### HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use ORENCIA safely and effectively. See full prescribing information for ORENCIA.

#### ORENCIA (abatacept) for injection, for intravenous use ORENCIA (abatacept) injection, for subcutaneous use Initial U.S. Approval: 2005

RECENT MAJOR CHANGES					
Indications and Usage, Juvenile Idiopathic Arthritis (1.2)	3/2017				
Indications and Usage, Adult Psoriatic Arthritis (PsA) (1.3)	6/2017				
Dosage and Administration, Juvenile Idiopathic Arthritis (2.2)	3/2017				
Dosage and Administration, Adult Psoriatic Arthritis (PsA) (2.3)	6/2017				

------INDICATIONS AND USAGE------ORENCIA is a selective T cell costimulation modulator indicated for:

#### Adult Rheumatoid Arthritis (RA) (1.1)

• moderately to s everely a ctive R A in a dults. O RENCIA may be u sed a s monotherapy or concomitantly with DMARDs other than TNF antagonists (1.1).

#### Juvenile Idiopathic Arthritis (1.2)

• moderately to severely active polyarticular juvenile idiopathic arthritis in patients 2 years of age and older. ORENCIA may be used as monotherapy or concomitantly with methotrexate (1.2).

### Adult Psoriatic Arthritis (PsA) (1.3)

• active PsA in adults. (1.3)

Important Limitations of Use (1.4)

• should not be given concomitantly with TNF antagonists (1.4, 5.1).

-----DOSAGE AND ADMINISTRATION-----

#### Intravenous Administration for Adult RA (2.1) and Adult PsA (2.3)

Body Weight of Patient	Dose	Number of Vials
Less than 60 kg	500 mg	2
60 to 100 kg	750 mg	3
More than 100 kg	1000 mg	4

#### Subcutaneous Administration for Adult RA (2.1)

- Administer by subcutaneous injection once weekly with or without an intravenous l oading d ose. F or patients i nitiating t herapy with a n intravenous loading dose, administer a single intravenous infusion (as per body weight categories above), followed by the first 125 mg subcutaneous injection given within a day of the intravenous infusion.
- Patients transitioning from ORENCIA intravenous therapy to subcutaneous administration should administer the first subcutaneous dose instead of the next scheduled intravenous dose.

#### Intravenous Administration for Juvenile Idiopathic Arthritis (2.2)

 Pediatric patients weighing less than 75 kg receive 10 mg/kg intravenously based on the patient's body weight. Pediatric patients weighing 75 kg or more should be a dministered O RENCIA following the a dult intravenous dosing regimen, not to exceed a maximum dose of 1000 mg. Intravenous dosing has not been studied in patients younger than 6 years of age.(2.2)

### Subcutaneous Administration for Juvenile Idiopathic Arthritis (2.2)

Body Weight of Patient	Dose (once weekly)
10 to less than 25 kg	50 mg
25 to less than 50 kg	87.5 mg
50 kg or more	125 mg

### FULL PRESCRIBING INFORMATION: CONTENTS \*

### I INDICATIONS AND USAGE

- 1.1 Adult Rheumatoid Arthritis (RA)
- 1.2 Juvenile Idiopathic Arthritis
- 1.3 Adult Psoriatic Arthritis (PsA)
- 1.4 Important Limitations of Use

### 2 DOSAGE AND ADMINISTRATION

- 2.1 Adult Rheumatoid Arthritis
  - 2.2 Juvenile Idiopathic Arthritis
  - 2.3 Adult Psoriatic Arthritis
  - 2.4 Preparation and Administration Instructions for Intravenous Infusion
  - 2.5 General Considerations for Subcutaneous Administration
- 3 DOSAGE FORMS AND STRENGTHS
- 4 CONTRAINDICATIONS

### Subcutaneous Administration for Adult PsA (2.3)

- Administer by subcutaneous injection once weekly without the need of an intravenous loading dose.
- Patients transitioning from ORENCIA intravenous therapy to subcutaneous administration should administer the first subcutaneous dose instead of the next scheduled intravenous dose.

### $General \ Dosing \ Information \ for \ Intravenous \ Administration \ (2.1 \ and \ 2.3)$

- Administer as a 30-minute intravenous infusion (2.1, 2.2)
- Following initial dose, give at 2 and 4 weeks, then every 4 weeks (2.1)
- Prepare ORENCIA using only the silicone-free disposable syringe (2.3)
- Use only Sterile Water for Injection, USP to reconstitute the powder (2.3)
- The reconstituted and diluted product must be a dministered using a filter (2.3)

# -----DOSAGE FORMS AND STRENGTHS------Intravenous Infusion

• For Injection: 250 mg lyophilized p owder i n a single-use vial f or reconstitution and dilution prior to intravenous infusion (3)

#### **Subcutaneous Injection**

- Injection: 50 mg/0.4 mL, 87.5 mg/0.7 mL, 125 mg/mL solution in singledose prefilled syringes for subcutaneous use (3)
- Injection: 125 m g/mL s olution i n a s ingle-dose p refilled C lickJect<sup>™</sup> autoinjector for subcutaneous use (3)

CONTRAINDICATIONS
 None (4)

### -----WARNINGS AND PRECAUTIONS------

- Concomitant use with a TNF antagonist can increase the risk of infections and serious infections (5.1)
- Hypersensitivity, anaphylaxis, and anaphylactoid reactions (5.2)
- Patients with a history of r ecurrent in fections or underlying conditions predisposing to infections may experience more infections (5.3, 8.5)
- Discontinue if a serious infection develops (5.3)
- Screen f or l atent T B infection prior to initiating therapy. P atients t esting positive should be treated prior to initiating ORENCIA (5.3)
- Live v accines should not be given concurrently or within 3 m onths of discontinuation (5.4)
- Patients with juvenile idiopathic arthritis should be brought up to date with all immunizations prior to ORENCIA therapy (5.4)
- Based on its mechanism of action, ORENCIA may blunt the effectiveness of some immunizations (5.4)
- COPD patients may develop more frequent respiratory adverse events (5.5)

-----ADVERSE REACTIONS------Most c ommon adverse events (≥10%) a re headache, u pper r espiratory t ract infection, nasopharyngitis, and nausea (6.1)

#### To report SUSPECTED ADVERSE REACTIONS, contact Bristol-Myers Squibb at 1-800-721-5072 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

-----USE IN SPECIFIC POPULATIONS------

• Pregnancy: Registry available. The data with O RENCIA use in pregnant women are insufficient to inform on drug-associated risk (8.1)

See 17 for PATIENT COUNSELING INFORMATION and FDAapproved patient labeling.

Revised: 6/2017

#### 5 WARNINGS AND PRECAUTIONS

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- 5.2 Hypersensitivity
- 5.3 Infections
- 5.4 Immunizations
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### ADVERSE REACTIONS

- 6.1 Clinical Studies Experience in Adult RA Patients Treated with Intravenous ORENCIA
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- Clinical Studies Experience in Juvenile Idiopathic Arthritis Patients Treated with 6.3 Intravenous ORENCIA
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# FULL PRESCRIBING INFORMATION

## 1 INDICATIONS AND USAGE

## 1.1 Adult Rheumatoid Arthritis (RA)

ORENCIA<sup>®</sup> is indicated for r educing s igns and s ymptoms, inducing m ajor c linical r esponse, inhibiting the progression of structural damage, and improving physical function in adult patients with moderately to severely active rheumatoid arthritis. ORENCIA may be used as monotherapy or c oncomitantly w ith disease-modifying antirheumatic drugs (DMARDs) other t han tumor necrosis factor (TNF) antagonists.

## **1.2** Juvenile Idiopathic Arthritis

ORENCIA is indicated for reducing signs and symptoms in patients 2 years of a ge and older with moderately to severely active polyarticular juvenile idiopathic arthritis. ORENCIA may be used as monotherapy or concomitantly with methotrexate (MTX).

## 1.3 Adult Psoriatic Arthritis (PsA)

ORENCIA is indicated for the treatment of adult patients with active psoriatic arthritis (PsA).

## 1.4 Important Limitations of Use

ORENCIA should not be administered concomitantly with TNF antagonists. ORENCIA is not recommended for use concomitantly with other biologic rheumatoid arthritis (RA) therapy, such as anakinra.

## 2 DOSAGE AND ADMINISTRATION

## 2.1 Adult Rheumatoid Arthritis

For adult patients with RA, ORENCIA may be administered as an intravenous infusion or as a subcutaneous injection.

ORENCIA m ay be us ed a s m onotherapy or c oncomitantly with D MARDs ot her t han T NF antagonists.

## Intravenous Dosing Regimen

ORENCIA lyophilized pow der should be reconstituted a nd administered after d ilution [*see Dosage and Administration (2.3)*] as a 30-minute intravenous infusion utilizing the weight rangebased dos ing s pecified i n T able 1. F ollowing the in itial intravenous administration, a n intravenous infusion should be given at 2 and 4 weeks after the first infusion and every 4 weeks thereafter.

Infusion in Adult RA Patients								
<b>Body Weight of Patient</b>	Dose	Number of Vials <sup>a</sup>						
Less than 60 kg	500 mg	2						
60 to 100 kg	750 mg	3						
More than 100 kg	1000 mg	4						

Dose of ORENCIA for Intravenous Infusion in Adult RA Patients

<sup>a</sup> Each vial provides 250 mg of abatacept for administration.

### Subcutaneous Dosing Regimen

Table 1:

ORENCIA 125 m g in prefilled s yringes or in ORENCIA ClickJect<sup>TM</sup> autoinjector should be administered by subcutaneous injection once weekly [*see Dosage and Administration (2.4)*] and may be initiated with or without an intravenous loading dose. For patients initiating therapy with an intravenous loading dose, ORENCIA should be initiated with a single intravenous infusion (as per b ody w eight c ategories lis ted in T able 1 ), f ollowed b y th e f irst 125 m g s ubcutaneous injection administered within a day of the intravenous infusion.

Patients t ransitioning f rom O RENCIA i ntravenous t herapy t o s ubcutaneous a dministration should administer the first subcutaneous dose instead of the next scheduled intravenous dose.

## 2.2 Juvenile Idiopathic Arthritis

For patients with juvenile id iopathic a rthritis (JIA), O RENCIA m ay b e ad ministered as an intravenous infusion (6 years of age and older) or a subcutaneous injection (2 years of age and older). Intravenous dosing has not been studied in patients younger than 6 years of age.

ORENCIA may be used as monotherapy or concomitantly with methotrexate.

### Intravenous Dosing Regimen

ORENCIA should be administered as a 30-minute intravenous infusion based on body weight. Pediatric patients with:

- body weight less than 75 kg should be administered ORENCIA at a dose of 10 mg/kg [see Dosage and Administration (2.3)].
- body w eight of 75 k g or m ore s hould be a dministered O RENCIA f ollowing t he a dult intravenous dosing regimen (see Table 1), not to exceed a maximum dose of 1000 mg.

Following the initial administration, ORENCIA should be given at 2 and 4 weeks after the first infusion and every 4 weeks thereafter. Any unused portions in the vials must be immediately discarded.

## Subcutaneous Dosing Regimen

ORENCIA for subcutaneous injection should be initiated without an intravenous loading dose and be administered utilizing the weight range-based dosing as specified in Table 2.

Table 2:	Administ	RENCIA for Subcutaneous ration in Patients 2 Years of der with JIA
Body Weight of	Patient	Dose (once weekly)
10 to less than	25 kg	50 mg
25 to less than	50 kg	87.5 mg
50 kg or me	ore	125 mg

The safety and efficacy of ORENCIA ClickJect autoinjector for subcutaneous injection has not been studied in patients under 18 years of age.

## 2.3 Adult Psoriatic Arthritis

For adult p atients with psoriatic arthritis, O RENCIA may be a dministered as an in travenous infusion (IV) or a subcutaneous (SC) injection.

ORENCIA can be used with or without non-biologic DMARDs.

### Intravenous Dosing Regimen

ORENCIA IV should be administered as a 30-minute intravenous infusion utilizing the weight range-based dos ing s pecified in T able 1. F ollowing t he i nitial i ntravenous a dministration, a n intravenous infusion should be given at 2 and 4 weeks after the first infusion and every 4 weeks thereafter.

## Subcutaneous Dosing Regimen

ORENCIA SC 125 mg should be administered by subcutaneous injection once weekly without the need for an intravenous loading dose.

Patients switching from ORENCIA intravenous therapy to subcutaneous administration should administer the first subcutaneous dose instead of the next scheduled intravenous dose.

# 2.4 Preparation and Administration Instructions for Intravenous Infusion

### Use aseptic technique.

ORENCIA for I njection is provided as a 1 yophilized pow der i n pr eservative-free, s ingle-use vials. E ach ORENCIA vial pr ovides 250 m g of a batacept for a dministration. The ORENCIA powder in each vial must be reconstituted with 10 mL of Sterile Water for Injection, USP, using *only the silicone-free disposable syringe provided with each vial* and an 18- to 21-gauge needle. After r econstitution, t he c oncentration of a batacept i n t he vi al w ill be 25 mg/mL. If the ORENCIA pow der i s a ccidentally reconstituted us ing a siliconized s yringe, the s olution m ay develop a few translucent particles. Discard any solutions prepared using siliconized syringes.

If the <u>silicone-free disposable syringe</u> is dropped or becomes contaminated, use a new <u>silicone-free disposable syringe</u> from inventory. For information on obt aining additional <u>silicone-free disposable syringes</u>, contact Bristol-Myers Squibb 1-800-ORENCIA.

- 1) Use 10 m L of Sterile Water for Injection, USP to reconstitute the ORENCIA powder. To reconstitute the ORENCIA powder, remove the flip-top from the vial and wipe the top with an a lcohol s wab. Insert the s yringe ne edle i nto the vi al through the c enter of the r ubber stopper and direct the stream of Sterile Water for Injection, USP, to the glass wall of the vial. Do not use the vial if the vacuum is not present. Rotate the vial with gentle swirling to minimize foam formation, until the contents are completely dissolved. Do not shake. Avoid prolonged or vigorous agitation.
- 2) Upon c omplete di ssolution of the l yophilized pow der, the vial s hould b e ve nted with a needle to dissipate any foam that may be present. A fter reconstitution, each milliliter will contain 25 mg (250 mg/10 mL). The solution should be clear and colorless to pale yellow. Do not use if opaque particles, discoloration, or other foreign particles are present.
- 3) The reconstituted ORENCIA solution must be further diluted to 100 mL as follows. From a 100 mL infusion b ag or bot tle, withdraw a volume of 0.9% S odium C hloride Injection,

USP, equal to the volume of the reconstituted ORENCIA solution required for the patient's dose. Slowly add the reconstituted ORENCIA solution into the infusion bag or bottle using the s ame <u>silicone-free disposable syringe provided with each vial</u>. G ently m ix. <u>Do not shake the bag or bottle</u>. The final c oncentration of a batacept in the b ag or b ottle will depend upon the amount of drug added, but will be no m ore than 10 mg/mL. Any unused portions in the ORENCIA vial must be immediately discarded.

- 4) Prior to administration, the ORENCIA solution should be inspected visually for particulate matter and discoloration. Discard the solution if any particulate matter or discoloration is observed.
- 5) The entire, fully diluted ORENCIA solution should be administered over a period of 30 minutes and must be administered with an infusion set and a <u>sterile, non-pyrogenic, low-protein-binding filter</u> (pore size of 0.2 μm to 1.2 μm).
- 6) The infusion of the fully diluted ORENCIA solution must be completed within 24 hours of reconstitution of the ORENCIA vials. The fully diluted ORENCIA solution may be stored at room temperature or refrigerated at 2°C to 8°C (36°F to 46°F) before use. Discard the fully diluted solution if not administered within 24 hours.
- 7) ORENCIA should not be infused concomitantly in the same intravenous line with other agents. No physical or biochemical compatibility studies have been conducted to evaluate the coadministration of ORENCIA with other agents.

## 2.5 General Considerations for Subcutaneous Administration

ORENCIA prefilled syringes and OR ENCIA ClickJect autoinjectors are intended f or subcutaneous use only and are not intended for intravenous infusion.

ORENCIA prefilled syringes and ORENCIA ClickJect autoinjectors are intended for use under the guidance of a p hysician or h ealthcare p ractitioner. After proper training in s ubcutaneous injection technique, a patient or caregiver may inject with ORENCIA if a physician/healthcare practitioner d etermines t hat it is a ppropriate. P atients and caregivers should be instructed t o follow the directions provided in the Instructions for Use for additional details on me dication administration.

Inspect visually for p articulate ma tter a nd d iscoloration p rior to a dministration. Do not us e ORENCIA prefilled syringes or ORENCIA ClickJect autoinjectors exhibiting particulate matter or discoloration. ORENCIA should be clear and colorless to pale yellow.

Patients u sing O RENCIA prefilled s yringes an d O RENCIA ClickJect autoinjectors for subcutaneous administration should be instructed to inject the full amount, which provides the proper dose of ORENCIA, according to the directions provided in the Instructions for Use.

Injection sites should be rotated and injections should never be given into areas where the skin is tender, bruised, red, or hard.

## 3 DOSAGE FORMS AND STRENGTHS

## • Intravenous Infusion

For Injection: 250 mg lyophilized powder in a single-use vial

## • Subcutaneous Injection

Injection: 50 mg/0.4 mL, 87.5 mg/0.7 mL, and 125 mg/mL of a clear to slightly opalescent, colorless to pale-yellow solution in a single-dose prefilled glass syringe.

Injection: 125 mg/mL of a clear to slightly opalescent, colorless to pale-yellow solution in a single-dose prefilled ClickJect autoinjector.

# 4 CONTRAINDICATIONS

None.

# 5 WARNINGS AND PRECAUTIONS

# 5.1 Concomitant Use with TNF Antagonists

In controlled clinical trials in patients with adult RA, patients receiving concomitant intravenous ORENCIA a nd T NF a ntagonist t herapy e xperienced m ore i nfections (63%) and s erious infections (4.4%) compared t o pa tients t reated with onl y T NF antagonists (43% a nd 0.8%, respectively) [*see Adverse Reactions (6.1)*]. T hese trials f ailed to d emonstrate a n imp ortant enhancement of e fficacy with concomitant administration of ORENCIA with TNF antagonist; therefore, concurrent therapy with ORENCIA and a TNF antagonist is not recommended. While transitioning from TNF antagonist therapy to ORENCIA therapy, patients should be monitored for signs of infection.

# 5.2 Hypersensitivity

In clinical trials of 2688 adult RA patients treated with intravenous ORENCIA, there were two cases (<0.1%) of anaphylaxis or anaphylactoid reactions. Other reactions potentially associated with drug h ypersensitivity, s uch as h ypotension, ur ticaria, and d yspnea, each occurred in less than 0.9% of OR ENCIA-treated patients. Of the 190 pa tients with juvenile i diopathic arthritis

treated w ith O RENCIA i n cl inical t rials, t here w as o ne cas e o f a h ypersensitivity r eaction (0.5%). Appropriate me dical s upport me asures for the treatment o f h ypersensitivity r eactions should be available for immediate us e in the event of a reaction [*see Adverse Reactions (6.1, 6.3)*]. Anaphylaxis or anaphylactoid reactions can occur after the first infusion and can be life threatening. In postmarketing experience, a case of fatal anaphylaxis following the first infusion of O RENCIA has be en reported. If an anaphylactic o r o ther s erious al lergic r eaction o ccurs, administration of ORENCIA should be stopped immediately with appropriate therapy instituted, and the use of ORENCIA should be permanently discontinued.

## 5.3 Infections

Serious i nfections, i ncluding s epsis a nd pne umonia, ha ve be en r eported i n pa tients r eceiving ORENCIA. S ome of t hese i nfections ha ve b een f atal. M any o f t he s erious i nfections ha ve occurred i n pa tients on c oncomitant i mmunosuppressive t herapy w hich i n a ddition t o their underlying di sease, could f urther pr edispose t hem t o i nfection. Physicians s hould ex ercise caution when considering the use of ORENCIA in patients with a history of recurrent infections, underlying conditions which may predispose them to infections, or chronic, latent, or localized infections. P atients w ho de velop a new i nfection w hile undergoing t reatment w ith ORENCIA should be monitored closely. Administration of ORENCIA should be discontinued if a patient develops a serious infection [*see Adverse Reactions* (6.1)]. A higher rate of serious infections has been observed in adult RA patients treated with concurrent TNF antagonists and ORENCIA [*see Warnings and Precautions* (5.1)].

Prior t o i nitiating i mmunomodulatory t herapies, i ncluding ORENCIA, pa tients s hould be screened for l atent t uberculosis i nfection with a tuberculin s kin t est. ORENCIA has not be en studied in patients with a positive tuberculosis screen, and the safety of ORENCIA in individuals with latent tuberculosis infection is unknown. Patients testing positive in tuberculosis screening should be treated by standard medical practice prior to therapy with ORENCIA.

Antirheumatic therapies have been associated with hepatitis B reactivation. Therefore, screening for viral hepatitis should be performed in accordance with published guidelines before starting therapy with ORENCIA. In clinical studies with ORENCIA, patients who screened positive for hepatitis were excluded from study.

## 5.4 Immunizations

Live v accines s hould not be g iven c oncurrently with O RENCIA or w ithin 3 m onths of i ts discontinuation. No data are available on t he secondary transmission of infection from persons receiving live vaccines to patients receiving ORENCIA. The efficacy of vaccination in patients

receiving ORENCIA is not known. Based on its mechanism of action, ORENCIA may blunt the effectiveness of some immunizations.

It is recommended that patients with juvenile idiopathic arthritis be brought up to date with all immunizations in agreement with current immunization guidelines prior to initiating ORENCIA therapy.

# 5.5 Use in Patients with Chronic Obstructive Pulmonary Disease (COPD)

Adult C OPD p atients treated with O RENCIA d eveloped ad verse events m ore frequently than those treated with placebo, including COPD exacerbations, cough, rhonchi, and dyspnea. Use of ORENCIA in patients with RA and COPD should be undertaken with caution and such patients should be monitored for worsening of their respiratory status [*see Adverse Reactions* (6.1)].

## 5.6 Immunosuppression

The possibility exists for drugs inhibiting T cell activation, including ORENCIA, to affect host defenses a gainst infections and malignancies since T cells mediate cellular immune responses. The impact of treatment with ORENCIA on the development and course of malignancies is not fully understood [*see Adverse Reactions (6.1)*]. In clinical trials in patients with a dult R A, a higher r ate of i nfections w as s een i n ORENCIA-treated p atients compared t o p lacebo [*see Adverse Reactions (6.1)*].

# 6 ADVERSE REACTIONS

Because clinical trials a re conducted under widely varying and controlled conditions, a dverse reaction rates observed in clinical trials of a d rug cannot be directly compared to rates in the clinical trials of a nother drug and m ay not predict the rates observed in a broader patient population in clinical practice.

As with all therapeutic proteins, there is potential for immunogenicity. The detection of antibody formation is highly dependent on the sensitivity and specificity of the assay. A dditionally, the observed incidence of antibody (including neutralizing antibody) positivity in an assay may be influenced by several factors including assay methodology, sample handling, timing of sample collection, concomitant medications, and underlying disease. For these reasons, comparison of the incidence of antibodies to a batacept in the studies de scribed be low with the incidence of antibodies in other studies or to other products may be misleading.

# 6.1 Clinical Studies Experience in Adult RA Patients Treated with Intravenous ORENCIA

The data described herein reflect exposure to ORENCIA administered intravenously in patients with active RA in placebo-controlled studies (1955 patients with ORENCIA, 989 with placebo). The studies had either a double-blind, placebo-controlled period of 6 months (258 patients with ORENCIA, 133 with placebo) or 1 year (1697 patients with ORENCIA, 856 with placebo). A subset of these patients received concomitant biologic DMARD therapy, such as a TNF blocking agent (204 patients with ORENCIA, 134 with placebo).

The ma jority o f p atients in R A c linical s tudies r eceived o ne o r m ore o f t he f ollowing concomitant me dications with O RENCIA: methotrexate, nons teroidal a nti-inflammatory d rugs (NSAIDs), corticosteroids, T NF bl ocking a gents, a zathioprine, c hloroquine, gold, hydroxychloroquine, leflunomide, sulfasalazine, and anakinra.

The most serious adverse reactions were serious infections and malignancies.

The m ost c ommonly reported a dverse e vents (occurring i n  $\geq 10\%$  o f patients tr eated w ith ORENCIA) were headache, upper respiratory tract infection, nasopharyngitis, and nausea.

The a dverse e vents most f requently resulting i n c linical i ntervention ( interruption or discontinuation of ORENCIA) were due to infection. The most frequently reported infections resulting in dos e interruption were upper r espiratory tract infection (1.0%), bronchitis (0.7%), and he rpes z oster ( 0.7%). T he most f requent i nfections r esulting i n di scontinuation were pneumonia (0.2%), localized infection (0.2%), and bronchitis (0.1%).

## Infections

In the placebo-controlled trials, in fections were reported in 54% of ORENCIA-treated patients and 48% of placebo-treated patients. The most c ommonly reported i nfections (reported i n 5%-13% of p atients) were upper respiratory tract infection, na sopharyngitis, s inusitis, ur inary tract infection, influenza, and bronchitis. Other infections reported in fewer than 5% of patients at a hi gher f requency (>0.5%) with O RENCIA c ompared t o pl acebo, were r hinitis, he rpes simplex, and pneumonia [*see Warnings and Precautions* (5.3)].

Serious infections were reported in 3.0% of patients treated with ORENCIA and 1.9% of patients treated w ith pl acebo. The m ost c ommon (0.2%-0.5%) s erious i nfections r eported w ith ORENCIA were pneumonia, cellulitis, urinary tract infection, bronchitis, diverticulitis, and acute pyelonephritis [*see Warnings and Precautions (5.3)*].

## Malignancies

In the placebo-controlled portions of the clinical trials (1955 patients treated with ORENCIA for a median of 12 months), the overall frequencies of malignancies were similar in the ORENCIAand placebo-treated patients (1.3% and 1.1%, respectively). However, more cases of lung cancer were observed in ORENCIA-treated patients (4, 0.2%) than placebo-treated patients (0). In the cumulative ORENCIA clinical trials (placebo-controlled and uncontrolled, open-label) a total of 8 cases of lung cancer (0.21 cases per 100 patient-years) and 4 lymphomas (0.10 cases per 100 patient-years) w ere obs erved i n 2688 pa tients ( 3827 pa tient-years). The r ate o bserved f or lymphoma is a pproximately 3.5 -fold h igher t han ex pected in a n a ge- and ge nder-matched general population based on the National Cancer Institute's Surveillance, Epidemiology, and End Results Database. Patients with RA, particularly those with highly active disease, are at a higher risk f or t he de velopment of 1 ymphoma. O ther malignancies i ncluded s kin, br east, bi le duc t, bladder, cervical, e ndometrial, 1 ymphoma, m elanoma, m yelodysplastic s yndrome, ovarian, prostate, renal, thyroid, and uterine cancers [*see Warnings and Precautions (5.6)*]. The potential role of ORENCIA in the development of malignancies in humans is unknown.

## Infusion-Related Reactions and Hypersensitivity Reactions

Acute i nfusion-related e vents ( adverse r eactions oc curring w ithin 1 ho ur of t he s tart of t he infusion) i n S tudies I II, IV, a nd V [*see Clinical Studies (14.1)*] w ere m ore c ommon i n t he ORENCIA-treated patients than the placebo patients (9% for ORENCIA, 6% for placebo). The most frequently reported events (1%-2%) were dizziness, headache, and hypertension.

Acute i nfusion-related e vents t hat w ere reported i n > 0.1% and  $\le 1\%$  o f p atients tr eated w ith ORENCIA included cardiopulmonary symptoms, such as hypotension, increased blood pressure, and d yspnea; ot her s ymptoms i ncluded na usea, f lushing, ur ticaria, cough, h ypersensitivity, pruritus, rash, and wheezing. Most of these reactions were mild (68%) to moderate (28%). Fewer than 1% of ORENCIA-treated patients discontinued due t o an acute infusion-related event. In controlled t rials, 6 O RENCIA-treated p atients co mpared t o 2 placebo-treated p atients discontinued study treatment due to acute infusion-related events.

In clinical trials of 2688 a dult RA patients treated with intravenous ORENCIA, there were two cases (<0.1%) of an aphylaxis or an aphylactoid reactions. Other reactions potentially as sociated with dr ug h ypersensitivity, s uch a s h ypotension, ur ticaria, and d yspnea, each occurred in less than 0.9% of ORENCIA-treated patients and generally occurred within 24 hours of ORENCIA infusion. A ppropriate medical s upport measures for the treatment of h ypersensitivity reactions should be available for immediate use in the event of a reaction [*see Warnings and Precautions* (5.2)].

### Adverse Reactions in Patients with COPD

In S tudy V [*see Clinical Studies (14.1)*], t here w ere 37 pa tients w ith c hronic obs tructive pulmonary disease (COPD) who were treated with ORENCIA and 17 COPD patients who were treated with placebo. The COPD patients treated with ORENCIA developed adverse events more frequently t han t hose t reated w ith pl acebo (97% vs 88%, r espectively). R espiratory d isorders occurred m ore frequently in ORENCIA-treated patients compared t o p lacebo-treated p atients (43% vs 24%, r espectively) i ncluding C OPD e xacerbation, c ough, rhonchi, a nd d yspnea. A greater percentage of ORENCIA-treated patients developed a serious adverse event compared to placebo-treated patients (27% vs 6%), including COPD exacerbation (3 of 37 patients [8%]) and pneumonia (1 of 37 patients [3%]) [see Warnings and Precautions (5.5)].

### Other Adverse Reactions

Adverse e vents oc curring i n 3% or m ore of patients an d at 1 east 1 % m ore f requently i n ORENCIA-treated patients during placebo-controlled RA studies are summarized in Table 3.

Adverse Event (Preferred Term)	ORENCIA (n=1955) <sup>a</sup> Percentage	Placebo (n=989) <sup>b</sup> Percentage
Headache	18	13
Nasopharyngitis	12	9
Dizziness	9	7
Cough	8	7
Back pain	7	6
Hypertension	7	4
Dyspepsia	6	4
Urinary tract infection	6	5
Rash	4	3
Pain in extremity	3	2

# Table 3:Adverse Events Occurring in 3% or More of Patients and at Least<br/>1% More Frequently in ORENCIA-Treated Patients During<br/>Placebo-Controlled RA Studies

<sup>a</sup> Includes 204 patients on concomitant biologic DMARDs (adalimumab, anakinra, etanercept, or infliximab).

<sup>b</sup> Includes 134 patients on concomitant biologic DMARDs (adalimumab, anakinra, etanercept, or infliximab).

### Immunogenicity

Antibodies directed against the entire abatacept molecule or to the CTLA-4 portion of abatacept were assessed by ELISA as says in RA patients for up to 2 years following repeated treatment with ORENCIA. Thirty-four of 1993 (1.7%) patients developed binding antibodies to the entire abatacept molecule or to the CTLA-4 portion of abatacept. Because trough levels of abatacept

can interfere with assay results, a subset analysis was performed. In this analysis it was observed that 9 of 154 (5.8%) patients that had discontinued treatment with ORENCIA for over 56 days developed antibodies.

Samples w ith c onfirmed b inding a ctivity to CTLA-4 w ere as sessed f or t he p resence o f neutralizing antibodies in a cell-based luciferase reporter assay. Six of 9 (67%) evaluable patients were s hown t o pos sess ne utralizing a ntibodies. However, the d evelopment of ne utralizing antibodies may be underreported due to lack of assay sensitivity.

No correlation of antibody development to clinical response or adverse events was observed.

The d ata r eflect t he p ercentage of p atients w hose t est r esults w ere p ositive f or an tibodies t o abatacept i n s pecific a ssays. The obs erved i ncidence of a ntibody (including n eutralizing antibody) positivity in an assay is highly dependent on several factors, including assay sensitivity and specificity, assay methodology, sample handling, timing of sample collection, concomitant medication, and underlying disease. For these reasons, comparison of the incidence of antibodies to abatacept with the incidence of antibodies to other products may be misleading.

## Clinical Experience in Methotrexate-Naive Patients

Study V I w as an act ive-controlled c linical tr ial in methotrexate-naive p atients [*see Clinical Studies (14.1)*]. The safety experience in these patients was consistent with Studies I-V.

# 6.2 Clinical Studies Experience in Adult RA Patients Treated with Subcutaneous ORENCIA

Study SC -1 was a randomized, doubl e-blind, doubl e-dummy, non-inferiority s tudy th at compared t he ef ficacy and s afety of abatacept administered subcutaneously (SC) a nd intravenously (IV) in 1457 subjects w ith r heumatoid a rthritis, receiving b ackground methotrexate, and experiencing an inadequate response to methotrexate (MTX-IR) [*see Clinical Studies (14.1)*]. T he s afety experience and i mmunogenicity f or ORENCIA a dministered subcutaneously was consistent with intravenous Studies I-VI. Due to the route of administration, injection site reactions and immunogenicity were evaluated in Study SC-1 and two other smaller studies discussed in the sections below.

## Injection Site Reactions in Adult RA Patients Treated with Subcutaneous ORENCIA

Study SC -1 compared the s afety of abatacept including in jection s iter eactions f ollowing subcutaneous or intravenous administration. The overall frequency of injection site reactions was 2.6% (19/736) and 2.5% (18/721) for the subcutaneous abatacept group and the intravenous

abatacept group (subcutaneous placebo), r espectively. All these injections iter eactions (including hematoma, pruritus, and erythema) were mild (83%) to moderate (17%) in severity, and none necessitated drug discontinuation.

### Immunogenicity in Adult RA Patients Treated with Subcutaneous ORENCIA

Study SC-1 compared the immunogenicity to abatacept following subcutaneous or intravenous administration. The overall immunogenicity frequency to abatacept was 1.1% (8/725) and 2.3% (16/710) for the subcutaneous and intravenous groups, respectively. The rate is consistent with previous e xperience, a nd t here w as no correlation of i mmunogenicity with e ffects on pharmacokinetics, safety, or efficacy.

# Immunogenicity and Safety of Subcutaneous ORENCIA Administration as Monotherapy without an Intravenous Loading Dose

Study SC -2 was c onducted t o d etermine t he effect of m onotherapy use of ORENCIA on immunogenicity following subcutaneous administration without an intravenous load in 100 RA patients, w ho had not p reviously r eceived abatacept or ot her C TLA4Ig, who r eceived ei ther subcutaneous ORENCIA plus methotrexate (n=51) or subcutaneous ORENCIA monotherapy (n=49). No p atients i n e ither group de veloped a nti-product a ntibodies a fter 4 m onths of treatment. The s afety o bserved i n t his s tudy w as c onsistent w ith t hat observed i n t he ot her subcutaneous studies.

# Immunogenicity and Safety of Subcutaneous ORENCIA upon Withdrawal (Three Months) and Restart of Treatment

Study SC-3 in the subcutaneous program was conducted to investigate the effect of withdrawal (three m onths) a nd r estart of O RENCIA s ubcutaneous t reatment on i mmunogenicity in R A patients tr eated c oncomitantly w ith methotrexate. One hundr ed s ixty-seven p atients were enrolled in the first 3-month treatment period and responders (n=120) were randomized to either subcutaneous ORENCIA or placebo for the second 3-month period (withdrawal period). Patients from this period then received open-label ORENCIA treatment in the final 3-month period of the study (period 3). At the end of the withdrawal period, 0/38 patients who continued to receive subcutaneous ORENCIA developed anti-product antibodies compared to 7/73 (9.6%) of patients who had subcutaneous ORENCIA withdrawn during this period. Half of the patients receiving subcutaneous placebo d uring the withdrawal period received a single intravenous infusion of ORENCIA at the start of period 3 and half received intravenous placebo. At the end of period 3, when all patients again received subcutaneous ORENCIA, the immunogenicity rates were 1/38 (2.6%) in the group receiving subcutaneous ORENCIA throughout, and 2/73 (2.7%) in the group

that had received placebo during the withdrawal period. Upon reinitiating therapy, there were no injection reactions and no differences in response to therapy in patients who were withdrawn from subcutaneous therapy for up to 3 months relative to those who remained on subcutaneous therapy, whether therapy was reintroduced with or without an intravenous loading dos e. The safety observed in this study was consistent with that observed in the other studies.

## 6.3 Clinical Studies Experience in Juvenile Idiopathic Arthritis Patients Treated with Intravenous ORENCIA

In general, the adverse events in pediatric patients were similar in frequency and type to those seen in adult patients [*see Warnings and Precautions (5)*, *Adverse Reactions (6)*].

Study JIA-1 was a three-part study including an open-label extension that assessed the safety and efficacy of i ntravenous ORENCIA in 190 pediatric pa tients, 6 t o 1 7 years of a ge, w ith polyarticular ju venile id iopathic a rthritis. Overall frequency of a dverse e vents in the 4-month, lead-in, open-label period of the study was 70%; infections occurred at a frequency of 36% [*see Clinical Studies (14.2)*]. The most common infections were upper respiratory tract infection and nasopharyngitis. T he i nfections r esolved w ithout s equelae, and the t ypes o f i nfections were consistent w ith t hose c ommonly s een i n out patient pe diatric populations. O ther events t hat occurred at a prevalence of at least 5 % were h eadache, n ausea, d iarrhea, co ugh, p yrexia, and abdominal pain.

A total of 6 serious adverse events (acute lymphocytic leukemia, ovarian cyst, varicella infection, disease flare [2], and j oint wear) were reported during the initial 4 months of treatment with ORENCIA.

Of the 190 patients with juvenile idiopathic arthritis treated with ORENCIA in clinical trials, there was one case of a hypersensitivity reaction (0.5%). During Periods A, B, and C, a cute infusion-related reactions occurred at a frequency of 4%, 2%, and 3%, respectively, and were consistent with the types of events reported in adults.

Upon continued treatment in the open-label extension period, the types of adverse events were similar in frequency and type to those seen in adult patients, except for a single patient diagnosed with multiple sclerosis while on open-label treatment.

## Immunogenicity

Antibodies directed against the entire abatacept molecule or to the CTLA-4 portion of abatacept were assessed by ELISA assays in patients with juvenile idiopathic arthritis following repeated treatment with ORENCIA throughout the open-label period. For patients who were withdrawn

from therapy for up to 6 months during the double-blind period, the rate of antibody formation to the CTLA-4 portion of the molecule was 41% (22/54), while for those who remained on therapy the rate was 13% (7/54). Twenty of these patients had samples that could be tested for antibodies with ne utralizing a ctivity; of t hese, 8 ( 40%) pa tients w ere s hown t o pos sess ne utralizing antibodies.

The p resence of f antibodies w as g enerally t ransient and t iters w ere l ow. T he p resence of antibodies w as not as sociated with ad verse events, changes in efficacy, or an effect on s erum concentrations of abatacept. For p atients w ho were w ithdrawn f rom ORENCIA during t he double-blind period for up to 6 m onths, no s erious acute infusion-related events were observed upon re-initiation of ORENCIA therapy.

## 6.4 Clinical Studies Experience in Juvenile Idiopathic Arthritis Patients Treated with Subcutaneous ORENCIA

Study JIA-2 was an open-label study with a 4-month short-term period and a long-term extension period that assessed the pharmacokinetics (PK), safety, and efficacy of subcutaneous ORENCIA in 205 pediatric patients, 2 to 17 years of age with juvenile id iopathic a rthritis. The safety experience and i mmunogenicity for ORENCIA a dministered subcutaneously were consistent with the intravenous Study JIA-1.

There were no reported cases of hypersensitivity reactions. Local injection-site reactions occurred at a frequency of 4.4%.

# 6.5 Clinical Studies Experience in Adult PsA Patients

The safety of ORENCIA was evaluated in 594 patients with psoriatic arthritis (341 patients on ORENCIA and 253 pa tients on pl acebo), in two randomized, double-blind, pl acebo-controlled trials. Of t he 341 pa tients w ho r eceived O RENCIA, 128 patients received i ntravenous ORENCIA (PsA-I) and 213 pa tients r eceived s ubcutaneous ORENCIA (PsA-II). The s afety profile was comparable between studies PsA-I and PsA-II and consistent with the safety profile in rheumatoid arthritis [*see Warnings and Precautions (5), Adverse Reactions (6.1, 6.2)*].

# 6.6 Postmarketing Experience

Adverse reactions have been reported during the postapproval use of ORENCIA. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a cau sal relationship to ORENCIA. Based on the postmarketing ex perience in a dult R A pa tients, t he f ollowing a dverse r eaction ha s be en identified during postapproval use with ORENCIA.

• Vasculitis (including cutaneous vasculitis and leukocytoclastic vasculitis)

# 7 DRUG INTERACTIONS

## 7.1 TNF Antagonists

Concurrent a dministration of a TNF antagonist with O RENCIA h as b een a ssociated with a n increased risk of serious infections and no s ignificant a dditional efficacy over use of the TNF antagonists alone. Concurrent therapy with ORENCIA and TNF antagonists is not recommended [*see Warnings and Precautions (5.1)*].

# 7.2 Other Biologic RA Therapy

There is insufficient experience to as sess the safety and efficacy of O RENCIA administered concurrently with other biologic R A therapy, such as a nakinra, and therefore such us e is not recommended.

# 7.3 Blood Glucose Testing

Parenteral dr ug p roducts c ontaining m altose c an i nterfere w ith t he r eadings of bl ood g lucose monitors that use test strips with glucose dehydrogenase pyrroloquinoline quinone (GDH-PQQ). The GDH -PQQ ba sed g lucose m onitoring s ystems ma y r eact w ith th e ma ltose p resent in ORENCIA for intravenous administration, r esulting in falsely elevated blood glucose r eadings on the day of infusion. When receiving ORENCIA through intravenous administration, patients that require blood glucose monitoring should be advised to consider methods that do not react with m altose, s uch a s t hose ba sed on glucose dehydrogenase ni cotine adenine di nucleotide (GDH-NAD), glucose oxidase, or glucose hexokinase test methods.

ORENCIA for subcutaneous administration does not contain maltose; therefore, patients do not need to alter their glucose monitoring.

# 8 USE IN SPECIFIC POPULATIONS

## 8.1 Pregnancy

## Pregnancy Exposure Registry

There is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to ORENCIA during pregnancy. Healthcare professionals are encouraged to register patients and pregnant women are encouraged to enroll themselves by calling 1-877-311-8972.

### **Risk Summary**

The data with ORENCIA use in pregnant women are insufficient to inform on drug-associated risk. In reproductive toxicology studies in rats and rabbits, no fetal malformations were observed with intravenous a dministration of O RENCIA during or ganogenesis a t dos es t hat pr oduced exposures a pproximately 29 t imes t he e xposure at t he m aximum r ecommended hum an dos e (MRHD) of 10 m g/kg/month on a n AUC basis. However, in a pre- and postnatal development study in rats, ORENCIA altered immune function in female rats at 11 times the MRHD on an AUC basis.

### Data

### Human Data

There are no adequate and well-controlled studies of ORENCIA use in pregnant women. The data with ORENCIA use in pregnant women are insufficient to inform on drug-associated risk.

### Animal Data

Intravenous a dministration of ab atacept during or ganogenesis to mic e (10, 55, or 300 mg/kg/day), rats (10, 45, or 200 mg/kg/day), and rabbits (10, 45, or 200 mg/kg every 3 days) produced exposures in rats and rabbits that were approximately 29 times the MRHD on an AUC basis (at maternal dos es of 200 m g/kg/day in rats and rabbits), and no e mbryotoxicity or fetal malformations were observed in any species.

In a study of pre- and postnatal development in rats (10, 45, or 200 mg/kg every 3 da ys from gestation da y 6 t hrough lactation da y 21), alterations in immune function in female of fspring, consisting of a 9-fold i ncrease i n T -cell-dependent a ntibody response relative t o c ontrols on postnatal da y (PND) 5 6 a nd t hyroiditis i n a s ingle f emale pup on P ND 112, oc curred a t approximately 11 t imes the MRHD on a n A UC basis (at a maternal dose of 200 m g/kg). No adverse ef fects were observed at ap proximately 3 t imes t he M RHD (a maternal d ose o f 45 mg/kg). It is not known if immunologic perturbations in rats are relevant indicators of a risk for development of autoimmune diseases in humans exposed *in utero* to abatacept. Exposure to abatacept in the juvenile rat, which may be more representative of the fetal immune system state in the human, resulted in immune system abnormalities in cluding in flammation of the th yroid and pancreas [*see Nonclinical Toxicology (13.2)*].

## 8.2 Lactation

## **Risk Summary**

There is no information regarding the presence of a batacept in human milk, the effects on the breastfed infant, or the effects on milk production. However, abatacept was present in the milk of lactating rats dosed with abatacept.

## 8.4 Pediatric Use

In S tudy J IA-1, O RENCIA with i ntravenous a dministration w as s hown t o r educe s igns and symptoms of a ctive pol yarticular J IA i n pa tients 6 t o 17 years of a ge [*see Clinical Studies* (14.2)]. ORENCIA with intravenous administration has not been studied in patients younger than 6 years of age.

In S tudy J IA-2, the P K and safety of O RENCIA prefilled s yringe for subcutaneous injection have been studied in patients 2 to 17 years of age. The efficacy of ORENCIA for subcutaneous injection in children 2 to 17 years of age is based on pharmacokinetic exposure and extrapolation of established efficacy of intravenous ORENCIA in polyarticular JIA patients and subcutaneous ORENCIA in patients with RA [*see Clinical Pharmacology (12.3) and Clinical Studies (14.2)*]. The safety and immunogenicity of O RENCIA for subcutaneous injection in children 2 to 17 years of age were assessed descriptively [*see Adverse Reactions (6.4)*]. ORENCIA may be used as monotherapy or concomitantly with methotrexate.

The safety and efficacy of ORENCIA ClickJect autoinjector for subcutaneous injection have not been studied in patients under 18 years of age.

Studies in juvenile rats exposed to O RENCIA prior to immune system maturity have shown immune system a bnormalities in cluding an increase in the incidence of infections leading to death as well as inflammation of the thyroid and pancreas [*see Nonclinical Toxicology (13.2)*]. Studies in a dult mice and monkeys have not d emonstrated similar findings. As the immu ne system of the rat is undeveloped in the first few weeks after birth, the relevance of these results to humans is unknown.

The safety and efficacy of ORENCIA in pediatric patients for uses other than juvenile idiopathic arthritis have not been established.

It is unknown if abatacept can cross the placenta into the fetus when the woman is treated with abatacept dur ing pr egnancy. S ince a batacept i s a n i mmunomodulatory a gent, t he s afety of

administering l ive va ccines i n i nfants e xposed *in utero* to a batacept i s unknow n. R isk a nd benefits should be considered prior to vaccinating such infants.

## 8.5 Geriatric Use

A total of 323 patients 65 years of a ge and ol der, including 53 pa tients 75 years and ol der, received O RENCIA in clinical studies. No overall differences in safety or effectiveness were observed between these patients and younger patients, but these numbers are too low to rule out differences. T he f requency o f s erious i nfection a nd m alignancy a mong O RENCIA-treated patients over age 65 was higher than for those under age 65. Because there is a higher incidence of infections and malignancies in the elderly population in general, caution should be used when treating the elderly.

# 10 OVERDOSAGE

Doses up t o 50 mg/kg have been administered intravenously without apparent toxic effect. In case of overdosage, it is recommended that the patient be monitored for any signs or symptoms of adverse reactions and appropriate symptomatic treatment instituted.

## 11 DESCRIPTION

 $ORENCIA^{\mbox{\ensuremath{\mathbb{R}}}}$  (abatacept) is a selective T cell costimulation modulator. OR ENCIA is a soluble fusion protein t hat c onsists of t he e xtracellular dom ain of hum an c ytotoxic T -lymphocyte-associated an tigen 4 (CTLA-4) l inked t o t he modified F c (hinge, C H2, and C H3 dom ains) portion of hum an immunoglobulin G l (IgGl). Abatacept is produced by r ecombinant D NA technology in a mammalian cell expression system. The apparent molecular weight of abatacept is 92 kilodaltons.

ORENCIA for Injection is a lyophilized pow der for intravenous infusion. ORENCIA for Injection is supplied as a sterile, white, preservative-free, lyophilized pow der for reconstitution and di lution prior t o intravenous administration. Following r econstitution of t he l yophilized powder with 10 m L of Sterile W ater for Injection, U SP, the solution of O RENCIA is c lear, colorless to pale yellow, with a p H range of 7.2 to 7.8. Each single-use vial of O RENCIA for Injection provides 250 mg abatacept, maltose (500 mg), monobasic sodium phosphate (17.2 mg), and sodium chloride (14.6 mg) for administration.

ORENCIA Injection is a sterile, preservative-free, clear to slightly opalescent, colorless to paleyellow s olution w ith a pH range of 6.8 t o 7.4 for s ubcutaneous a dministration. OR ENCIA Injection is supplied as a single-dose prefilled syringe or as a single-dose ClickJect autoinjector (see Table 4).

 Table 4:
 Contents of ORENCIA Subcutaneous Injection

Presentation	Active Ingredient Quantity and Label Volume	Inactive Ingredient Content
ORENCIA Injection 50 mg/0.4 mL Prefilled Syringe	50 mg of abatacept in 0.4 mL of solution	dibasic sodium phosphate anhydrous (0.335 mg) monobasic sodium phosphate monohydrate (0.114 mg) poloxamer 188 (3.2 mg) sucrose (68 mg) qs to 0.4 mL water for injection
ORENCIA Injection 87.5 mg/0.7 mL Prefilled Syringe 87.5 mg of abatacept in 0.7 mL of solution		dibasic sodium phosphate anhydrous (0.587 mg) monobasic sodium phosphate monohydrate (0.200 mg) poloxamer 188 (5.6 mg) sucrose (119 mg) qs to 0.7 mL water for injection
ORENCIA Injection 125 mg/mL Prefilled Syringe and ClickJect Autoinjector	125 mg of abatacept in 1 mL of solution	dibasic sodium phosphate anhydrous (0.838 mg) monobasic sodium phosphate monohydrate (0.286 mg) poloxamer 188 (8 mg) sucrose (170 mg) qs to 1.0 mL water for injection

Unlike t he l yophilized formulation f or i ntravenous us e, t he ORENCIA solutions for subcutaneous administration contain no maltose.

## 12 CLINICAL PHARMACOLOGY

## 12.1 Mechanism of Action

Abatacept, a selective c ostimulation mo dulator, in hibits T c ell (T l ymphocyte) a ctivation b y binding to CD80 and CD86, thereby blocking interaction with CD28. This interaction provides a costimulatory signal necessary for full activation of T lymphocytes. Activated T lymphocytes are implicated in the pathogenesis of RA and PsA and are found in the synovium of patients with RA and PsA.

*In vitro*, abatacept decreases T cell proliferation and inhibits the production of the cytokines TNF alpha (TNF $\alpha$ ), interferon- $\gamma$ , and interleukin-2. In a rat collagen-induced arthritis model, abatacept suppresses i nflammation, d ecreases an ti-collagen a ntibody production, a nd reduces an tigen specific production of interferon- $\gamma$ . The relationship of these biological response markers to the mechanisms by which ORENCIA exerts its clinical effects is unknown.

## 12.2 Pharmacodynamics

In clinical trials with ORENCIA at doses approximating 10 mg/kg, decreases were observed in serum levels of soluble interleukin-2 receptor (sIL-2R), interleukin-6 (IL-6), rheumatoid factor (RF), C -reactive p rotein (CRP), ma trix metalloproteinase-3 (MMP3), a nd T NFα. T he

relationship of these biological response markers to the mechanisms by which ORENCIA exerts its clinical effects is unknown.

## 12.3 Pharmacokinetics

Healthy Adults and Adult RA - Intravenous Administration

The pharmacokinetics of abatacept were studied in healthy adult subjects after a single 10 mg/kg intravenous i nfusion a nd i n R A pa tients a fter multiple 10 m g/kg i ntravenous i nfusions (see Table 5).

	6 6	
PK Parameter	Healthy Subjects (After 10 mg/kg Single Dose) n=13	RA Patients (After 10 mg/kg Multiple Doses <sup>a</sup> ) n=14
Peak Concentration (C <sub>max</sub> ) [mcg/mL]	292 (175-427)	295 (171-398)
Terminal half-life $(t_{1/2})$ [days]	16.7 (12-23)	13.1 (8-25)
Systemic clearance (CL) [mL/h/kg]	0.23 (0.16-0.30)	0.22 (0.13-0.47)
Volume of distribution (Vss) [L/kg]	0.09 (0.06-0.13)	0.07 (0.02-0.13)

# Table 5:Pharmacokinetic Parameters (Mean, Range) in Healthy Subjects and<br/>RA Patients After 10 mg/kg Intravenous Infusion(s)

<sup>a</sup> Multiple intravenous infusions were administered at days 1, 15, 30, and monthly thereafter.

The p harmacokinetics of ab atacept i n R A p atients an d h ealthy s ubjects ap peared t o b e comparable. In R A p atients, a fter m ultiple i ntravenous i nfusions, t he pha rmacokinetics o f abatacept showed proportional increases of C<sub>max</sub> and AUC over the dose range of 2 mg/kg to 10 mg/kg. At 10 m g/kg, serum concentration appeared to reach a steady state by day 60 with a mean (range) trough concentration of 24 mcg/mL (1 to 66 mcg/mL). No systemic accumulation of abatacept occurred upon continued repeated treatment with 10 m g/kg at monthly intervals in RA patients.

Population pha rmacokinetic an alyses i n R A p atients r evealed t hat t here w as a t rend t oward higher clearance of abatacept with increasing body weight. Age and gender (when corrected for body weight) did not affect clearance. Concomitant methotrexate, NSAIDs, corticosteroids, and TNF blocking agents did not influence abatacept clearance.

No formal studies were conducted to examine the effects of either renal or hepatic impairment on the pharmacokinetics of abatacept.

### Adult RA - Subcutaneous Administration

Abatacept exhibited linear pharmacokinetics following subcutaneous administration. The mean (range) for  $C_{min}$  and  $C_{max}$  at steady state observed after 85 days of treatment was 32.5 m cg/mL (6.6 t o 113.8 m cg/mL) a nd 4 8.1 mcg/mL (9.8 t o 132.4 m cg/mL), r espectively. T he bioavailability o f abatacept f ollowing s ubcutaneous a dministration r elative t o i ntravenous administration i s 78.6%. M ean e stimates f or s ystemic c learance (0.28 m L/h/kg), vol ume of distribution (0.11 L /kg), a nd t erminal ha lf-life (14.3 d ays) w ere comparable b etween subcutaneous administration.

Study SC -2 was c onducted t o d etermine t he effect of m onotherapy use of O RENCIA on immunogenicity following subcutaneous administration without an intravenous load. When the intravenous loading dos e w as not a dministered, a mean trough c oncentration of 12.6 m cg/mL was achieved after 2 weeks of dosing.

Consistent with the intravenous data, population pha rmacokinetic analyses for subcutaneous abatacept in R A patients revealed that there was a t rend toward higher clearance of abatacept with increasing body weight. Age and gender (when corrected for body weight) did not a ffect apparent clearance. Concomitant medication, such as methotrexate, corticosteroids, and NSAIDs, did not influence abatacept apparent clearance.

### Juvenile Idiopathic Arthritis - Intravenous Administration

In Study JIA-1 among patients 6 t o 17 years of age, the mean (range) steady state serum peak and trough concentrations of abatacept were 217 mcg/mL (57 to 700 mcg/mL) and 11.9 mcg/mL (0.15 to 44.6 mcg/mL). Population pharmacokinetic analyses of the serum concentration da ta showed that clearance of ab atacept increased with baseline body weight. The estimated mean (range) clearance of abatacept in the juvenile idiopathic arthritis patients was 0.4 mL/h/kg (0.20 to 1.12 mL/h/kg). After accounting for the effect of body weight, the clearance of abatacept was not related to age and gender. Concomitant methotrexate, corticosteroids, and NSAIDs were also shown not to influence abatacept clearance.

### Juvenile Idiopathic Arthritis - Subcutaneous Administration

In Study JIA-2 among patients 2 to 17 years of age, steady state of abatacept was achieved by Day 85 following the weekly bod y-weight-tiered subcutaneous abatacept dos ing. C omparable trough c oncentrations a cross w eight tiers and a ge gr oups w ere a chieved by the bod y-weight-tiered s ubcutaneous dos ing r egimen. The m ean (range) t rough c oncentration of a batacept a t Day 113 was 44.4 m cg/mL (13.4 to 88.1 m cg/mL), 46.6 m cg/mL (22.4 to 97.0 m cg/mL), and

38.5 m cg/mL (9.3 t o 7 3.2 m cg/mL) i n p ediatric J IA pa tients w eighing 10 to < 25 k g, 25 to < 50 kg, and  $\geq$  50 kg, respectively.

Consistent with the intravenous data, population pharmacokinetic analyses for subcutaneous abatacept in JIA patients revealed that there was a trend toward higher clearance of abatacept with increasing body weight. Age and gender (when corrected for body weight) did not affect apparent clearance. Concomitant medication, such as methotrexate, corticosteroids, and NSAIDs, did not influence abatacept apparent clearance.

Adult Psoriatic Arthritis - Intravenous and Subcutaneous Administration

In St udy Ps A-I, a dos e ranging study, IV a batacept w as a dministered at 3 m g/kg, 10 m g/kg (weight range-based dosing: 500 mg for patients weighing less than 60 kg, 750 mg for patients weighing 60 to 100 kg, and 1000 mg for patients weighing greater than 100 kg), or two doses of 30 m g/kg f ollowed b y w eight r ange-based dos e of 10 m g/kg. Following m onthly IV administration, a batacept s howed l inear PK over t he dos e range o f 3 m g/kg to 10 m g/kg. A t 10 mg/kg, the steady state of abatacept was reached by Day 57 and the geometric mean (CV%) trough concentration (Cmin) was 24.3 m cg/mL (40.8%) at Day 169. In Study PsA-II following weekly SC administration of abatacept at 125 mg, the steady state of abatacept was reached at Day 57 and the geometric mean (CV%) Cmin was 25.6 mcg/mL (47.7%) at Day 169.

Consistent with the RA results, population pharmacokinetic analyses for a batacept in psoriatic arthritis patients revealed that there was a trend toward higher clearance (L/h) of abatacept with increasing bod y w eight. In a ddition, r elative to the RA p atients with the s ame b ody w eight, abatacept cl earance i n psoriatic a rthritis patients w as a pproximately 8 % lo wer, r esulting in higher abatacept exposures in patients with PsA. This slight difference in exposures, however, is not considered to be clinically meaningful.

## 13 NONCLINICAL TOXICOLOGY

## 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

In a mouse carcinogenicity study, weekly subcutaneous injections of 20, 65, or 200 mg/kg of abatacept a dministered for up t o 84 weeks in males and 88 weeks in females were associated with increases in the incidence of malignant lymphomas (all doses) and mammary gland tumors (intermediate- and high-dose in females). The mice from this study were infected with murine leukemia virus and mouse mammary tumor virus. These viruses are associated with an increased incidence of lymphomas and mammary gland tumors, respectively, in immunosuppressed mice. The doses used in these studies produced exposures 0.8, 2.0, and 3.0 times higher, respectively, than t he e xposure associated with the maximum r ecommended hum an dos e (MRHD) of

10 mg/kg ba sed on AUC (area und er t he t ime-concentration cu rve). T he r elevance of t hese findings to the clinical use of ORENCIA is unknown.

In a one-year toxicity study in cynomolgus monkeys, abatacept was administered intravenously once weekly at doses up to 50 mg/kg (producing 9 times the MRHD exposure based on AUC). Abatacept w as n ot a ssociated w ith a ny s ignificant d rug-related t oxicity. R eversible pharmacological effects consisted of minimal transient decreases in serum IgG and minimal to severe lymphoid depletion of germinal centers in the spleen and/or lymph nodes. No evidence of lymphomas or preneoplastic morphologic changes was observed, despite the presence of a virus (lymphocryptovirus) known t o c ause t hese l esions i n i mmunosuppressed m onkeys w ithin t he time frame of th is study. The r elevance of these findings to the clinical use of ORENCIA is unknown.

No m utagenic pot ential of a batacept w as obs erved in the *in vitro* bacterial r everse m utation (Ames) or C hinese ha mster ova ry/hypoxanthine g uanine ph osphoribosyl-transferase (CHO/HGPRT) f orward p oint mu tation a ssays with o r w ithout me tabolic a ctivation, a nd no chromosomal a berrations were obs erved in hum an lymphocytes treated with a batacept with or without metabolic activation.

Abatacept had no a dverse effects on m ale or female fertility in rats at dos es up t o 200 mg/kg every three days (11 times the MRHD exposure based on AUC).

# 13.2 Animal Toxicology and/or Pharmacology

A juvenile animal study was conducted in rats dosed with abatacept from 4 to 94 days of age in which an increase in the incidence of infections leading to death occurred at all doses compared with controls. Altered T-cell subsets including increased T-helper cells and reduced T-regulatory cells were observed. In addition, inhibition of T-cell-dependent antibody responses (TDAR) was observed. U pon f ollowing t hese a nimals i nto adulthood, l ymphocytic in flammation of th e thyroid and pancreatic islets was observed.

In studies of adult mice and monkeys, inhibition of TDAR was apparent. However, infection and mortality, altered T-helper cells, and inflammation of thyroid and pancreas were not observed.

# 14 CLINICAL STUDIES

# 14.1 Adult Rheumatoid Arthritis

The efficacy and s afety of O RENCIA for intravenous a dministration were assessed in six randomized, double-blind, controlled studies (five placebo-controlled and one active-controlled)

in p atients  $\geq 18$  years of age with act ive R A diagnosed ac cording t o A merican C ollege of Rheumatology (ACR) criteria. Studies I, II, III, IV, and VI required patients to have at least 12 tender and 10 s wollen joints at randomization. Study V did not require any specific number of tender or swollen joints. ORENCIA or placebo treatment was given intravenously at weeks 0, 2, and 4 and then every 4 weeks thereafter in intravenous Studies I, II, III, IV, and VI. The safety and efficacy of ORENCIA for subcutaneous administration were assessed in Study SC-1, which was a randomized, double-blind, double-dummy, non-inferiority study that compared ab atacept administered subcutaneously and intravenously in 1457 subjects with rheumatoid arthritis (RA), receiving b ackground methotrexate (MTX), and experiencing an i nadequate response t o methotrexate (MTX-IR).

Study I evaluated ORENCIA as monotherapy in 122 patients with active RA who had failed at least one non-biologic DMARD or etanercept. In Study II and Study III, the efficacy and safety of OR ENCIA were assessed in patients with an inadequate response to methotrexate and who were continued on t heir stable dos e of methotrexate. In S tudy IV, the efficacy and safety of ORENCIA were assessed in patients with an inadequate response to a TNF blocking agent, with the TNF blocking agent discontinued prior to r andomization; other DMARDs were permitted. Study V primarily assessed safety in patients with active RA requiring additional intervention in spite of c urrent th erapy with D MARDs; all D MARDs u sed a t enrollment w ere c ontinued. Patients i n S tudy V w ere not e xcluded for c omorbid m edical c onditions. In S tudy VI, the efficacy and safety of ORENCIA were assessed in methotrexate naive patients with RA of less than 2 years di sease du ration. In S tudy V I, pa tients pr eviously naive t o methotrexate were randomized t o r eceive ORENCIA pl us methotrexate or methotrexate plus pl acebo. In S tudy SC-1, the goal was to demonstrate the efficacy and safety of ORENCIA subcutaneous relative to ORENCIA intravenous a dministration in s ubjects with m oderate t o s everely a ctive R A and experiencing inadequate response to methotrexate, using a non-inferiority study design.

Study I p atients w ere r andomized t o r eceive o ne of t hree dos es o f O RENCIA (0.5, 2, or 10 mg/kg) or placebo ending at week 8. Study II patients were randomized to receive ORENCIA 2 or 10 mg/kg or placebo for 12 m onths. Study III, IV, V, and VI patients were randomized to receive a dose of ORENCIA based on weight range or placebo for 12 months (Studies III, V, and VI) or 6 months (Study IV). The dose of ORENCIA was 500 mg for patients weighing less than 60 kg, 750 mg for patients weighing 60 t o 100 kg, and 1000 mg for patients weighing greater than 100 kg. In S tudy SC-1, patients w ere r andomized w ith s tratification by bod y weight (<60 kg, 60 to 100 kg, >100 kg) to receive ORENCIA 125 mg subcutaneous injections weekly, after a s ingle intravenous loading do se of ORENCIA based on bod y w eight or O RENCIA intravenously on Days 1, 15, 29, and every four weeks thereafter. Subjects continued taking their current dose of methotrexate from the day of randomization.

## **Clinical Response**

The percent of ORENCIA-treated patients achieving ACR 20, 50, a nd 70 responses and major clinical response in Studies I, III, IV, and VI are shown in Table 6. ORENCIA-treated patients had higher ACR 20, 50, and 70 response rates at 6 months compared to placebo-treated patients. Month 6 ACR response rates in Study II for the 10 mg/kg group were similar to the ORENCIA group in Study III.

In Studies III and IV, improvement in the ACR 20 r esponse rate versus placebo was observed within 15 days in some patients and within 29 days versus methotrexate in Study VI. In Studies II, III, and VI, ACR response rates were maintained to 12 months in ORENCIA-treated patients. ACR r esponses were maintained up t o three years in the open-label extension of S tudy II. In Study III, ORENCIA-treated p atients ex perienced g reater i mprovement t han p lacebo-treated patients in morning stiffness.

In Study VI, a greater proportion of patients treated with ORENCIA plus methotrexate achieved a low l evel o f d isease activity as m easured b y a DAS28-CRP less t han 2.6 at 12 m onths compared t o t hose t reated with methotrexate plus pl acebo (Table 6). Of p atients treated with ORENCIA plus methotrexate who achieved DAS28-CRP less than 2.6, 54% had no active joints, 17% had one active joint, 7% had two active joints, and 22% had three or more active joints, where an active joint was a joint that was rated as tender or swollen or both.

In Study SC -1, the main outcome measure was ACR 20 at 6 m onths. The pre-specified noninferiority m argin w as a t reatment d ifference of -7.5%. A s s hown i n T able 6, t he s tudy demonstrated non-inferiority of ORENCIA administered subcutaneously to intravenous infusions of ORENCIA with respect to ACR 20 responses up to 6 m onths of treatment. ACR 50 a nd 70 responses a re a lso s hown i n T able 6. N o m ajor d ifferences i n ACR r esponses were o bserved between intravenous and subcutaneous treatment g roups i n s ubgroups ba sed on w eight categories (less than 60 kg, 60 to 100 kg, and more than 100 kg; data not shown).

		<b>Percent of Patients</b>		
	Intraven	ous Administration		Subcutaneous Administration
Inadequate Response to DMARDs	Inadequate Response to Methotrexate (MTX)	Inadequate Response to TNF Blocking Agent	MTX-Naive	Inadequate Response to MTX
Study I	Study III	Study IV	Study VI	Study SC-1

### Table 6:Clinical Responses in Controlled Trials

Response Rate	ORN <sup>a</sup> n=32	PBO n=32	ORN <sup>b</sup> +MTX n=424	PBO +MTX n=214	$ORN^{b} + DMARDs$ n=256	PBO + DMARDs n=133	ORN <sup>b</sup> +MTX n=256	PBO +MTX n=253	ORN <sup>e</sup> SC +MTX n=693	ORN <sup>e</sup> IV +MTX n=678
ACR 20 Month 3	53%	31%	62% <sup>‡</sup>	37%	46% <sup>‡</sup>	18%	64%*	53%	68%	69%
Month 6	NA	NA	68% <sup>‡</sup>	40%	50% <sup>‡</sup>	20%	$75\%^{\dagger}$	62%	76% <sup>§</sup>	76%
Month 12	NA	NA	73% <sup>‡</sup>	40%	NA	NA	76% <sup>‡</sup>	62%	NA	NA
ACR 50 Month 3 Month 6 Month 12	16% NA NA	6% NA NA	32% <sup>‡</sup> 40% <sup>‡</sup> 48% <sup>‡</sup>	8% 17% 18%	18% <sup>†</sup> 20% <sup>‡</sup> NA	6% 4% NA	40% <sup>‡</sup> 53% <sup>‡</sup> 57% <sup>‡</sup>	23% 38% 42%	33% 52% NA	39% 50% NA
ACR 70 Month 3	6%	0	13% <sup>‡</sup>	3%	6%*	1%	19% <sup>†</sup>	10%	13%	16%
Month 6	NA	NA	$20\%^{\ddagger}$	7%	$10\%^{\dagger}$	2%	$32\%^{\dagger}$	20%	26%	25%
Month 12	NA	NA	29% <sup>‡</sup>	6%	NA	NA	43% <sup>‡</sup>	27%	NA	NA
Major Clinical Response <sup>c</sup>	NA	NA	14% <sup>‡</sup>	2%	NA	NA	27% <sup>‡</sup>	12%	NA	NA
DAS28- CRP <2.6 <sup>d</sup>										
Month 12	NA	NA	NA	NA	NA	NA	41% <sup>‡</sup>	23%	NA	NA

\* p<0.05, ORENCIA (ORN) vs placebo (PBO) or MTX.

<sup>†</sup> p < 0.01, ORENCIA vs placebo or MTX.

p < 0.001, ORENCIA vs placebo or MTX.

\$ 95% CI: -4.2, 4.8 (based on prespecified margin for non-inferiority of -7.5%).

<sup>a</sup> 10 mg/kg.

<sup>b</sup> Dosing based on weight range [see Dosage and Administration (2.1)].

<sup>c</sup> Major clinical response is defined as achieving an ACR 70 response for a continuous 6-month period.

<sup>d</sup> Refer to text for additional description of remaining joint activity.

<sup>e</sup> Per protocol data is presented in table. For ITT; n=736, 721 for SC and IV ORENCIA, respectively.

The results of the components of the ACR response criteria for Studies III, IV, and SC-1 are shown in Table 7 (results at Baseline [BL] and 6 months [6 M]). In ORENCIA-treated patients, greater improvement was seen in all ACR response criteria components through 6 and 12 months than in placebo-treated patients.

	Intravenous Administration						Subcutaneous Administration					
	Inad	nadequate Response to Methotrexate (MTX) Inadequate Response to TNF Blocking Agent				Inadequate Response to MTX						
	Study III				Stud	y IV			Study	SC-1 <sup>c</sup>		
	ORN +MTX n=424		+M	BO ITX 214	ORN PBO +DMARDs +DMARDs n=256 n=133			+M	N SC ITX 693	+M	N IV ITX 678	
Component (median)	BL	6 M	BL	6 M	BL	6 M	BL	6 M	BL	6 M	BL	6 M
Number of tender joints (0-68)	28	7‡	31	14	30	13 <sup>‡</sup>	31	24	27	5	27	6
Number of swollen joints (0-66)	19	5‡	20	11	21	10 <sup>‡</sup>	20	14	18	4	18	3
Pain <sup>a</sup>	67	27 <sup>‡</sup>	70	50	73	$43^{\dagger}$	74	64	71	25	70	28
Patient global assessment <sup>a</sup>	66	29 <sup>‡</sup>	64	48	71	44 <sup>‡</sup>	73	63	70	26	68	27
Disability index <sup>b</sup>	1.75	1.13 <sup>‡</sup>	1.75	1.38	1.88	1.38‡	2.00	1.75	1.88	1.00	1.75	1.00
Physician global assessment <sup>a</sup>	69	21 <sup>‡</sup>	68	40	71	32 <sup>‡</sup>	69	54	65	16	65	15
CRP (mg/dL)	2.2	0.9 <sup>‡</sup>	2.1	1.8	3.4	1.3 <sup>‡</sup>	2.8	2.3	1.6	0.7	1.8	0.7

### Table 7: Components of ACR Responses at 6 Months

p<0.01, ORENCIA (ORN) vs placebo (PBO), based on mean percent change from baseline.

<sup>‡</sup> p<0.001, ORENCIA vs placebo, based on mean percent change from baseline.

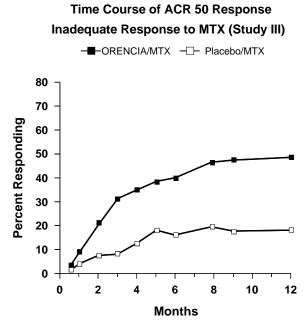
<sup>a</sup> Visual analog scale: 0 = best, 100 = worst.

<sup>b</sup> Health Assessment Q uestionnaire: 0 = b est, 3 = w orst; 2 0 q uestions; 8 c ategories: d ressing a nd g rooming, arising, eating, walking, hygiene, reach, grip, and activities.

<sup>c</sup> SC-1 is a non-inferiority study. Per protocol data is presented in table.

The percent of pa tients a chieving the ACR 50 r esponse for S tudy III by v isit is s hown in Figure 1. The time course for the ORENCIA group in Study VI was similar to that in Study III.

# Figure 1:Percent of Patients Achieving ACR 50 Response by Visit\* (Study III)



\*The same patients may not have responded at each time point.

The pe rcent of pa tients a chieving t he A CR 50 r esponse for S tudy S C-1 in t he OR ENCIA subcutaneous (SC) and intravenous (IV) treatment arms at each treatment visit was as follows: Day 15—SC 3%, IV 5%; Day 29—SC 11%, IV 14%; Day 57—SC 24%, IV 30%; Day 85—SC 33%, IV 38%; Day 113—SC 39%, IV 41%; Day 141—SC 46%, IV 47%; Day 169—SC 51%, IV 50%.

### Radiographic Response

In Study III and Study VI, structural joint damage was assessed radiographically and expressed as change from baseline in the Genant-modified Total Sharp Score (TSS) and its components, the Erosion Score (ES) and Joint Space Narrowing (JSN) score. ORENCIA/methotrexate slowed the pr ogression of s tructural d amage compared t o p lacebo/methotrexate after 12 m onths of treatment as shown in Table 8.

Parameter	ORENCIA/MTX	Placebo/MTX	Differences	P-value <sup>d</sup>
Study III				
First Year				
TSS	1.07	2.43	1.36	< 0.01
ES	0.61	1.47	0.86	< 0.01
JSN score	0.46	0.97	0.51	< 0.01
Second Year				
TSS	0.48	$0.74^{\circ}$	-	-
ES	0.23	$0.22^{\circ}$	-	-
JSN score	0.25	0.51 <sup>c</sup>	-	-
Study VI				
First Year				
TSS	0.6	1.1	0.5	0.04

Table 8:

Mean Radiographic Changes in Study III<sup>a</sup> and Study VI<sup>b</sup>

<sup>a</sup> Patients with an inadequate response to MTX.

<sup>b</sup> MTX-naive patients.

<sup>c</sup> Patients received 1 year of placebo/MTX followed by 1 year of ORENCIA/MTX.

<sup>d</sup> Based on a nonparametric ANCOVA model.

In t he ope n-label e xtension of S tudy III, 75% of pa tients i nitially r andomized t o ORENCIA/methotrexate and 65% of patients initially randomized to placebo/methotrexate were evaluated radiographically at Year 2. As shown in Table 8, progression of structural damage in ORENCIA/methotrexate-treated patients was further reduced in the second year of treatment.

Following 2 years of tr eatment w ith O RENCIA/methotrexate, 51% of pa tients had no progression of structural damage as defined by a change in the TSS of zero or less compared with b aseline. Fifty-six pe rcent (56%) of O RENCIA/methotrexate-treated pa tients h ad no progression during the first year compared to 45% of placebo/methotrexate-treated patients. In their second year of treatment with ORENCIA/methotrexate, more patients had no pr ogression than in the first year (65% vs 56%).

### Physical Function Response and Health-Related Outcomes

Improvement i n ph ysical f unction w as m easured b y t he H ealth A ssessment Q uestionnaire Disability Index (HAQ-DI). In the HAQ-DI, ORENCIA demonstrated greater improvement from baseline versus placebo in Studies II-V and versus methotrexate in Study VI. In Study SC-1, improvement from baseline as measured by HAQ-DI at 6 months and over time was similar between subcutaneous and intravenous administration. The results from Studies II and III a re shown i n T able 9. S imilar r esults w ere o bserved i n Study V compared t o pl acebo a nd i n

Study VI compared to methotrexate. During the open-label period of Study II, the improvement in physical function has been maintained for up to 3 years.

	Inadequate Response to Methotrexate					
	Study II		Study III			
HAQ Disability Index	ORENCIA <sup>a</sup> +MTX (n=115)	Placebo +MTX (n=119)	ORENCIA <sup>b</sup> +MTX (n=422)	Placebo +MTX (n=212)		
Baseline (Mean)	0.98 <sup>c</sup>	0.97 <sup>c</sup>	1.69 <sup>d</sup>	1.69 <sup>d</sup>		
Mean Improvement Year 1	0.40 <sup>°,</sup> ***	0.15 <sup>c</sup>	0.66 <sup>d,</sup> ***	0.37 <sup>d</sup>		

# Table 9:Mean Improvement from Baseline in Health Assessment<br/>Questionnaire Disability Index (HAQ-DI)

\*\*\* p<0.001, ORENCIA vs placebo.

<sup>a</sup> 10 mg/kg.

<sup>b</sup> Dosing based on weight range [see Dosage and Administration (2.1)].

<sup>c</sup> Modified H ealth Assessment Q uestionnaire: 0 = b est, 3 = worst; 8 q uestions; 8 c ategories: d ressing a nd grooming, arising, eating, walking, hygiene, reach, grip, and activities.

<sup>d</sup> Health Assessment Q uestionnaire: 0 = b est, 3 = w orst; 2 0 q uestions; 8 c ategories: d ressing a nd g rooming, arising, eating, walking, hygiene, reach, grip, and activities.

Health-related quality of life was assessed by the SF-36 questionnaire at 6 months in Studies II, III, and IV and at 12 months in Studies II and III. In these studies, improvement was observed in the ORENCIA group as compared with the placebo group in all 8 domains of the SF-36 as well as the Physical Component Summary (PCS) and the Mental Component Summary (MCS).

## 14.2 Juvenile Idiopathic Arthritis

Juvenile Idiopathic Arthritis - Intravenous Administration

The s afety an d e fficacy of ORENCIA with intravenous administration were as sessed i n Study JIA-1, a three-part study including an open-label extension in children with polyarticular juvenile id iopathic a rthritis (JIA). P atients 6 t o 17 years of a ge (n=190) with m oderately t o severely a ctive p olyarticular JIA who had an inadequate response t o on e or m ore DMARDs, such as methotrexate or T NF antagonists, were t reated. P atients had a di sease dur ation of approximately 4 years with moderately to severely active disease at study entry, as determined by baseline counts of active joints (mean, 16) and joints with loss of motion (mean, 16); patients had elevated C-reactive protein (CRP) levels (mean, 3.2 mg/dL) and ESR (mean, 32 mm/h). The patients e nrolled had subtypes of J IA that at d isease o nset in cluded O ligoarticular (16%), Polyarticular (64%; 20% were rheumatoid factor positive), and Systemic (20%). At study entry, 74% of patients were receiving methotrexate (mean dose, 13.2 mg/m<sup>2</sup> per week) and remained

on a stable dose of methotrexate (those not receiving methotrexate did not initiate methotrexate treatment during the study).

In P eriod A (open-label, l ead-in), pa tients r eceived 10 m g/kg (maximum 1000 m g pe r dos e) intravenously on da ys 1, 15, 29, and m onthly thereafter. R esponse w as as sessed u tilizing the ACR Pediatric 30 definition of improvement, defined as  $\geq$ 30% improvement in at least 3 of the 6 JIA core set variables and  $\geq$ 30% worsening in not more than 1 of the 6 JIA core set variables. Patients demonstrating an ACR Pedi 30 response at the end of Period A were randomized in to the doubl e-blind phase (Period B) and received either ORENCIA or placebo for 6 m onths or until disease flare. Disease flare was defined as a  $\geq$ 30% worsening in at least 3 of the 6 JIA core set variables;  $\geq$ 2 cm of worsening of the Physician or Parent Global Assessment was necessary if used as 1 of the 3 JIA core set variables used t o de fine flare, and w orsening in  $\geq$ 2 jo ints w as n ecessary if the number of active joints or joints with limitation of motion was used as 1 of the 3 JIA core set variables used to define flare.

At the conclusion of Period A, pediatric ACR 30/50/70 r esponses were 65%, 50%, and 28%, respectively. Pediatric ACR 30 responses were similar in all subtypes of JIA studied.

During the double-blind randomized withdrawal phase (Period B), ORENCIA-treated patients experienced s ignificantly fewer d isease f lares c ompared t o p lacebo-treated pa tients (20% vs 53%); 95% CI of the difference (15%, 52%). The risk of disease flare among patients continuing on O RENCIA was l ess t han one -third t han t hat f or pa tients w ithdrawn f rom O RENCIA treatment (hazard ratio=0.31, 95% CI [0.16, 0.59]). A mong patients who received ORENCIA throughout the study (Period A, Period B, and the open-label extension Period C), the proportion of pediatric ACR 30/50/70 responders has remained consistent for 1 year.

### Juvenile Idiopathic Arthritis - Subcutaneous Administration

ORENCIA for subcutaneous administration without an intravenous loading dose was assessed in Study JIA-2, a 2-period, open-label study that included children 2 to 17 years of a ge (n=205). Patients had active polyarticular disease at the time of the study and had inadequate response to at l east o ne nonbiologic or bi ologic D MARD. The pa tient subtypes a t s tudy e ntry included Polyarticular (7 9%; 2 2% w ere r heumatoid f actor pos itive), Extended and P ersistent Oligoarticular (14%), Enthesitis-Related Arthritis (1%), and Systemic (2%). Patients had a mean disease duration of 2.5 years with active joints (mean, 11.9), joints with loss of motion (mean, 10.4), and elevated C-reactive protein (CRP) levels (mean, 1.2 mg/dL). At study entry, 80% of patients were receiving methotrexate and remained on a stable dose of methotrexate. Patients received weekly open-label ORENCIA subcutaneously by a weight-tiered dosing regimen. The

primary objective of the study was evaluation of PK in order to support the extrapolation of efficacy b ased on exposure to O RENCIA supported by descriptive e fficacy [*see Clinical Pharmacology* (12.3)].

JIA A CR 30/50/70 r esponses assessed at 4 m onths in the 2 - to 17 -year-old patients were consistent with the results from the intravenous study, JIA-1.

## 14.3 Adult Psoriatic Arthritis

The ef ficacy o f O RENCIA w as as sessed i n 5 94 p atients with psoriatic a rthritis, i n t wo randomized, doubl e-blind, pl acebo-controlled studies (Studies P sA-I a nd P sA-II) i n a dult patients, age 18 years and older. Patients had active psoriatic arthritis ( $\geq$ 3 swollen joints and  $\geq$ 3 tender joints) despite prior treatment with DMARD therapy and had one qualifying psoriatic skin lesion of at least 2 cm in diameter. In PsA-I and PsA-II, 37% and 61% of patients, respectively, were treated with TNFi previously.

In PsA-I, a dose-ranging study, 170 patients received study drug IV at Day 1, 15, 29, and then every 28 d ays t hereafter i n a doubl e bl ind m anner f or 24 w eeks, f ollowed b y ope n-label ORENCIA every 28 days. Patients were randomized to receive placebo or ORENCIA 3 mg/kg, 10 mg/kg (weight range-based dosing: 500 mg for patients weighing less than 60 kg, 750 mg for patients weighing 60 to 100 kg, and 1000 mg for patients weighing greater than 100 kg), or two doses of 30 m g/kg followed by weight range-based dosing of 10 m g/kg without escape for 24 weeks. P atients w ere allowed to receive s table doses of c oncomitant m ethotrexate, 1 ow dos e corticosteroids ( equivalent t o  $\leq$ 10 m g of p rednisone) a nd/or N SAIDs dur ing t he t rial. At enrollment, approximately 60% of patients were receiving methotrexate. At baseline, the mean (SD) C RP for ORENCIA IV was 17 m g/L (33.0) and mean number (SD) of tender j oints and swollen joints was 22.2 (14.3) and 10.9 (7.6), respectively.

In P sA-II, 424 pa tients w ere r andomized 1: 1 t o r eceive w eekly dos es of S C pl acebo or ORENCIA 125 mg without a loading dose for 24 weeks-in a double-blind manner, followed by open-label ORENCIA 125 mg S C w eekly. P atients w ere al lowed t o receive s table d oses o f concomitant m ethotrexate, s ulfasalazine, l eflunomide, h ydroxychloroquine, l ow dos e corticosteroids ( equivalent t o  $\leq 10$  m g of p rednisone) a nd/or N SAIDs dur ing t he t rial. A t randomization, 60. 4% o f p atients w ere receiving m ethotrexate. The b aseline d isease characteristics included presence of joint erosion on X-rays in 84% (341/424) with a mean (SD) PsA-modified S harp v an de r Heijde e rosion s core (SHS) of 10.8 (24.2), e levated s erum C reactive p rotein (CRP) i n 66% [ 277/424]) w ith a mean (SD) of 14.1 m g/L (25.9), a nd polyarticular disease in 98% (416/424) of patients with a mean number (SD) of tender joints and

swollen joints of 20.2 (13.3) and 11.6 (7.5), respectively. Patients who had not achieved at least a 20% improvement from baseline in their swollen and tender joint counts by Week 16 escaped to open-label ORENCIA 125 mg SC weekly.

The primary endpoint for both PsA-I and PsA-II was the proportion of patients achieving ACR 20 response at Week 24 (Day 169).

### **Clinical Response**

A higher proportion of patients achieved an ACR20 response after treatment with ORENCIA 10 mg/kg IV (weight range-based dosing as described above) or 125 mg SC compared to placebo at Week 24. Responses were seen regardless of prior TNFi treatment and regardless of concomitant non-biologic DMARD treatment. The percent of patients achieving ACR 20, 50, or 70 responses in Studies PsA-I and PsA-II are presented in Table 10 below.

	PsA-I and PsA-II <sup>a</sup>					
	PsA-I		PsA-II			
	ORENCIA 10mg/kg IV <sup>b</sup>	Placebo	ORENCIA 125 mg SC	Placebo		
	N=40	N=42	N=213	N=211		
ACR 20	47.5%*	19.0%	<b>39.4</b> % <sup>*</sup>	22.3%		
ACR 50	25.0%	2.4%	19.2%	12.3%		
ACR 70	12.5%	0%	10.3%	6.6%		

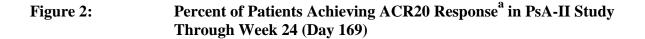
### Proportion of Patients With ACR Responses at Week 24 in Studies Table 10:

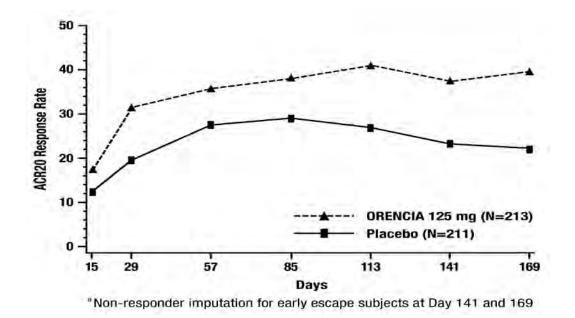
p<0.05 versus placebo

<sup>a</sup> Patients who had less than 20% improvement in tender or swollen joint counts at Week 16 met escape criteria and were considered non-responders.

<sup>b</sup> Weight range-based dosing (as described above).

The percentage of p atients in P sA-II achieving ACR20 r esponse t hrough Week 24 i s s hown below in Figure 2.





Results were generally consistent across the ACR components in Study PsA-I and PsA-II.

Improvements in enthesitis and dactylitis were seen with ORENCIA treatment at Week 24 in both PsA-I and PsA-II.

## **Physical Function Response**

In st udy PsA-I, there w as a higher proportion of patients with at least a 0.30 de crease from baseline in Health Assessment Questionnaire-Disability Index (HAQ-DI) score at Week 24, with an estimated difference for ORENCIA 10 mg/kg (weight range-based dosing as described above) (45.0%) vs. placebo (19.0%) of 26.1 (95% confidence interval: 6.8, 45.5). In study PsA-II, the proportion of patients with at least a 0.35 decrease from baseline in HAQ-DI on ORENCIA was 31%, as compared to 24% on placebo (estimated difference: 7%; 95% confidence interval: -1%, 16%). There was a higher adjusted mean change from baseline in HAQ-DI on ORENCIA (-0.33) vs. pl acebo (-0.20) at Week 2 4, w ith an estimated difference of -0.13 (95% c onfidence interval: -0.25, -0.01).

## 16 HOW SUPPLIED/STORAGE AND HANDLING

## For Intravenous Infusion

ORENCIA<sup>®</sup> (abatacept) for Injection is a lyophilized pow der f or i ntravenous i nfusion after

reconstitution and di lution. It is supplied as an individually packaged, single-use v ial with a silicone-free disposable syringe, providing 250 mg of abatacept in a 15-mL vial:

NDC 0003-2187-10: in a clamshell presentation

NDC 0003-2187-13: in a carton presentation

## For Subcutaneous Injection

ORENCIA<sup>®</sup> (abatacept) Injection a nd O RENCIA<sup>®</sup> ClickJect (abatacept) are solutions for subcutaneous administration.

## Prefilled Syringe

ORENCIA Injection, 50 mg/0.4 mL, 87.5 mg/0.7 mL, and 125 mg/mL, is supplied as single-dose disposable p refilled g lass s yringes with BD UltraSafe P assive<sup>™</sup> needle g uard and flange extenders.

The Type I glass syringe has a coated stopper and fixed stainless steel needle (5 bevel, 29-gauge thin w all,  $\frac{1}{2}$ -inch needle) co vered w ith a r igid n eedle s hield. The prefilled s yringe provides abatacept in the following packages:

NDC 0003-2814-11 (50 mg/0.4 mL): pack of 4 syringes with a passive needle safety guard

NDC 0003-2818-11 (87.5 mg/0.7 mL): pack of 4 syringes with a passive needle safety guard

NDC 0003-2188-11 (125 mg/mL): pack of 4 syringes with a passive needle safety guard

## ClickJect Autoinjector

ORENCIA ClickJect, 125 mg/mL, is supplied as a single-dose disposable prefilled autoinjector. The Type I glass syringe contained in the autoinjector has a co ated stopper and fixed stainless steel n eedle (5 b evel, 27-gauge special thin wall,  $\frac{1}{2}$ -inch ne edle) c overed with a rigid ne edle shield. The autoinjector provides 125 mg of abatacept in 1 mL and is provided in the following package:

NDC 0003-2188-51: pack of 4 autoinjectors

## Storage

ORENCIA lyophilized powder supplied in a vial should be refrigerated at 2°C to 8°C (36°F to 46°F). Do not use beyond the expiration date on the vial. Protect the vials from light by storing in the original package until time of use.

ORENCIA solution supplied i n a pr efilled s yringe or C lickJect autoinjector should be refrigerated at 2°C to 8°C (36°F to 46°F). Do not use beyond the expiration date on the prefilled syringe or autoinjector. Protect from light by storing in the original package until time of use. Do not allow the prefilled syringe or autoinjector to freeze.

## 17 PATIENT COUNSELING INFORMATION

Advise t he pa tient t o read t he FDA-approved patient labeling (Patient I nformation a nd Instructions for Use).

## Concomitant Use With Biologic Medications for RA

Inform patients that they should n ot receive O RENCIA treatment concomitantly with a T NF antagonist, such as adalimumab, etanercept, and infliximab because such combination therapy may in crease th eir r isk f or in fections [ *see Indications and Usage (1.4), Warnings and Precautions (5.1)*, and *Drug Interactions (7.1)*], and t hat they should not receive O RENCIA concomitantly with other biologic R A therapy, such as anakinra because there is n ot en ough information to assess the safety and efficacy of such combination therapy [*see Indications and Usage (1.4), Drug Interactions (7.2)*].

## Hypersensitivity

Instruct patients to immediately tell their healthcare professional if they experience symptoms of an a llergic r eaction d uring o r f or th e f irst d ay a fter th e a dministration o f O RENCIA [ *see Warnings and Precautions* (5.2)].

## Infections

Ask patients if they have a history of recurrent infections, have underlying conditions which may predispose them to infections, or have chronic, latent, or localized infections. Ask patients if they have had tuberculosis (TB), a positive skin test for TB, or recently have been in close contact with someone w ho has had TB. Instruct patients that they may be tested for TB be fore they receive O RENCIA. Inform patients to tell their h ealthcare p rofessional if they d evelop a n infection during therapy with ORENCIA [*see Warnings and Precautions (5.3)*].

## Immunizations

Inform patients that live vaccines should not be given concurrently with ORENCIA or within 3 months of its discontinuation. Inform caregivers of patients with juvenile idiopathic arthritis that the patient s hould be brought up t o date with all immunizations in a greement with current immunization g uidelines p rior to in itiating O RENCIA therapy and to di scuss with t heir healthcare provider how best to handle future immunizations once ORENCIA therapy has been initiated [*see Warnings and Precautions (5.4*)].

## Pregnancy and Nursing Mothers

Inform patients that ORENCIA has not been studied in pregnant women or nursing mothers so the effects of ORENCIA on pregnant women or nursing infants are not known. Instruct patients to tell their healthcare professional if they are pregnant, become pregnant, or are thinking about becoming p regnant [ *see Use in Specific Populations (8.1)*]. Instruct p atients to tell their healthcare professional if they plan to breastfeed their infant [*see Use in Specific Populations (8.2)*].

## **Blood Glucose Testing**

## Intravenous Administration

Ask pa tients if t hey h ave d iabetes. M altose is contained in O RENCIA for i ntravenous administration and can give falsely elevated blood glucose readings with certain blood glucose monitors on t he day of ORENCIA infusion. If a patient is using s uch a monitor, advise the patient to discuss with their healthcare professional methods that do not react with maltose [*see Drug Interactions (7.3)*].

## Subcutaneous Administration

ORENCIA for subcutaneous administration does not contain maltose; therefore, patients do not need to alter their glucose monitoring.

## Disposal of Prefilled Syringes and ClickJect Autoinjectors

Advise patients to follow disposal instructions in the Instructions for Use. A puncture-resistant container for disposal of ne edles and s yringes should be us ed. Instruct patients that they will need to follow their community guidelines for the correct way to dispose of their sharps disposal container. Instruct patients not to recycle their used sharps disposal container.

Bristol-Myers Squibb Company Princeton, New Jersey 08543 USA U.S. License Number 1713

## PATIENT INFORMATION ORENCIA<sup>®</sup> (oh-REN-see-ah) (abatacept) for injection, for intravenous use ORENCIA<sup>®</sup> (oh-REN-see-ah) (abatacept) injection, for subcutaneous use

## What is ORENCIA?

ORENCIA is a prescription medicine that reduces signs and symptoms in:

- adults with moderate to severe rheumatoid arthritis (RA), including those who have not been helped enough by other medicines for RA. ORENCIA may prevent further damage to your bones and joints and may help your ability to perform daily activities. In adults, ORENCIA may be used alone or with other RA treatments other than tumor necrosis factor (TNF) antagonists.
- patients 2 years of age and older with moderate to severe polyarticular juvenile idiopathic arthritis (JIA). ORENCIA may be used alone or with methotrexate.
- adults with active psoriatic arthritis (PsA). In adults, ORENCIA can be used alone or with other PsA treatments.

It is not known if ORENCIA is safe and effective in children under 2 years of age.

It is not known if ORENCIA is safe and effective in children for uses other than juvenile idiopathic arthritis. Before you use ORENCIA, tell your healthcare provider about all of your medical conditions, including if you:

- have any kind of infection even if it is small (such as an open cut or sore), or an infection that is in your whole body (such as the flu). If you have an infection when taking ORENCIA, you may have a higher chance for getting serious side effects.
- have an infection that will not go away or an infection that keeps coming back.
- are allergic to abatacept or any of the ingredients in ORENCIA. See the end of this Patient Information leaflet for a complete list of ingredients in ORENCIA.
- have or have had inflammation of your liver due to an infection (viral hepatitis). Before you use ORENCIA, your healthcare provider may examine you for hepatitis.
- have had a lung infection called tuberculosis (TB), a positive skin test for TB, or you recently have been in close contact with someone who has had TB. Before you use ORENCIA, your healthcare provider may examine you for TB or perform a skin test. Symptoms of TB may include:
  - a cough that does not go away
     weight loss
- fevernight sweats

- are scheduled to have surgery.
- recently received a vaccination or are scheduled for a vaccination. If you are receiving ORENCIA, and for 3 months after you stop receiving ORENCIA, you should not receive live vaccines.
- have a history of a breathing problem called chronic obstructive pulmonary disease (COPD).
- have diabetes and use a blood glucose monitor to check your blood sugar (blood glucose) levels. ORENCIA for intravenous infusion (given through a needle placed in a vein) contains maltose, a type of sugar, that can give false high blood sugar readings with certain types of blood glucose monitors on the day of ORENCIA infusion. Your healthcare provider may tell you to use a different way to monitor your blood sugar levels.
- ORENCIA for subcutaneous injection (injected under the skin) does not contain maltose. You do not need to change your blood sugar monitoring if you are taking ORENCIA subcutaneously.
- are pregnant or plan to become pregnant. It is not known if ORENCIA can harm your unborn baby. If you took ORENCIA during pregnancy, talk to your healthcare provider before your baby receives any vaccines.
  - Bristol-Myers Squibb Company has a registry for pregnant women exposed to ORENCIA. The purpose of this registry is to check the health of the pregnant mother and her child. Women are encouraged to call the registry themselves or ask their healthcare provider to contact the registry for them by calling 1-877-311-8972.
- are breastfeeding or plan to breastfeed. It is not known if ORENCIA passes into your breast milk. Talk

•

may affect your immune system, such as: Enbrel<sup>®</sup> (etanercept) Kineret<sup>®</sup> (anakinra) • Humira<sup>®</sup> (adalimumab) • Rituxan<sup>®</sup> (rituximab) Actemra<sup>®</sup> (tocilizumab) Remicade<sup>®</sup> (infliximab) • Simponi<sup>®</sup> (golimumab) • You may have a higher chance of getting a serious infection if you take ORENCIA with other biologic medicines for your RA. JIA. or PsA. Know the medicines you take. Keep a list of your medicines and show it to your healthcare provider and pharmacist when you get a new prescription. How should I use ORENCIA? You may receive ORENCIA given by a healthcare provider through a vein in your arm (IV or intravenous infusion). It takes about 30 minutes to give you the full dose of medicine. You will then receive ORENCIA 2 weeks and 4 weeks after the first dose and then every 4 weeks. You may also receive ORENCIA as an injection under your skin (subcutaneous). For home use, •

- ORENCIA comes in a prefilled syringe or prefilled ClickJect autoinjector. Your healthcare provider will prescribe the type that is best for you. If your healthcare provider decides that you or a caregiver can give your injections of ORENCIA prefilled syringes or ORENCIA ClickJect autoinjectors at home, you or your caregiver should receive training on the right way to prepare and inject ORENCIA. Do not try to inject ORENCIA until you have been shown the right way to give the injections by your healthcare provider.
- Your healthcare provider will tell you how much ORENCIA to use and when to use it.
- See the Instructions for Use at the end of this Patient Information leaflet for instructions about the right way to prepare and give your ORENCIA injections at home.

## What are the possible side effects of ORENCIA?

**ORENCIA** can cause serious side effects including:

- infections. ORENCIA can make you more likely to get infections or make the infection that you have • get worse. Some people have died from these infections. Call your healthcare provider right away if you have any symptoms of an infection. Symptoms of an infection may include:
  - o fever

• have flu-like symptoms

o feel very tired

o have a cough

• warm, red, or painful skin

o trouble breathing

allergic reactions. Allergic reactions can happen to people who use ORENCIA. Call your healthcare provider or go to the emergency room right away if you have any symptoms of an allergic reaction. Symptoms of an allergic reaction may include:

#### o hives

- swollen face, eyelids, lips, or tongue
- hepatitis B infection in people who carry the virus in their blood. If you are a carrier of the • hepatitis B virus (a virus that affects the liver), the virus can become active while you use ORENCIA. Your healthcare provider may do a blood test before you start treatment with ORENCIA.
- vaccinations. You should not receive ORENCIA with certain types of vaccines (live vaccines). ORENCIA may also cause some vaccinations to be less effective. Talk with your healthcare provider about your vaccination plans.
- breathing problems in people with Chronic Obstructive Pulmonary Disease (COPD). Some people may get certain respiratory problems more often if they receive ORENCIA and have COPD. Symptoms of respiratory problems include:
  - COPD that becomes worse

o trouble breathing

- o couah
- cancer (malignancies). Certain kinds of cancer have been reported in people using ORENCIA. It is not known if ORENCIA increases your chance of getting certain kinds of cancer. Common side effects of ORENCIA include:

- Cimzia<sup>®</sup> (certolizumab pegol)
- to your healthcare provider about the best way to feed your baby if you use ORENCIA.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-

counter medicines, vitamins, and herbal supplements,

ORENCIA may affect the way other medicines work, and other medicines may affect the way ORENCIA

works causing serious side effects. Especially tell your healthcare provider if you take other biologic medicines to treat RA, JIA or PsA that

headache	<ul> <li>sore throat</li> </ul>		
<ul> <li>upper respiratory tract infection</li> </ul>	<ul> <li>nausea</li> </ul>		
In children and adolescents, other side effects ma	ay include:		
diarrhea	fever		
• cough	<ul> <li>abdominal pain</li> </ul>		
These are not all the possible side effects of ORENC			
Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA- 1088.			
		How should I store ORENCIA?	
• Store ORENCIA in the refrigerator at 36°F to 46°F (2°C to 8°C).			
Keep ORENCIA in the original package and out of the light.			
Do not freeze ORENCIA.			
<ul> <li>Safely throw away medicine that is out of date or no longer needed.</li> </ul>			
Keep ORENCIA and all medicines out of the reach of children.         General information about the safe and effective use of ORENCIA         Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet.         Do not use ORENCIA for a condition for which it was not prescribed. Do not give ORENCIA to other			
		people, even if they have the same symptoms that yo	
		You can ask your pharmacist or healthcare provider for information about ORENCIA that is written for	
		health professionals.	
What are the ingredients in ORENCIA?			
Active ingredient: abatacept			
Intravenous inactive ingredients: maltose, monobasic sodium phosphate, sodium chloride for			
administration			
Subcutaneous inactive ingredients: sucrose, poloxamer 188, monobasic sodium phosphate			
monohydrate, dibasic sodium phosphate anhydrous,	water for injection		
Bristol-Myers Squibb Company			
Princeton, NJ 08543 USA, U.S. License Number 17	13		
All other trademarks are property of their respective of	owners.		

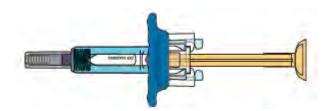
All other trademarks are property of their respective owners. For more information, go to www.ORENCIA.com or call 1-800-ORENCIA.

This Patient Information has been approved by the U.S. Food and Drug Administration.

Rev June 2017

## INSTRUCTIONS FOR USE ORENCIA<sup>®</sup> (oh-REN-see-ah) (abatacept) Prefilled Syringe with BD UltraSafe Passive<sup>™</sup> Needle Guard

ORENCIA<sup>®</sup> Prefilled Syringe with BD UltraSafe Passive<sup>™</sup> Needle Guard (abatacept) Injection



**Read these instructions before you start using your ORENCIA Prefilled Syringe** and each time you get a refill. There may be new information. Before you use the prefilled syringe for the first time, make sure your healthcare provider shows you the right way to use it and decides that you or a caregiver may be able to give your injections of ORENCIA at home. **Important:** 

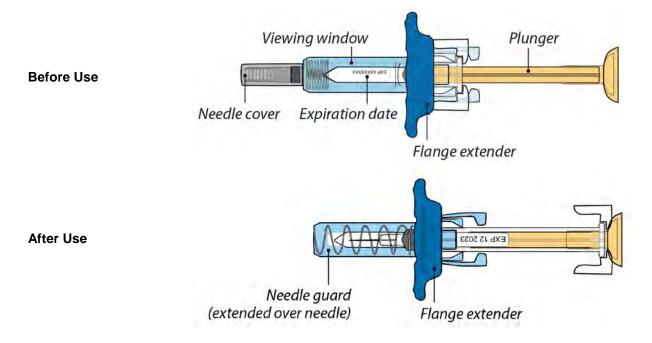
- Keep the Prefilled Syringe in the refrigerator until ready to use.
- Do not freeze.

## Before You Begin: Get to Know Your Prefilled Syringe

There are **3 types** of prefilled syringes:



The type of prefilled syringe you receive depends on the dose prescribed by your healthcare provider. The 125 mg/mL prefilled syringe is shown below.



The prefilled syringe has a **flange extender** that makes it easier to hold and inject, and a **needle guard** that automatically covers the needle after a complete injection.



**DO NOT** remove the needle cover until you are ready to inject.

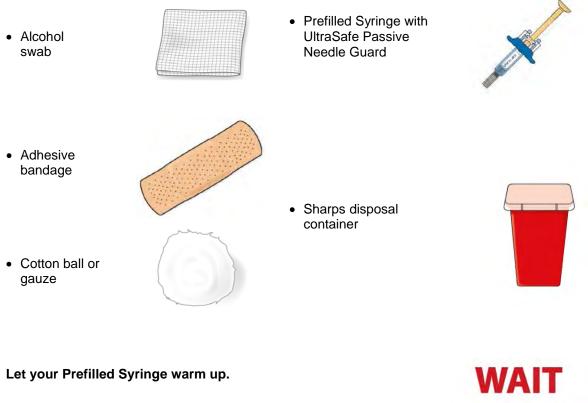
**DO NOT PULL** back on the plunger at any time.

**DO NOT RECAP** the prefilled syringe at any time, as this may damage, bend, or break the needle.

## Step 1: Preparing for an ORENCIA Injection

## Gather and place supplies for your injection on a clean, flat surface.

Only the prefilled syringe is included in the package:



Remove one prefilled syringe from the refrigerator and wait **30 minutes** to allow it to reach room temperature.

- **Do not** speed up the warming process in any way, such as using the microwave or placing the syringe in warm water.
- **Do not** remove the needle cover while allowing the prefilled syringe to reach room temperature.

Wash your hands well with soap and water.

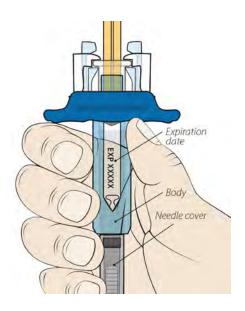




## Step 2: Examine the Prefilled Syringe

Hold the prefilled syringe by the body with the needle cover pointing down as shown.

- Check the expiration date printed on the label. Do not use if the expiration date has passed.
- Check the prefilled syringe for damage. Do not use if it is cracked or broken.



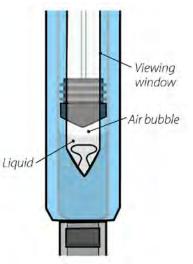
## Check the Liquid.

• **Check the liquid** in the prefilled syringe through the viewing window. It should be clear and colorless to pale yellow.

Do not inject if the liquid is cloudy, discolored, or has particles in it.

\*Note: the 50 mg prefilled syringe is shown.

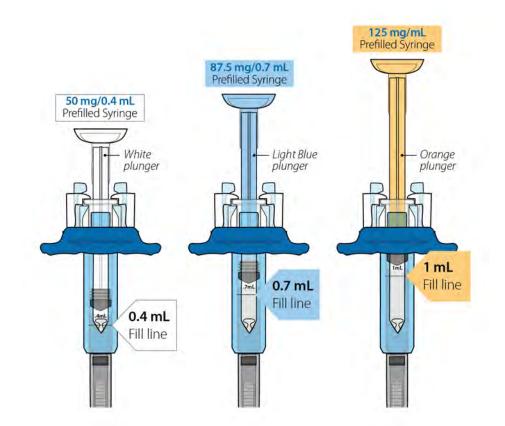
**Note:** It is normal to see an air bubble. **Do not** attempt to remove it.



Go to Step 3

## Step 3: Check the Dose on the Prefilled Syringe

Hold the syringe at eye level. Look closely to make sure that the amount of liquid in the prefilled syringe is **at or just above the fill line** for your prescribed dose:



**Do not** use if your prefilled syringe does not have the correct amount of liquid. Call your pharmacist immediately.

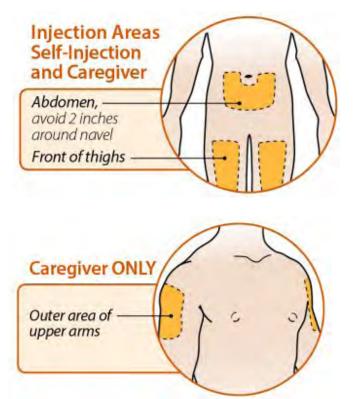
## Step 4: Choose and Prepare an Injection Site

Choose your injection site.

Choose your injection site in either the stomach **(abdomen)**, front of the **thighs**, or outer area of **upper arm** (only if caregiver administered).

## Rotate injection site.

- Each week you can use the same area of your body, but use a different injection site in that area.
- **Do not** inject into an area where the skin is tender, bruised, red, scaly, or hard. **Do not** give the injection in any areas with scars or stretch marks.
- Record the date, time, and site where you inject.



#### Gently clean injection site.

- Wipe the injection site with an alcohol swab and let it air dry.
- **Do not** touch the injection site again before giving the injection.
- **Do not** fan or blow on the clean area.

**Remove the needle cover** by holding the body of the prefilled syringe with one hand and pulling the cover straight off with your other hand.

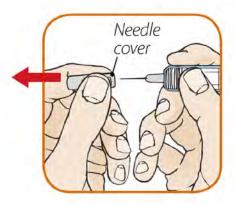
**Do not put the needle cover back on the needle after you remove it.** Throw away the needle cover in your household trash.

- **Do not** use the prefilled syringe if it is dropped after the needle cover is removed.
- **Do not** use the prefilled syringe if the needle is damaged or bent.

Note: It is normal to see a drop of fluid leaving the needle.



**DO NOT RECAP** the Prefilled Syringe, as this may damage the needle.



## Step 5: Inject Your Dose of ORENCIA

Hold the body of the prefilled syringe in your hand using your thumb and index finger. With your other hand, pinch the area of skin you cleaned.





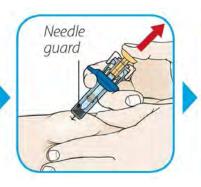
Insert the needle.

**Gently insert** the needle into the pinched skin at a  $45^{\circ}$  angle.

## Complete all steps to deliver your full dose of the medicine.



**Inject: push the plunger** with your thumb as far as it will go.



Release Needle Guard: slowly lift your thumb from the plunger to activate the needle guard.



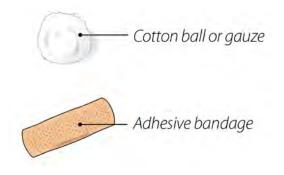
**Confirm:** after a complete injection, **the needle guard will cover the needle** and you may hear a click.

Remove the prefilled syringe and let go of the pinched skin.

## Step 6: After the Injection

## Care of injection site:

- There may be a little bleeding at the injection site. You can press a cotton ball or gauze over the injection site.
- **Do not** rub the injection site.
- If needed, you may cover the injection site with an adhesive bandage.



## **Disposing of used Prefilled Syringes:**

- Put your used ORENCIA prefilled syringes in a FDA-cleared sharps disposal container right away after use. Do not throw away (dispose of) loose needles and prefilled syringes in your household trash.
- If you do not have a FDA-cleared sharps disposal container, you may use a household container that is:
  - o made of a heavy-duty plastic,
  - can be closed with a tight-fitting, puncture-resistant lid, without sharps being able to come out,
  - o upright and stable during use,
  - o leak resistant, and
  - o properly labeled to warn of hazardous waste inside the container.
- When your sharps disposal container is almost full, you will need to follow your community guidelines for the right way to dispose of your sharps disposal container. There may be state or local laws about how you should throw away used needles and syringes. For more information about safe sharps disposal, and for specific information about sharps disposal in the state that you live in, go to the FDA's website at: http://www.fda.gov/safesharpsdisposal.
- **Do not** throw away (dispose of) your used sharps disposal container in your household trash unless your community guidelines permit this. **Do not** recycle your used sharps disposal container.

See **Frequently Asked Questions** for additional disposal information.

If your injection is administered by a caregiver, this person must also be careful handling the syringe to prevent accidental needle stick injury and possibly spreading infection.

Keep ORENCIA prefilled syringes and the disposal container out of the reach of children.



## How to store ORENCIA Prefilled Syringe

- Store ORENCIA in the refrigerator at 36°F to 46°F (2°C to 8°C).
- Keep ORENCIA in the original package and out of the light.
- Do not freeze ORENCIA.
- Safely throw away medicine that is out of date or no longer needed.

Go to Next Page

## **Frequently Asked Questions**

## Q. Why do I need to allow the prefilled syringe to warm up at room temperature for 30 minutes prior to injecting?

A. This step is primarily for your comfort. Never try to speed up the warming process in any way, like using the microwave or placing the syringe in warm water.

## Q. Is it necessary to hold the skin pinch during the entire time I inject the dose?

A. You must pinch the skin during needle insertion however, for your comfort you may release the skin pinch as you deliver the injection.

#### Q. What if my prefilled syringe appears to be broken or damaged?

A. Do not use the prefilled syringe. Contact your healthcare provider or pharmacist for further instructions.

#### Q. What if I cannot clearly see the liquid inside the syringe?

A. Look at the syringe closely by holding at eye level and up to the light. You may tilt the syringe slowly to get a better view of the drug fluid. If you still have trouble, contact your healthcare provider or pharmacist for further instructions.

#### Q. Is it normal to feel a little bit of burning or pain during injection?

A. You may feel a prick from the needle. Sometimes, the medicine can cause slight irritation near the injection site. Discomfort should be mild to moderate. If you have any side effects, including pain, swelling, or discoloration near the injection site, contact your healthcare provider.

Go to next page

## **Frequently Asked Questions**

## Q. How should I dispose of a used prefilled syringe?

- A. Place the used prefilled syringe into an FDA-cleared sharps disposal container. If you do not have one you may use a household container that is:
  - made of a heavy-duty plastic,
  - can be closed with a tight-fitting, puncture-resistant lid, without sharps being able to come out,
  - upright and stable during use, leak-resistant, and properly labeled to warn of hazardous waste inside the container.

When your sharps disposal container is almost full, you will need to follow your community guidelines for the right way to dispose of your sharps disposal container. There may be state or local laws about how you should throw away used needles and injector pens. For more information about safe sharps disposal, and for specific information about sharps disposal in the state that you live in, go to the FDA's website at: http://www.fda.gov/safesharpsdisposal.

## Q. How should I keep my prefilled syringes cool while traveling?

A. Store them in a cool carrier between 36°F to 46°F (2°C to 8°C). Do not freeze them. Keep them in the original carton and protected from light. Your healthcare provider may know about special carrying cases.

## Q. Can I take my prefilled syringes on an airplane?

A. Generally you are allowed to carry your prefilled syringes with you on an airplane. Do not put them in your checked luggage. You should carry your prefilled syringes with you in your travel cooler at a temperature of 36°F to 46°F (2°C to 8°C). Keep your prefilled syringes in the original carton, and with its original preprinted labels and protected from light.

# Q. What if my prefilled syringe does not stay cool for an extended period of time? Is it dangerous to use?

A. Contact 1-800-673-6242 for more information.

Go to Back Cover

If you have questions or concerns about your prefilled syringe, please contact your healthcare provider or call our toll-free help line at 1-800-673-6242.

Bristol-Myers Squibb Company Princeton, NJ 08543 USA, U.S. License Number 1713

This Instructions for Use has been approved by the U.S. Food and Drug Administration.

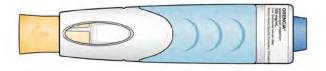
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BD UltraSafe Passive<sup>™</sup> is a trademark of Becton, Dickinson and Company.

Revised March 2017

## INSTRUCTIONS FOR USE ORENCIA<sup>®</sup> ClickJect<sup>™</sup> (oh-REN-see-ah) (abatacept) Prefilled Autoinjector

ORENCIA<sup>®</sup> ClickJect<sup>™</sup> (abatacept) Injection Prefilled Autoinjector



125 mg/mL, Single-Dose Autoinjector, For Subcutaneous Use Only

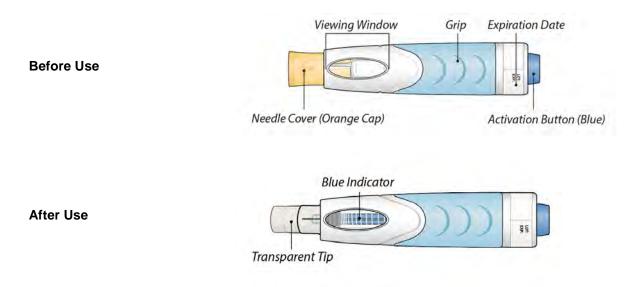
**Read these instructions before you use the ClickJect Autoinjector** and each time you get a refill. There may be new information. Before you use the Autoinjector for the first time, make sure your healthcare provider shows you the right way to use it. **Important:** 

- Keep the ClickJect Autoinjector in the refrigerator until ready to use.
- Do not freeze.

## **Before You Begin**

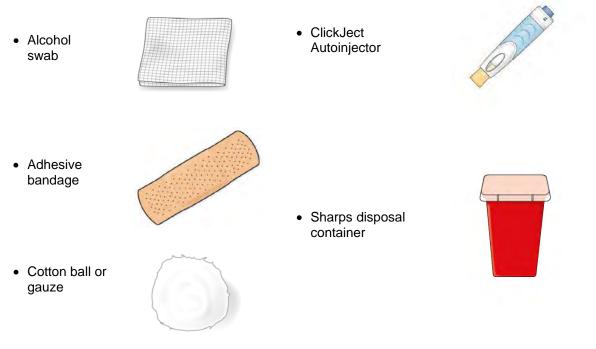
## Get to know the ClickJect Autoinjector

- The Autoinjector automatically delivers the medicine. The transparent tip locks over the needle once the injection is complete and the Autoinjector is removed from the skin.
- Do not remove the orange needle cover until you are ready to inject.



Gather supplies for your injection on a clean, flat surface

(only the ClickJect Autoinjector is included in the package):



#### **Step 1: Prepare Your Autoinjector**

#### Let your ClickJect Autoinjector warm up.

Remove one Autoinjector from the refrigerator and let it rest at room temperature for **30 minutes**.

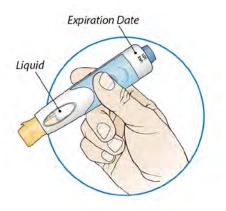
**Do not** remove the Autoinjector needle cover while allowing it to reach room temperature.



Wash your hands well with soap and water.

## Examine the ClickJect Autoinjector:

- Check expiration date printed on the label. Do not use if past the expiration date.
- Check the Autoinjector for damage. Do not use if it is cracked or broken.
- Check the liquid through the viewing window. It should be clear and colorless to pale yellow. You may see a small air bubble. You do not need to remove it. **Do not inject** if the liquid is cloudy, discolored, or has particles in it.



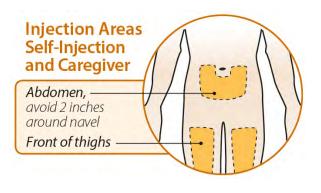
## Step 2: Prepare for Injection

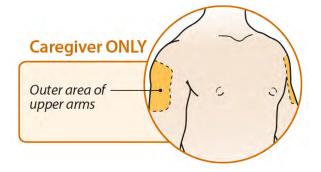
#### Choose your injection site

in either the stomach **(abdomen)**, front of the **thighs**, or outer area of **upper arm** (only if caregiver administered).

#### Rotate injection site.

- Each week you can use the same area of your body, but use a different injection site in that area.
- **Do not** inject into an area where the skin is tender, bruised, red, scaly, or hard. **Do not** give the injection in any areas with scars or stretch marks.
- Record the date, time, and site where you inject.





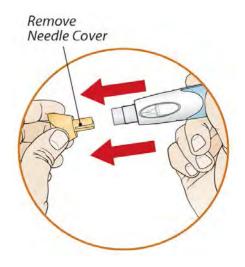
#### Gently clean injection site:

- Wipe the injection site with an alcohol swab and let it air dry.
- **Do not** touch the injection site again before giving the injection.
- **Do not** fan or blow on the clean area.

## Pull orange needle cover STRAIGHT off.

- DO NOT RECAP the Autoinjector.
- Throw away (discard) the needle cover in your household trash.
- **Do not** use the Autoinjector if it is dropped after the needle cover is removed.

Note: It is normal to see a drop of fluid leaving the needle.





## Step 3: Inject Your Dose

**Position the Autoinjector** so you can see the **viewing window** and it is at a 90° angle to the injection site. With your other hand, gently **pinch the cleaned skin**.



## Complete all steps to deliver your full dose of medicine:



**Push DOWN** on the skin to unlock the Autoinjector.

#### Press button, HOLD for 15 seconds AND watch window.

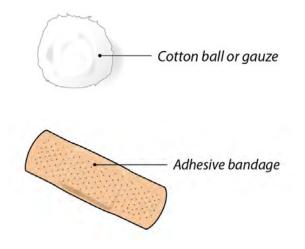
- You will hear a click as the injection begins.
- To deliver the full dose of medicine, hold the Autoinjector in place for 15 seconds **AND** wait until the blue indicator stops moving in window.

**Remove the ClickJect Autoinjector** from the injection site by lifting it straight up. After you remove it from your skin, the transparent tip will lock over the needle. Release skin pinch.

#### Step 4: After the Injection

## Care of injection site:

- There may be a little bleeding at the injection site. You can press a cotton ball or gauze over the injection site.
- **Do not** rub the injection site.
- If needed, you may cover the injection site with an adhesive bandage.

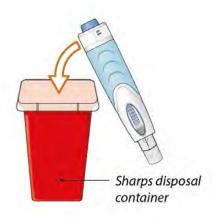


#### **Disposing of used ClickJect Autoinjectors:**

- Put your used ClickJect Autoinjector in a FDA-cleared sharps disposal container right away after use. Do not throw away (dispose of) loose needles and prefilled syringes in your household trash.
- If you do not have a FDA-cleared sharps disposal container, you may use a household container that is:
  - o made of a heavy-duty plastic,
  - o can be closed with a tight-fitting, puncture-resistant lid, without sharps being able to come out,
  - upright and stable during use,
  - o leak resistant, and
  - o properly labeled to warn of hazardous waste inside the container.
- When your sharps disposal container is almost full, you will need to follow your community guidelines for the right way to dispose of your sharps disposal container. There may be state or local laws about how you should throw away used needles and syringes. For more information about safe sharps disposal, and for specific information about sharps disposal in the state that you live in, go to the FDA's website at: http://www.fda.gov/safesharpsdisposal.
- **Do not** dispose of your used sharps disposal container in your household trash unless your community guidelines permit this. **Do not** recycle your used sharps disposal container.

See **Frequently Asked Questions** for additional disposal information.

If your injection is administered by a caregiver, this person must also handle the Autoinjector carefully to prevent accidental needle stick injury and possibly spreading infection.



## Keep Autoinjector and the disposal container out of the reach of children.

## How to store ORENCIA ClickJect Autoinjector

- Store ORENCIA in the refrigerator at 36°F to 46°F (2°C to 8°C).
- Keep ORENCIA in the original package and out of the light.
- Do not freeze ORENCIA.
- Safely throw away medicine that is out of date or no longer needed.

Continued on next page

## **Frequently Asked Questions**

## Q. Why do I need to allow the Autoinjector to warm up at room temperature for 30 minutes prior to injecting?

A. This step is primarily for your comfort. If the medicine is cold, the injection may take longer than 15 seconds. Never try to speed the warming process in any way, like using the microwave or placing the Autoinjector in warm water.

## Q. What if I accidentally remove the needle cover (orange cap) before I'm ready to use the Autoinjector?

A. If you remove the cover before you are ready to use the Autoinjector, be careful. Do not try to replace it. Use the Autoinjector as soon as possible. While you prepare for the injection, carefully place the Autoinjector on its side on a clean, flat surface. Be sure to keep the Autoinjector away from children.

#### Q. What if the Autoinjector appears to be broken or damaged?

A. Do not use the Autoinjector. Contact your healthcare provider or pharmacist for further instructions.

## Q. What if the injection was not triggered?

A. Before the injection can be triggered, the device must be unlocked. To unlock, firmly push the Autoinjector down on the skin without touching the button. Once the stop-point is felt, the device is unlocked and can be triggered by pushing the button.

#### Q. I feel a little bit of burning or pain during injection. Is this normal?

A. When giving an injection, you may feel a prick from the needle. Sometimes, the medicine can cause slight irritation near the injection site. If this occurs, the discomfort should be mild to moderate. If you experience any side effects, including pain, swelling, or discoloration near the injection site, contact your healthcare provider or pharmacist immediately. You are encouraged to report side effects of prescription drugs to the FDA. Visit <u>www.fda.gov/medwatch</u> or call 1-800-FDA-1088.

#### Q. How do I know I received my full dose?

A. Before lifting the Autoinjector from the injection site, check to ensure that the blue indicator has stopped moving. Then, before disposing of the Autoinjector, check the bottom of the transparent viewing window to make sure there is no liquid left inside. If the medicine has not been completely injected, consult your healthcare provider or pharmacist.

Continued on next page

## **Frequently Asked Questions**

## Q. How should I dispose of a used Autoinjector?

- A. Place used Autoinjector into an FDA-cleared sharps disposal container right away after use.
  - If you do not have one, you may use a household container that is:
  - made of a heavy-duty plastic,
  - can be closed with a tight-fitting, puncture-resistant lid, without sharps being able to come out,
  - upright and stable during use, leak-resistant, and properly labeled to warn of hazardous waste inside the container.
  - When your sharps disposal container is almost full, you will need to follow your community guidelines for the right way to dispose of your sharps disposal container. There may be state or local laws about how you should throw away used needles and Autoinjectors. For more information about safe sharps disposal, and for specific information about sharps disposal in the state that you live in, go to the FDA's website at: <a href="http://www.fda.gov/safesharpsdisposal">http://www.fda.gov/safesharpsdisposal</a>.
  - **Do not** recycle your used sharps disposal container.

## Q. How should I keep my Autoinjector cool while traveling?

A. Your healthcare provider or pharmacist may be familiar with special carrying cases for injectable medicines. Store at 36°F to 46°F (2°C to 8°C). Do not freeze. Protect from light.

## Q. Can I take my Autoinjector on board an aircraft?

A. Generally, this is allowed. Be sure to pack your Autoinjector in your carry-on, and do not put it in your checked luggage. You should carry it with you in your travel cooler at a temperature of 36°F to 46°F (2°C to 8°C) until you are ready to use it. Airport security procedures and airline policies change from time to time, so it's best to check with airport authorities and the airline for any special rules. Prior to flying, get a letter from your healthcare provider to explain that you are traveling with prescription medicine that uses a device with a needle; if you are carrying a sharps container in your carry-on baggage, notify the screener at the airport.

# Q. What if my Autoinjector does not stay cool for an extended period of time? Is it dangerous to use?

A. Contact 1-800-673-6242 for details.

# If you have questions or concerns about your Autoinjector, please contact a healthcare provider or call our toll-free help line at 1-800-673-6242.

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