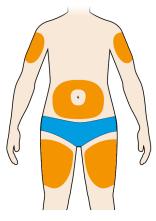
- Using the syringe at room temperature may make the injection more comfortable.
- **X** Do not use the syringe if it has been out of the refrigerator for more than 14 days.
- **X** Do not heat the syringe; let it warm up on its own.
- **X** Do not expose the syringe to direct sunlight.



## 5. Select the injection site.

- You can inject into your thigh or belly (abdomen) except for the 5 cm around your belly button (navel). If somebody else gives you the injection, you can also use the outer area of the upper arm.
- Change injection site each time you inject.

**X** Do not inject into skin that is tender, damaged or has bruises or scars.



Injection sites

#### 6. Prepare the injection site.

- Wash your hands.
- Clean skin with an alcohol wipe.

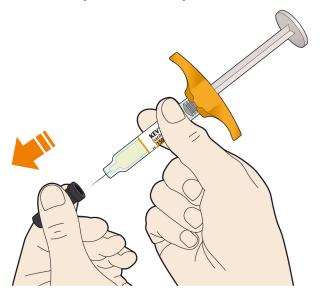
**X** Do not touch the injection site again before the injection.

# Step B: Perform the injection – Perform Step B only after completing Step A "Get ready for an injection"

#### 1. Pull off the needle cap.

- Hold the syringe in the middle of the syringe body with the needle pointing away from you.
- Keep your hand away from the plunger.
- **X** Do not get rid of any air bubbles in the syringe.

- **X** Do not pull off the needle cap until you are ready to inject.
- **X** Do not put the needle cap back on.

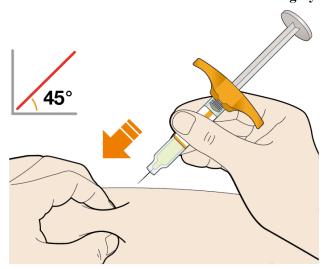


### 2. Pinch the skin.

• Use your thumb and first (index) finger to pinch a fold of skin at the injection site.



3. Insert the needle into the fold of skin at roughly a 45° angle.



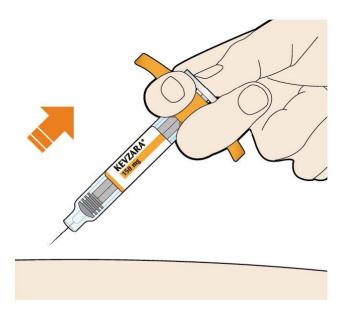
# 4. Push the plunger down.

• Slowly push the plunger down as far as it will go until the syringe is empty.



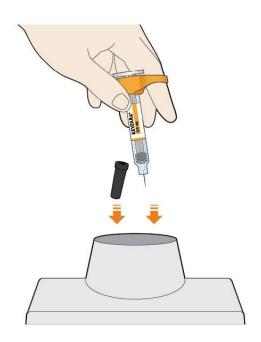
## 5. Before you remove the needle, check that the syringe is empty.

- Pull the needle out at the same angle it was injected.
- If you see any blood, press a cotton ball or gauze on the site.
- **X** Do not rub your skin after the injection.



# 6. Put your used syringe and the cap into a puncture-resistant container right away after use.

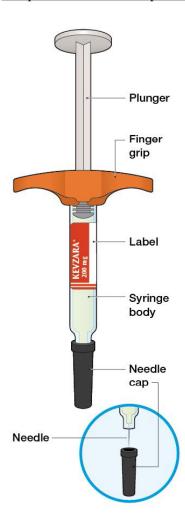
- Always keep the container out of the sight and reach of children.
- **X** Do not put the needle cap back on.
- **X** Do not throw the used syringe in household waste.
- **X** Do not dispose of your used puncture-resistant container in your household waste unless your local guidelines permit this. Ask your doctor, pharmacist or nurse how to throw away the container.



# Kevzara 200 mg solution for injection in a pre-filled syringe sarilumab

#### Instructions for use

The parts of the Kevzara pre-filled syringe are shown in this picture.



## Important information

This device is a single-dose pre-filled syringe (called "syringe" in these instructions). It contains 200 mg of Kevzara for injection under the skin (subcutaneous injection) once every two weeks.

Ask your healthcare professional to show you the right way to use the syringe before your first injection.

#### Do

- Read all of the instructions carefully before using a syringe.
- Check that you have the correct medicine and the correct dose.
- ✓ Keep unused syringes in the original carton and store in the refrigerator between 2°C and 8°C.
- ✓ Keep the carton in an insulated bag with an ice pack when travelling.
- ✓ Let the syringe warm up to room temperature for at least 30 minutes before using.
- ✓ Use the syringe within 14 days after taking it out of the refrigerator or insulated bag.
- ✓ Keep the syringe out of the sight and reach of children.

#### Do not

- X Do not use the syringe if it has been damaged or the needle cap is missing or not attached.
- X Do not remove the needle cap until just before you are ready to inject.
- **X** Do not touch the needle.
- X Do not try to put the cap back on the syringe.
- X Do not re-use the syringe.
- **X** Do not freeze or heat the syringe.
- Once removed from the refrigerator, do not store the syringe above 25°C.
- X Do not expose the syringe to direct sunlight.
- Do not inject through your clothes.

#### If you have any further questions, ask your doctor, pharmacist or nurse.

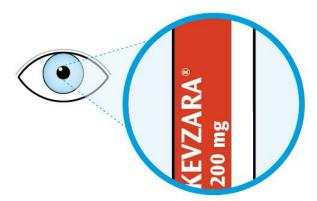
#### Step A: Get ready for an injection

#### 1. Prepare all the equipment you will need on a clean, flat working surface.

- You will need an alcohol wipe, a cotton ball or gauze, and a puncture-resistant container.
- Take one syringe out of the packaging by holding the middle of the syringe body. Keep the remaining syringe in the carton in the refrigerator.

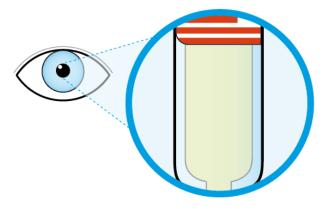
#### 2. Look at the label.

- Check that you have the correct medicine and the correct dose.
- Check the expiry date (EXP).
- **X** Do not use the syringe if the date has passed.



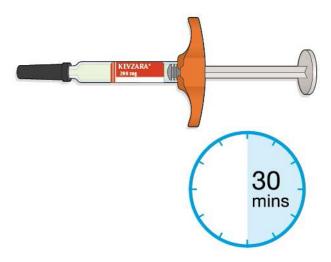
#### 3. Look at the medicine.

- Check that the liquid is clear and colourless to pale yellow.
- You may see an air bubble, this is normal.
- **Do not** inject if the liquid is cloudy, discoloured or contains particles.



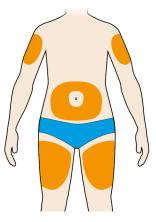
# 4. Lay the syringe on a flat surface and allow it to warm up to room temperature (<25°C) for at least 30 minutes.

- Using the syringe at room temperature may make the injection more comfortable.
- **X** Do not use the syringe if it has been out of the refrigerator for more than 14 days.
- **Do not** heat the syringe; let it warm up on its own.
- **X** Do not expose the syringe to direct sunlight.



#### 5. Select the injection site.

- You can inject into your thigh or belly (abdomen) except for the 5 cm around your belly button (navel). If somebody else gives you the injection, you can also use the outer area of the upper arm.
- Change injection site each time you inject.
- **X** Do not inject into skin that is tender, damaged or has bruises or scars.



Injection sites

# 6. Prepare the injection site.

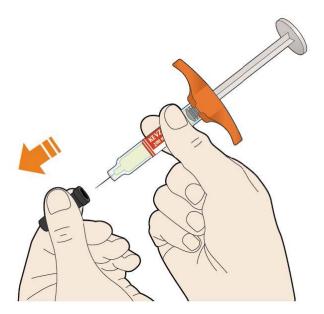
- Wash your hands.
- Clean skin with an alcohol wipe.
- **No not** touch the injection site again before the injection.

# Step B: Perform the injection – Perform Step B only after completing Step A "Get ready for an injection"

## 1. Pull off the needle cap.

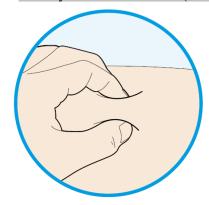
- Hold the syringe in the middle of the syringe body with the needle pointing away from you.
- Keep your hand away from the plunger.

- **Do not** get rid of any air bubbles in the syringe.
- **Do not** pull off the needle cap until you are ready to inject.
- **Do not** put the needle cap back on.

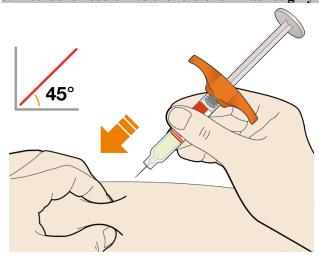


# 2. Pinch the skin.

• Use your thumb and first (index) finger to pinch a fold of skin at the injection site.

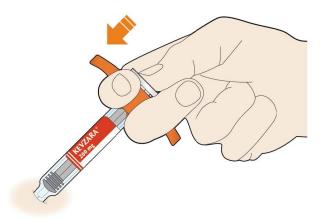


3. Insert the needle into the fold of skin at roughly a 45° angle.



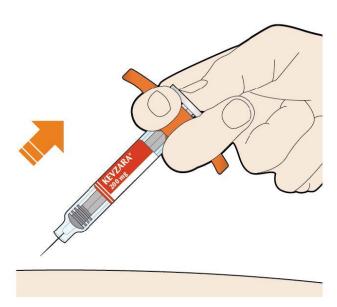
# 4. Push the plunger down.

• Slowly push the plunger down as far as it will go until the syringe is empty.



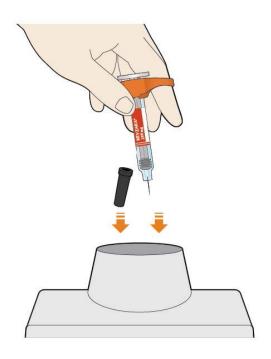
## 5. Before you remove the needle, check that the syringe is empty.

- Pull the needle out at the same angle it was injected.
- If you see any blood, press a cotton ball or gauze on the site.
- **Do not** rub your skin after the injection.



## 6. Put your used syringe and the cap into a puncture-resistant container right away after use.

- Always keep the container out of the sight and reach of children.
- **Do not** put the needle cap back on.
- **X** Do not throw the used syringe in household waste.
- **X Do not** dispose of your used puncture-resistant container in your household waste unless your local guidelines permit this. Ask your doctor, pharmacist or nurse how to throw away the container.



## Package leaflet: Information for the patient

## Kevzara 150 mg solution for injection in pre-filled pen Kevzara 200 mg solution for injection in pre-filled pen sarilumab

## 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.

In addition to this leaflet, you will be given a patient alert card, which contains important safety information that you need before and during treatment with Kevzara.

#### What is in this leaflet

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

#### 1. What Keyzara is and what it is used for

#### What Kevzara is

Kevzara contains the active substance sarilumab. It is a type of protein - called a "monoclonal antibody".

#### What Kevzara is used for

Kevzara is used to treat adults with moderately to severely active rheumatoid arthritis if previous therapy did not work well enough or was not tolerated. Kevzara can be used alone or together with a medicine called methotrexate.

It may help you by:

- slowing down damage to joints
- improving your ability to perform daily activities.

#### How Kevzara works

- Kevzara attaches to another protein called interleukin-6 (IL-6) receptor and blocks its action.
- IL-6 plays a major role in the symptoms of rheumatoid arthritis such as pain, swollen joints, morning stiffness, and fatigue.

## 2. What you need to know before you use Kevzara

#### Do not use Kevzara:

- if you are allergic to sarilumab or any of the other ingredients of this medicine (listed in section 6).
- if you have an active severe infection.

#### Warnings and precautions

Talk to your doctor, pharmacist, or nurse if:

- you have any infection or, you get a lot of infections. Kevzara can lower your body's ability to fight infection and this means it can make you more likely to get infections or make your infection worse.
- you have tuberculosis (TB), symptoms of TB (persistent cough, weight loss, listlessness, mild fever), or have been in close contact with someone with TB. Before you are given Kevzara, your doctor will check you for TB.
- you have had viral hepatitis or other liver disease. Before you use Kevzara, your doctor will do a blood test to check your liver function.
- you have had diverticulitis (a condition of the lower bowel) or ulcers in your stomach or intestines, or develop symptoms such as fever and stomach (abdominal) pain that does not go away.
- you have ever had any type of cancer.
- you have recently had any vaccination or are going to have a vaccination.

If any of the above apply to you (or you are not sure), talk to your doctor, pharmacist or nurse before using Kevzara.

You will have blood tests before you are given Kevzara. You will also have the tests during your treatment. This is to check if you have a low blood cell count, liver problems, or changes in your cholesterol levels.

#### Children and adolescents

Do not give this medicine to children and adolescents under 18 years of age.

## Other medicines and Kevzara

Tell your doctor or pharmacist if you are using, have recently used, or might use any other medicines. This is because Kevzara can affect the way some other medicines work. Also some other medicines can affect the way Kevzara works.

In particular, do not use Kevzara and tell your doctor or pharmacist if you are using:

- a group of medicines called "Janus kinase (JAK) inhibitors" (used for disease like rheumatoid arthritis and cancer)
- other biological medicines used in the treatment of rheumatoid arthritis.

If any of the above apply to you (or you are not sure), talk to your doctor or pharmacist.

Kevzara can affect the way some medicines work: this means the dose of other medicines may need changing. If you are using any of the following medicines, tell your doctor or pharmacist before using Kevzara:

- statins, used to reduce cholesterol level
- oral contraceptives
- theophylline, used to treat asthma
- warfarin, used to prevent blood clots

If any of the above apply to you (or you are not sure), talk to your doctor or pharmacist.

#### **Pregnancy and breast-feeding**

Talk to your doctor before using Kevzara if you are pregnant or breast feeding, think you may be pregnant or are planning to have a baby.

- Do not take Kevzara if you are pregnant unless your doctor specifically recommends it.
- The effects of Kevzara on an unborn baby are not known.
- You and your doctor should decide if you should use Kevzara if you are breast-feeding.

## **Driving and using machines**

The use of Kevzara is not expected to affect your ability to drive or use machines. However, if you are feeling tired or unwell after you use Kevzara, you should not drive or use machines.

#### 3. How to use Kevzara

Treatment should be started by a doctor experienced in the diagnosis and treatment of rheumatoid arthritis. Always use this medicine exactly as your doctor or pharmacist has told you. Check with your doctor or pharmacist if you are not sure.

The recommended dose is one 200 mg injection every two weeks.

• Your doctor may adjust the dose of your medicine based on results of blood tests.

Kevzara is given as an injection under the skin (called "subcutaneous" injection).

### Learning how to use the pre-filled pen

- Your doctor, pharmacist, or nurse will show you how to inject Kevzara. Following these instructions Kevzara can be self-injected or administered by a care-giver.
- Carefully follow the "Instructions for Use" provided in the carton.
- Use the pre-filled pen exactly as described in the "Instructions for Use".

## If you use more Kevzara than you should

If you have used more Kevzara than you should, talk to your doctor, pharmacist or nurse.

## If you miss a dose of Kevzara

If it has been 3 days or less since the missed dose:

- inject your missed dose as soon as you can.
- then inject your next dose at your regular time.

If it has been 4 days or more, inject the next dose at your regular time. Do not inject a double dose to make up for a forgotten injection.

If you are unsure when to inject your next dose: ask your doctor, pharmacist or nurse for instructions.

#### If you stop using Kevzara

Do not stop using Kevzara without talking to your doctor.

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.

#### Serious side effect

**Tell your doctor straight away** if you think you have an **infection** (which may affect up to 1 in every 10 people). The symptoms may include fever, sweats, or chills.

### Other side effects

Tell your doctor, pharmacist, or nurse if you notice any of the following side effects:

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

• Low white blood cell counts shown by blood tests

## **Common** (may affect up to 1 in 10 people):

- infections in your sinuses or throat, blocked or runny nose and sore throat ("upper respiratory tract infection")
- urinary tract infection
- cold sores ("oral herpes")
- low platelet counts shown by blood tests
- high cholesterol, high triglycerides shown by blood tests

- abnormal liver function tests
- injection site reactions (including redness and itching)

## Uncommon (may affect up to 1 in 100 people):

- infection of the lungs
- inflammation of the deep skin tissue
- diverticulitis (a disease affecting the gut often with stomach (abdominal) pain, nausea and vomiting, fever, and constipation, or less commonly diarrhoea)

## Rare (may affect up to 1 in 1000 people):

• perforation in stomach or intestines (a hole that develops in the wall of the gut)

## **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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store Keyzara

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.

## Store in a refrigerator (2°C to 8°C).

- Do not freeze.
- Once taken out the refrigerator, do not store Kevzara above 25 °C.
- Write down the date of removal from the refrigerator in the space provided on the outer carton.
- Use the pen within 14 days after taking it out of the refrigerator or the insulated bag.
- Keep the pen in the original carton in order to protect from light.

Do not use this medicine if the solution in the pen is cloudy, discoloured or contains particles, or if any part of the pre-filled pen looks damaged.

After use, put the pen into a puncture-resistant container. Always keep the container out of the sight and reach of children. Ask your doctor, pharmacist, or nurse how to throw away the container.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist 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 Keyzara contains

- The active substance is sarilumab.
- The other ingredients are arginine, histidine, polysorbate 20, sucrose, and water for injections.

## What Kevzara looks like and contents of the pack

Kevzara is a clear, colourless to pale yellow solution for injection that comes in a pre-filled pen.

Each pre-filled pen contains 1.14 ml of solution delivering one single dose. Kevzara is available in packs containing 1 or 2 pens and in multipacks comprising 3 cartons, each containing 2 pens.

Not all pack sizes may be marketed.

Kevzara is available as 150 mg or 200 mg pre-filled pens.

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#### Manufacturer

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#### This leaflet was last revised in

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

## **Kevzara 150 mg solution for injection in a pre-filled pen** sarilumab

#### **Instructions for use**

The parts of the Kevzara pre-filled pen are shown in this picture.



## **Important information**

This device is a single-dose pre-filled pen (called "pen" in these instructions). It contains 150 mg of Kevzara for injection under the skin (subcutaneous injection) once every two weeks.

Ask your healthcare professional to show you the right way to use the pen before your first injection.

## Do

- ✓ Read all of the instructions carefully before using a pen.
- ✓ Check that you have the correct medicine and the correct dose.
- ✓ Keep unused pens in the original carton and store in the refrigerator between 2°C and 8°C.
- ✓ Keep the carton in an insulated bag with an ice pack when travelling.
- ✓ Let the pen warm up to room temperature for at least 60 minutes before using.
- ✓ Use the pen within 14 days after taking it out of the refrigerator or insulated bag.
- ✓ Keep the pen out of the sight and reach of children.

## Do not

- X Do not use a pen if it has been damaged or the cap is missing or not attached.
- X Do not remove the cap until just before you are ready to inject.

- X Do not press or touch the yellow needle cover with your fingers.
- X Do not try to put the cap back on a pen.
- X Do not re-use the pen.
- X Do not freeze or heat the pen.
- X Once removed from the refrigerator, do not store the pen above 25°C.
- X Do not expose the pen to direct sunlight.
- X Do not inject through your clothes.

If you have any further questions, ask your doctor, pharmacist or nurse.

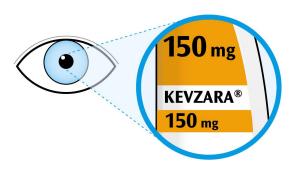
## Step A: Get ready for an injection

## 1. Prepare all the equipment you will need on a clean, flat working surface.

- You will need an alcohol wipe, a cotton ball or gauze, and a puncture-resistant container.
- Take one pen out of the packaging by holding the middle of the pen body. Keep the remaining pen in the carton in the refrigerator.

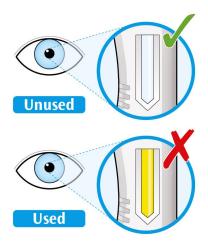
#### 2. Look at the label.

- Check that you have the correct medicine and the correct dose.
- Check the expiry date (EXP), this is shown on the side of the pens.
- **X** Do not use the pen if the date has passed.



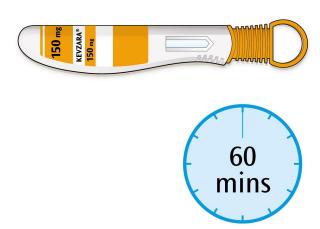
#### 3. Look at the window.

- Check that the liquid is clear and colourless to pale yellow.
- You may see an air bubble, this is normal.
- **X** Do not inject if the liquid is cloudy, discoloured or contains particles.
- **X** Do not use if the window is solid yellow.



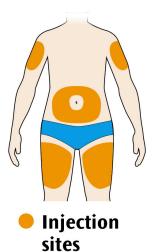
4. Lay the pen on a flat surface and allow it to warm up to room temperature (<25°C) for at least 60 minutes.

- Using the pen at room temperature may make the injection more comfortable.
- **X** Do not use the pen if it has been out of the refrigerator for more than 14 days.
- **X** Do not heat the pen; let it warm up on its own.
- **X** Do not expose the pen to direct sunlight.



## 5. Select the injection site.

- You can inject into your thigh or belly (abdomen) except for the 5 cm around your belly button (navel). If somebody else gives you the injection, you can also use the outer area of the upper arm.
- Change injection site each time you inject.
- **X** Do not inject into skin that is tender, damaged or has bruises or scars.



## 6. Prepare the injection site.

- Wash your hands.
- Clean skin with an alcohol wipe.

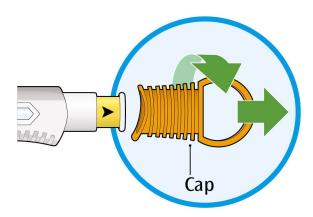
**X** Do not touch the injection site again before the injection.

Step B: Perform the injection – Perform Step B only after completing Step A "Get ready for an injection"

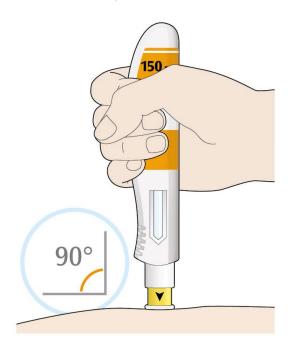
## 1. Twist or pull off the orange cap.

- **X** Do not remove the cap until you are ready to inject.
- **X** Do not press or touch the yellow needle cover with your fingers.

**X** Do not put the cap back on.



- 2. Put the yellow needle cover on your skin at roughly a  $90^{\circ}$  angle.
  - Make sure you can see the window.



## 3. Press down and hold the pen firmly against your skin.

• There will be a "click" when the injection starts.



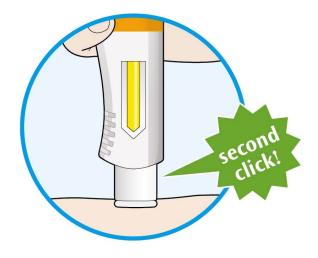
## 4. Keep holding the pen firmly against your skin.

- The window will start to turn yellow.
- The injection can take up to 15 seconds.



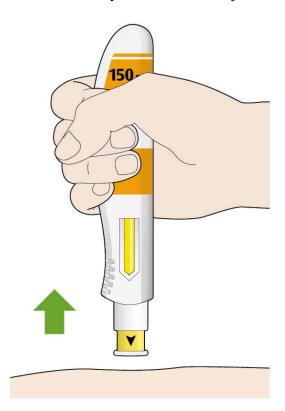
# 5. There will be a second click. Check to see if the entire window has turned yellow before you remove the pen.

- If you do not hear the second click, you should still check to see if the window has turned fully yellow.
- X If the window does not turn fully yellow, **do not** give yourself a second dose without speaking to your healthcare provider.



## 6. Pull the pen away from your skin.

- If you see any blood, press a cotton ball or gauze on the site.
- **X** Do not rub your skin after the injection.



## 7. Put your used pen and the cap into a puncture-resistant container right away after use.

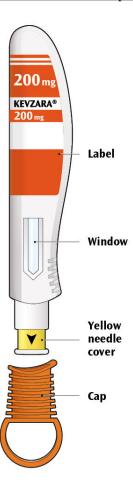
- Always keep the container out of the sight and reach of children.
- **X** Do not put the cap back on.
- **X** Do not throw the used pens in household waste.
- ✗ Do not dispose of your used puncture-resistant container in your household waste unless your local guidelines permit this. Ask your doctor, pharmacist or nurse how to throw away the container.



## Kevzara 200 mg solution for injection in a pre-filled pen sarilumab

#### Instructions for use

The parts of the Kevzara pre-filled pen are shown in this picture.



## Important information

This device is a single-dose pre-filled pen (called "pen" in these instructions). It contains 200 mg of Kevzara for injection under the skin (subcutaneous injection) once every two weeks.

Ask your healthcare professional to show you the right way to use the pen before your first injection.

#### Do

- ✓ Read all of the instructions carefully before using a pen.
- Check that you have the correct medicine and the correct dose.
- ✓ Keep unused pens in the original carton and store in the refrigerator between 2°C and 8°C.
- ✓ Keep the carton in an insulated bag with an ice pack when travelling.
- ✓ Let the pen warm up to room temperature for at least 60 minutes before using.
- ✓ Use the pen within 14 days after taking it out of the refrigerator or insulated bag.
- ✓ Keep the pen out of the sight and reach of children.

#### Do not

- **X** Do not use a pen if it has been damaged or the cap is missing or not attached.
- X Do not remove the cap until just before you are ready to inject.
- X Do not press or touch the yellow needle cover with your fingers.

- X Do not try to put the cap back on a pen.
- No not re-use the pen.
- X Do not freeze or heat the pen.
- X Once removed from the refrigerator, do not store the pen above 25°C.
- X Do not expose the pen to direct sunlight.
- **X** Do not inject through your clothes.

## If you have any further questions, ask your doctor, pharmacist or nurse.

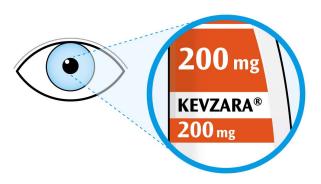
### Step A: Get ready for an injection

### 1. Prepare all the equipment you will need on a clean, flat working surface.

- You will need an alcohol wipe, a cotton ball or gauze, and a puncture-resistant container.
- Take one pen out of the packaging by holding the middle of the pen body. Keep the remaining pen in the carton in the refrigerator.

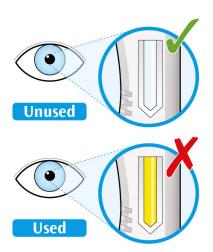
#### 2. Look at the label.

- Check that you have the correct medicine and the correct dose.
- Check the expiry date (EXP), this is shown on the side of the pens.
- **Do not** use the pen if the date has passed.



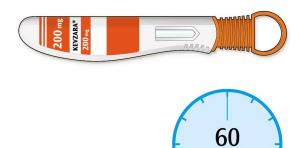
#### 3. Look at the window.

- Check that the liquid is clear and colourless to pale yellow.
- You may see an air bubble, this is normal.
- **X** Do not inject if the liquid is cloudy, discoloured or contains particles.
- **Do not** use if the window is solid yellow.



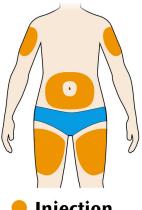
#### 60 minutes.

- Using the pen at room temperature may make the injection more comfortable.
- **X** Do not use the pen if it has been out of the refrigerator for more than 14 days.
- **Do not** heat the pen; let it warm up on its own.
- **Do not** expose the pen to direct sunlight.



## 5. Select the injection site.

- You can inject into your thigh or belly (abdomen) except for the 5 cm around your belly button (navel). If somebody else gives you the injection, you can also use the outer area of the upper arm.
- Change injection site each time you inject.
- **Do not** inject into skin that is tender, damaged or has bruises or scars.



Injection sites

## 6. Prepare the injection site.

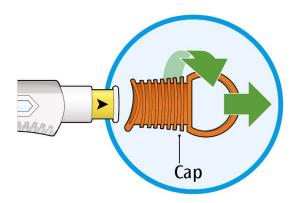
- Wash your hands.
- Clean skin with an alcohol wipe.
- **Do not** touch the injection site again before the injection.

## Step B: Perform the injection – Perform Step B only after completing Step A "Get ready for an injection"

## 1. Twist or pull off the orange cap.

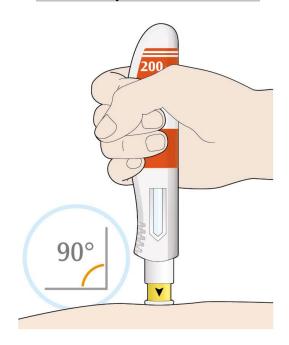
- **Do not** remove the cap until you are ready to inject.
- **Do not** press or touch the yellow needle cover with your fingers.

## **X** Do not put the cap back on.



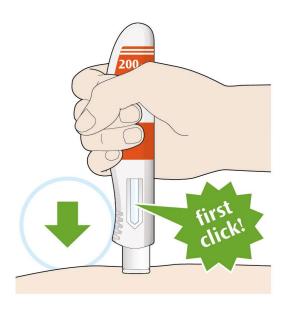
## 2. Put the yellow needle cover on your skin at roughly a 90° angle.

Make sure you can see the window.



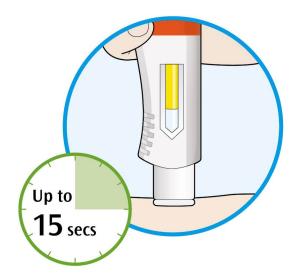
## 3. Press down and hold the pen firmly against your skin.

There will be a "click" when the injection starts.



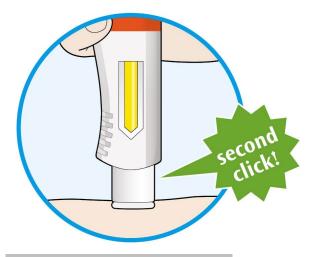
## 4. Keep holding the pen firmly against your skin.

- The window will start to turn yellow.
- The injection can take up to 15 seconds.



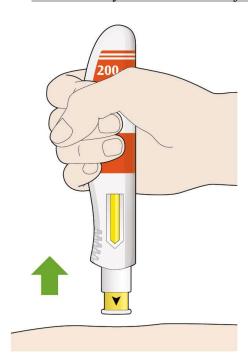
## 5. There will be a second click. Check to see if the entire window has turned yellow before you remove the pen.

- If you do not hear the second click, you should still check to see if the window has turned fully yellow.
- X If the window does not turn fully yellow, **do not** give yourself a second dose without speaking to your healthcare provider.



## 6. Pull the pen away from your skin.

- If you see any blood, press a cotton ball or gauze on the site.
- **No not** rub your skin after the injection.



## 7. Put your used pen and the cap into a puncture-resistant container right away after use.

- Always keep the container out of the sight and reach of children.
- **X** Do not put the cap back on.
- **X** Do not throw the used pens in household waste.
- **Do not** dispose of your used puncture-resistant container in your household waste unless your local guidelines permit this. Ask your doctor, pharmacist or nurse how to throw away the container.

