

## HIGHLIGHTS OF PRESCRIBING INFORMATION

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

CIMZIA (certolizumab pegol) for injection, for subcutaneous use  
CIMZIA (certolizumab pegol) injection, for subcutaneous use  
Initial U.S. Approval: 2008

### WARNING: SERIOUS INFECTIONS AND MALIGNANCY See full prescribing information for complete boxed warning.

- Increased risk of serious infections leading to hospitalization or death including tuberculosis (TB), bacterial sepsis, invasive fungal infections (such as histoplasmosis), and infections due to other opportunistic pathogens (5.1).
- CIMZIA should be discontinued if a patient develops a serious infection or sepsis (5.1).
- Perform test for latent TB; if positive, start treatment for TB prior to starting CIMZIA (5.1).
- Monitor all patients for active TB during treatment, even if initial latent TB test is negative (5.1)
- Lymphoma and other malignancies, some fatal, have been reported in children and adolescent patients treated with TNF blockers, of which CIMZIA is a member (5.2). CIMZIA is not indicated for use in pediatric patients. (8.4)

### INDICATIONS AND USAGE

CIMZIA is a tumor necrosis factor (TNF) blocker indicated for:

- Reducing signs and symptoms of Crohn's disease and maintaining clinical response in adult patients with moderately to severely active disease who have had an inadequate response to conventional therapy (1.1)
- Treatment of adults with moderately to severely active rheumatoid arthritis (1.2)
- Treatment of adult patients with active psoriatic arthritis. (1.3)
- Treatment of adults with active ankylosing spondylitis (1.4)
- Treatment of adults with active non-radiographic axial spondyloarthritis with objective signs of inflammation (1.5)
- Treatment of adults with moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy (1.6)

### DOSAGE AND ADMINISTRATION

CIMZIA is administered by subcutaneous injection. The recommended initial dose of CIMZIA is 400 mg (given as two subcutaneous injections of 200 mg) (2).

#### Crohn's Disease (2.1)

- 400 mg initially and at Weeks 2 and 4. If response occurs, follow with 400 mg every four weeks

#### Rheumatoid Arthritis (2.2)

- 400 mg initially and at Weeks 2 and 4, followed by 200 mg every other week; for maintenance dosing, 400 mg every 4 weeks can be considered

#### Psoriatic Arthritis (2.3)

- 400 mg initially and at week 2 and 4, followed by 200 mg every other week; for maintenance dosing, 400 mg every 4 weeks can be considered.

#### Ankylosing Spondylitis (2.4)

- 400 mg (given as 2 subcutaneous injections of 200 mg each) initially and at weeks 2 and 4, followed by 200 mg every other week or 400 mg every 4 weeks.

#### Non-radiographic Axial Spondyloarthritis (2.5)

- 400 mg (given as 2 subcutaneous injections of 200 mg each) initially and at weeks 2 and 4, followed by 200 mg every other week or 400 mg every 4 weeks.

#### Plaque Psoriasis (2.6, 14.6)

- 400 mg (given as 2 subcutaneous injections of 200 mg each) every other week. For some patients (with body weight  $\leq$  90 kg), a dose of 400 mg (given as 2 subcutaneous injections of 200 mg each) initially and at Weeks 2 and 4, followed by 200 mg every other week may be considered.

### DOSAGE FORMS AND STRENGTHS

- For injection: 200 mg lyophilized powder in a single-dose vial (3)
- Injection: 200 mg/mL solution in a single-dose prefilled syringe (3)

### CONTRAINDICATIONS

Serious hypersensitivity reaction to certolizumab pegol or to any of the excipients. (4)

### WARNINGS AND PRECAUTIONS

- **Serious Infections:** CIMZIA should not be initiated in patients with an active infection. Monitor for infection during and after treatment; discontinue if a serious infection develops. If invasive fungal infection develops in patients who reside or travel to regions where mycoses are endemic, consider empiric antifungal therapy. (5.1)
- **Malignancies:** Cases of lymphoma and other malignancies have been observed among patients receiving TNF blockers, including CIMZIA. (5.2)
- **Heart Failure:** Monitor patients for new onset or worsening congestive heart failure. (5.3)
- **Hypersensitivity Reactions:** Discontinue CIMZIA and institute appropriate therapy if anaphylaxis or other serious hypersensitivity reactions occur. (5.4)
- **Hepatitis B Virus Reactivation:** Test for HBV infection before starting CIMZIA. Monitor HBV carriers during and several months after therapy. If reactivation occurs, stop CIMZIA and begin anti-viral therapy (5.5)
- **Neurologic Reactions:** Exacerbation or new onset demyelinating disease may occur; use caution in patients with pre-existing or recent-onset demyelinating disorders. (5.6)
- **Hematological Reactions (including leukopenia, pancytopenia and thrombocytopenia):** Use with caution in patients who have ongoing, or a history of, significant hematologic abnormalities. Advise patients to seek immediate medical attention if symptoms develop; consider discontinuing CIMZIA in patients with confirmed abnormalities. (5.7)
- **Use with Anakinra, Abatacept, Rituximab and Natalizumab:** Increased risk of serious infections; concomitant use is not recommended. (5.8, 7.1)
- **Autoimmunity:** Discontinue CIMZIA if lupus-like syndrome develops. (5.9)
- **Live vaccines:** Avoid use with CIMZIA (5.10, 7.2)

### ADVERSE REACTIONS

Most common adverse reactions ( $\geq$ 7%): upper respiratory tract infection, rash, and urinary tract infection (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact UCB, Inc. at 1-866-822-0068 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

### DRUG INTERACTIONS

- **Laboratory Tests:** May cause erroneously elevated aPTT results. (7.3)

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.

Revised: 12/2022

---

**FULL PRESCRIBING INFORMATION: CONTENTS\***

**WARNING: SERIOUS INFECTIONS AND MALIGNANCY**

**1 INDICATIONS AND USAGE**

- 1.1 Crohn's Disease
- 1.2 Rheumatoid Arthritis
- 1.3 Psoriatic Arthritis
- 1.4 Ankylosing Spondylitis
- 1.5 Non-radiographic Axial Spondyloarthritis
- 1.6 Plaque Psoriasis

**2 DOSAGE AND ADMINISTRATION**

- 2.1 Crohn's Disease
- 2.2 Rheumatoid Arthritis
- 2.3 Psoriatic Arthritis
- 2.4 Ankylosing Spondylitis
- 2.5 Non-radiographic Axial Spondyloarthritis
- 2.6 Plaque Psoriasis
- 2.7 Preparation and Administration of CIMZIA Using the Lyophilized Powder for Injection
- 2.8 Preparation and Administration of CIMZIA Using the Prefilled Syringe
- 2.9 Monitoring to Assess Safety
- 2.10 Concomitant Medications

**3 DOSAGE FORMS AND STRENGTHS**

**4 CONTRAINDICATIONS**

**5 WARNINGS AND PRECAUTIONS**

- 5.1 Risk of Serious Infections
- 5.2 Malignancies
- 5.3 Heart Failure
- 5.4 Hypersensitivity Reactions
- 5.5 Hepatitis B Virus Reactivation
- 5.6 Neurologic Reactions
- 5.7 Hematological Reactions
- 5.8 Use with Biological Disease-Modifying Antirheumatic Drugs (Biological DMARDs)
- 5.9 Autoimmunity
- 5.10 Immunizations

- 5.11 Immunosuppression

**6 ADVERSE REACTIONS**

- 6.1 Clinical Trials Experience
- 6.2 Immunogenicity
- 6.3 Postmarketing Experience

**7 DRUG INTERACTIONS**

- 7.1 Use with Anakinra, Abatacept, Rituximab and Natalizumab
- 7.2 Live Vaccines
- 7.3 Laboratory Tests

**8 USE IN SPECIFIC POPULATIONS**

- 8.1 Pregnancy
- 8.2 Lactation
- 8.4 Pediatric Use
- 8.5 Geriatric Use

**11 DESCRIPTION**

**12 CLINICAL PHARMACOLOGY**

- 12.1 Mechanism of Action
- 12.2 Pharmacodynamics
- 12.3 Pharmacokinetics

**13 NONCLINICAL TOXICOLOGY**

- 13.1 Carcinogenesis, Mutagenesis, and Impairment of Fertility

**14 CLINICAL STUDIES**

- 14.1 Crohn's Disease
- 14.2 Rheumatoid Arthritis
- 14.3 Psoriatic Arthritis
- 14.4 Ankylosing Spondylitis
- 14.5 Non-radiographic Axial Spondyloarthritis
- 14.6 Plaque Psoriasis

**15 REFERENCES**

**16 HOW SUPPLIED/STORAGE AND HANDLING**

**17 PATIENT COUNSELING INFORMATION**

\*Sections or subsections omitted from the full prescribing information are not listed.

## FULL PRESCRIBING INFORMATION

### WARNING: SERIOUS INFECTIONS AND MALIGNANCY

#### SERIOUS INFECTIONS

Patients treated with CIMZIA are at increased risk for developing serious infections that may lead to hospitalization or death [see *Warnings and Precautions (5.1) and Adverse Reactions (6.1)*]. Most patients who developed these infections were taking concomitant immunosuppressants such as methotrexate or corticosteroids.

CIMZIA should be discontinued if a patient develops a serious infection or sepsis.

#### Reported infections include:

- Active tuberculosis, including reactivation of latent tuberculosis. Patients with tuberculosis have frequently presented with disseminated or extrapulmonary disease. Patients should be tested for latent tuberculosis before CIMZIA use and during therapy. Treatment for latent infection should be initiated prior to CIMZIA use.
- Invasive fungal infections, including histoplasmosis, coccidioidomycosis, candidiasis, aspergillosis, blastomycosis, and pneumocystosis. Patients with histoplasmosis or other invasive fungal infections may present with disseminated, rather than localized disease. Antigen and antibody testing for histoplasmosis may be negative in some patients with active infection. Empiric anti-fungal therapy should be considered in patients at risk for invasive fungal infections who develop severe systemic illness.
- Bacterial, viral and other infections due to opportunistic pathogens, including Legionella and Listeria.

The risks and benefits of treatment with CIMZIA should be carefully considered prior to initiating therapy in patients with chronic or recurrent infection.

Patients should be closely monitored for the development of signs and symptoms of infection during and after treatment with CIMZIA, including the possible development of tuberculosis in patients who tested negative for latent tuberculosis infection prior to initiating therapy. [see *Warnings and Precautions (5.1) and Adverse Reactions (6.1)*].

#### MALIGNANCY

Lymphoma and other malignancies, some fatal, have been reported in children and adolescent patients treated with TNF blockers, of which CIMZIA is a member [see *Warnings and Precautions (5.2)*]. CIMZIA is not indicated for use in pediatric patients.

## 1 INDICATIONS AND USAGE

### 1.1 Crohn's Disease

CIMZIA is indicated for reducing signs and symptoms of Crohn's disease and maintaining clinical response in adult patients with moderately to severely active disease who have had an inadequate response to conventional therapy.

### 1.2 Rheumatoid Arthritis

CIMZIA is indicated for the treatment of adults with moderately to severely active rheumatoid arthritis (RA).

### **1.3 Psoriatic Arthritis**

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

### **1.4 Ankylosing Spondylitis**

CIMZIA is indicated for the treatment of adults with active ankylosing spondylitis (AS). [*see Clinical Studies (14.4)*]

### **1.5 Non-radiographic Axial Spondyloarthritis**

CIMZIA is indicated for the treatment of adults with active non-radiographic axial spondyloarthritis (nr-axSpA) with objective signs of inflammation [*see Clinical Studies (14.5)*].

### **1.6 Plaque Psoriasis**

CIMZIA is indicated for the treatment of adults with moderate-to-severe plaque psoriasis (PsO) who are candidates for systemic therapy or phototherapy [*see Clinical Studies (14.6)*]

## **2 DOSAGE AND ADMINISTRATION**

CIMZIA is administered by subcutaneous injection. Injection sites should be rotated and injections should not be given into areas where the skin is tender, bruised, red or hard. When a 400 mg dose is needed (given as two subcutaneous injections of 200 mg), injections should occur at separate sites in the thigh or abdomen.

The solution should be carefully inspected visually for particulate matter and discoloration prior to administration. The solution should be a clear colorless to yellow liquid, essentially free from particulates and should not be used if cloudy or if foreign particulate matter is present. CIMZIA does not contain preservatives; therefore, unused portions of drug remaining in the syringe or vial should be discarded.

### **2.1 Crohn's Disease**

The recommended initial adult dose of CIMZIA is 400 mg (given as two subcutaneous injections of 200 mg) initially, and at Weeks 2 and 4. In patients who obtain a clinical response, the recommended maintenance regimen is 400 mg every four weeks.

### **2.2 Rheumatoid Arthritis**

The recommended dose of CIMZIA for adult patients with rheumatoid arthritis is 400 mg (given as two subcutaneous injections of 200 mg) initially and at Weeks 2 and 4, followed by 200 mg every other week. For maintenance dosing, CIMZIA 400 mg every 4 weeks can be considered [*see Clinical Studies (14.2)*].

### **2.3 Psoriatic Arthritis**

The recommended dose of CIMZIA for adult patients with psoriatic arthritis is 400 mg (given as 2 subcutaneous injections of 200 mg each) initially and at week 2 and 4, followed by 200 mg every other week. For maintenance dosing, CIMZIA 400 mg every 4 weeks can be considered [*see Clinical Studies (14.3)*].

### **2.4 Ankylosing Spondylitis**

The recommended dose of CIMZIA for adult patients with ankylosing spondylitis is 400 mg (given as 2 subcutaneous injections of 200 mg each) initially and at weeks 2 and 4, followed by 200 mg every 2 weeks or 400 mg every 4 weeks.

### **2.5 Non-radiographic Axial Spondyloarthritis**

The recommended dose of CIMZIA for adult patients with non-radiographic axial spondyloarthritis is 400 mg (given as 2 subcutaneous injections of 200 mg each) initially and at weeks 2 and 4, followed by 200 mg every 2 weeks or 400 mg every 4 weeks.

## 2.6 Plaque Psoriasis

The recommended dose of CIMZIA for adults with moderate-to-severe plaque psoriasis is 400 mg (given as 2 subcutaneous injections of 200 mg each) every other week.

For some patients (with body weight  $\leq$  90 kg), CIMZIA 400 mg (given as 2 subcutaneous injections of 200 mg each) initially and at Weeks 2 and 4, followed by 200 mg every other week can be considered [see *Clinical Studies (14.6)*].

## 2.7 Preparation and Administration of CIMZIA Using the Lyophilized Powder for Injection

CIMZIA Lyophilized powder should be prepared and administered by a health care professional. CIMZIA is provided in a package that contains everything required to reconstitute and inject the drug [see *How Supplied/Storage and Handling (16)*]. Step-by-step preparation and administration instructions are provided below.

### Preparation and Storage

- If refrigerated, remove CIMZIA from the refrigerator and allow the vial(s) to sit at room temperature for 30 minutes before reconstituting. Do not warm the vial in any other way. Use appropriate aseptic technique when preparing and administering CIMZIA.
- Reconstitute the vial(s) of CIMZIA with 1 mL of Sterile Water for Injection, USP using the 20-gauge needle provided. The sterile water for injection should be directed at the vial wall rather than directly on CIMZIA.
- Gently swirl each vial of CIMZIA for about one minute without shaking, assuring that all of the powder comes in contact with the Sterile Water for Injection. The swirling should be as gentle as possible in order to avoid creating a foaming effect.
- Continue swirling every 5 minutes as long as non-dissolved particles are observed. Full reconstitution may take as long as 30 minutes. The final reconstituted solution contains 200 mg/mL and should be clear to opalescent, colorless to pale yellow liquid essentially free from particulates.
- Once reconstituted, CIMZIA can be stored in the vials for up to 24 hours between 2° to 8° C (36° to 46° F) prior to injection. Do not freeze.

### Administration

- Prior to injecting, reconstituted CIMZIA should be at room temperature but do not leave reconstituted CIMZIA at room temperature for more than two hours prior to administration.
- Withdraw the reconstituted solution into a separate syringe for each vial using a new 20-gauge needle for each vial so that each syringe contains 1 mL of CIMZIA (200 mg of certolizumab pegol).
- Replace the 20-gauge needle(s) on the syringes with a 23-gauge(s) for administration.
- Inject the full contents of the syringe(s) subcutaneously, by pinching the skin of the thigh or abdomen. Where a 400 mg dose is required, two injections are required, therefore, separate sites should be used for each 200 mg injection.

## 2.8 Preparation and Administration of CIMZIA Using the Prefilled Syringe

After proper training in subcutaneous injection technique, a patient may self-inject with the CIMZIA Prefilled Syringe if a physician determines that it is appropriate.

- If refrigerated, remove the prefilled syringe from the carton and let it warm to room temperature.
- Inspect the liquid in the prefilled syringe. It should be clear and colorless to yellow and free from particulates. Discard the syringe if cloudy, discolored or contains particulates.
- Suitable sites for injection include the thigh or abdomen at least 2 inches away from the navel.

Inject at least 1 inch from the previous site.

- Do not inject into areas where the skin is tender, bruised, red or hard, or where there are scars or stretch marks.

The needle shield inside the removable cap of the CIMZIA prefilled syringe contains a derivative of natural rubber latex which may cause allergic reactions and should be handled with caution by latex-sensitive individuals [see *Warnings and Precautions (5.4)*].

## **2.9 Monitoring to Assess Safety**

Before initiation of therapy with CIMZIA, all patients must be evaluated for both active and inactive (latent) tuberculosis infection. The possibility of undetected latent tuberculosis should be considered in patients who have immigrated from or traveled to countries with a high prevalence of tuberculosis or had close contact with a person with active tuberculosis. Appropriate screening tests (e.g. tuberculin skin test and chest x-ray) should be performed in all patients.

## **2.10 Concomitant Medications**

CIMZIA may be used as monotherapy or concomitantly with non-biological disease modifying anti-rheumatic drugs (DMARDs).

The use of CIMZIA in combination with biological DMARDs or other tumor necrosis factor (TNF) blocker therapy is not recommended.

## **3 DOSAGE FORMS AND STRENGTHS**

For Injection: 200 mg of white to off-white lyophilized powder in a single-dose vial for reconstitution

Injection: 200 mg/mL clear to opalescent, colorless to pale yellow solution in a single-dose prefilled syringe

## **4 CONTRAINDICATIONS**

CIMZIA is contraindicated in patients with a history of hypersensitivity reaction to certolizumab pegol or to any of the excipients. Reactions have included angioedema, anaphylaxis, serum sickness, and urticaria [see *Warnings and Precautions (5.4)*].

## **5 WARNINGS AND PRECAUTIONS**

### **5.1 Risk of Serious Infections**

Patients treated with CIMZIA are at an increased risk for developing serious infections involving various organ systems and sites that may lead to hospitalization or death.

Opportunistic infections due to bacterial, mycobacterial, invasive fungal, viral, parasitic, or other opportunistic pathogens including aspergillosis, blastomycosis, candidiasis, coccidioidomycosis, histoplasmosis, legionellosis, listeriosis, pneumocystosis and tuberculosis have been reported with TNF blockers. Patients have frequently presented with disseminated rather than localized disease.

Treatment with CIMZIA should not be initiated in patients with an active infection, including clinically important localized infections. Patients greater than 65 years of age, patients with co-morbid conditions, and/or patients taking concomitant immunosuppressants (e.g. corticosteroids or methotrexate) may be at a greater risk of infection. The risks and benefits of treatment should be considered prior to initiating therapy in patients:

- with chronic or recurrent infection
- who have been exposed to tuberculosis

- with a history of an opportunistic infection
- who have resided or traveled in areas of endemic tuberculosis or endemic mycoses, such as histoplasmosis, coccidioidomycosis, or blastomycosis
- with underlying conditions that may predispose them to infection

### Tuberculosis

Cases of reactivation of tuberculosis or new tuberculosis infections have been observed in patients receiving CIMZIA, including patients who have previously or concomitantly received treatment for latent or active tuberculosis. Reports included cases of pulmonary and extrapulmonary (i.e., disseminated) tuberculosis. Evaluate patients for tuberculosis risk factors and test for latent infection prior to initiating CIMZIA and periodically during therapy.

Treatment of latent tuberculosis infection prior to therapy with TNF-blocking agents has been shown to reduce the risk of tuberculosis reactivation during therapy. Prior to initiating CIMZIA, assess if treatment for latent tuberculosis is needed; and consider an induration of 5 mm or greater a positive tuberculin skin test result, even for patients previously vaccinated with Bacille Calmette-Guerin (BCG).

Consider anti-tuberculosis therapy prior to initiation of CIMZIA in patients with a past history of latent or active tuberculosis in whom an adequate course of treatment cannot be confirmed, and for patients with a negative test for latent tuberculosis but having risk factors for tuberculosis infection. Despite previous or concomitant treatment for latent tuberculosis, cases of active tuberculosis have occurred in patients treated with CIMZIA. Some patients who have been successfully treated for active tuberculosis have redeveloped tuberculosis while being treated with CIMZIA. Consultation with a physician with expertise in the treatment of tuberculosis is recommended to aid in the decision of whether initiating anti-tuberculosis therapy is appropriate for an individual patient.

Strongly consider tuberculosis in patients who develop a new infection during CIMZIA treatment, especially in patients who have previously or recently traveled to countries with a high prevalence of tuberculosis, or who have had close contact with a person with active tuberculosis.

### Monitoring

Patients should be closely monitored for the development of signs and symptoms of infection during and after treatment with CIMZIA, including the development of tuberculosis in patients who tested negative for latent tuberculosis infection prior to initiating therapy. Tests for latent tuberculosis infection may also be falsely negative while on therapy with CIMZIA.

CIMZIA should be discontinued if a patient develops a serious infection or sepsis. A patient who develops a new infection during treatment with CIMZIA should be closely monitored, undergo a prompt and complete diagnostic workup appropriate for an immunocompromised patient, and appropriate antimicrobial therapy should be initiated.

### Invasive Fungal Infections

For patients who reside or travel in regions where mycoses are endemic, invasive fungal infection should be suspected if they develop a serious systemic illness. Appropriate empiric antifungal therapy should be considered while a diagnostic workup is being performed. Antigen and antibody testing for histoplasmosis may be negative in some patients with active infection. When feasible, the decision to administer empiric antifungal therapy in these patients should be made in consultation with a physician

with expertise in the diagnosis and treatment of invasive fungal infections and should take into account both the risk for severe fungal infection and risks of antifungal therapy.

## 5.2 Malignancies

In the controlled portions of clinical studies of some TNF blockers, more cases of malignancies have been observed among patients receiving TNF blockers compared to control patients. During controlled and open-labeled portions of CIMZIA studies of Crohn's disease and other diseases, malignancies (excluding non-melanoma skin cancer) were observed at a rate (95% confidence interval) of 0.5 (0.4, 0.7) per 100 patient-years among 4,650 CIMZIA-treated patients versus a rate of 0.6 (0.1, 1.7) per 100 patient-years among 1,319 placebo-treated patients. During CIMZIA studies of psoriasis, malignancies (excluding non-melanoma skin cancer) were observed corresponding to an incidence rate of 0.5 (0.2, 1.0) per 100 subject-years among a total of 995 subjects who received CIMZIA. The size of the control group and limited duration of the controlled portions of the studies precludes the ability to draw firm conclusions.

Malignancies, some fatal, have been reported among children, adolescents, and young adults who received treatment with TNF-blocking agents (initiation of therapy  $\leq$  18 years of age), of which CIMZIA is a member. Approximately half the cases were lymphomas, including Hodgkin's and non-Hodgkin's lymphoma. The other cases represented a variety of different malignancies and included rare malignancies usually associated with immunosuppression and malignancies that are not usually observed in children and adolescents. The malignancies occurred after a median of 30 months of therapy (range 1 to 84 months). Most of the patients were receiving concomitant immunosuppressants. These cases were reported post-marketing and are derived from a variety of sources including registries and spontaneous post-marketing reports. CIMZIA is not indicated for use in pediatric patients.

In the controlled portions of clinical trials of all the TNF blockers, more cases of lymphoma have been observed among patients receiving TNF blockers compared to control patients. In controlled studies of CIMZIA for Crohn's disease and other investigational uses, there was one case of lymphoma among 2,657 Cimzia-treated patients and one case of Hodgkin's lymphoma among 1,319 placebo-treated patients.

In the CIMZIA RA clinical trials (placebo-controlled and open label) a total of three cases of lymphoma were observed among 2,367 patients. This is approximately 2-fold higher than expected in the general population. Patients with RA, particularly those with highly active disease, are at a higher risk for the development of lymphoma. In the CIMZIA PsO clinical trials (placebo-controlled and open label) there was one case of Hodgkin's lymphoma.

Rates in clinical studies for CIMZIA cannot be compared to the rates of clinical trials of other TNF blockers and may not predict the rates observed when CIMZIA is used in a broader patient population. Patients with Crohn's disease that require chronic exposure to immunosuppressant therapies may be at higher risk than the general population for the development of lymphoma, even in the absence of TNF blocker therapy [see *Adverse Reactions (6.1)*]. The potential role of TNF blocker therapy in the development of malignancies in adults is not known.

Postmarketing cases of hepatosplenic T-cell lymphoma (HSTCL), a rare type of T-cell lymphoma that has a very aggressive disease course and is usually fatal, have been reported in patients treated with TNF blockers, including CIMZIA. The majority of reported TNF blocker cases occurred in adolescent and young adult males with Crohn's disease or ulcerative colitis. Almost all of these patients had received treatment with the immunosuppressants azathioprine and/or 6-mercaptopurine (6-MP) concomitantly with a TNF blocker at or prior to diagnosis. It is uncertain whether the occurrence of HSTCL is related to use of a TNF blocker or a TNF blocker in combination with these other immunosuppressants. The potential risk of using a TNF blocker in combination with azathioprine or 6-MP should be carefully considered.

Cases of acute and chronic leukemia have been reported in association with post-marketing TNF-blocker use in RA and other indications. Even in the absence of TNF-blocker therapy, patients with RA













In clinical studies, a total of 1112 subjects with plaque psoriasis were treated with CIMZIA. Of these, 779 subjects were exposed for at least 12 months, 551 for 18 months, and 66 for 24 months.

Data from three placebo-controlled studies (Studies PS-1, PS-2, and PS-3) in 1020 subjects (mean age 46 years, 66% males, 94% white) were pooled to evaluate the safety of CIMZIA [see Clinical Studies (14)].

#### *Placebo-Controlled Period (Week 0-16)*

In the placebo-controlled period of Studies PS-1, PS-2 and PS-3 in the 400 mg group, adverse events occurred in 63.5% of subjects in the CIMZIA group compared to 61.8% of subjects in the placebo group. The rates of serious adverse events were 4.7% in the CIMZIA group and 4.5% in the placebo group. Table 2 summarizes the adverse reactions that occurred at a rate of at least 1% and at a higher rate in the CIMZIA group than in the placebo group.

**Table 2: Adverse Reactions Occurring in  $\geq 1\%$  of Subjects in the CIMZIA Group and More Frequently than in the Placebo Group in the Plaque Psoriasis Studies PS-1, PS-2, and PS-3.**

<b>Adverse Reactions</b>	<b>Cimzia 400 mg every other week n (%) N=342</b>	<b>Cimzia 200 mg<sup>5</sup> every other week n (%) N=350</b>	<b>Placebo n (%) N=157</b>
Upper respiratory tract infections <sup>1</sup>	75 (21.9)	68 (19.4)	33 (21.0)
Headache <sup>2</sup>	13 (3.8)	10 (2.9)	4 (2.5)
Injection site reactions <sup>3</sup>	11 (3.2)	6 (1.7)	1 (0.6)
Cough	11 (3.2)	4 (1.1)	3 (1.9)
Herpes infections <sup>4</sup>	5 (1.5)	5 (1.4)	2 (1.3)

1: Upper respiratory tract infection cluster includes upper respiratory tract infection, pharyngitis bacterial, pharyngitis streptococcal, upper respiratory tract infection bacterial, viral upper respiratory tract infection, viral pharyngitis, viral sinusitis, and nasopharyngitis.

2: Headache includes headache and tension headache.

3: Injection site reactions cluster includes injection site reaction, injection site erythema, injection site bruising, injection site discoloration, injection site pain, and injection site swelling.

4: Herpes infections cluster includes oral herpes, herpes dermatitis, herpes zoster, and herpes simplex.

5: Subjects received 400 mg of CIMZIA at Weeks 0, 2, and 4, followed by 200 mg every other week.

#### *Elevated Liver Enzymes*

Elevated liver enzymes were reported more frequently in the CIMZIA-treated subjects (4.3% in the 200 mg group and 2.3% in the 400 mg group) than in the placebo-treated subjects (2.5%). Of CIMZIA-treated subjects who had elevation of liver enzymes, two subjects were discontinued from the trial. In controlled Phase 3 studies of CIMZIA in adults with PsO with a controlled period duration ranging from 0 to 16 weeks, AST and/or ALT elevations  $\geq 5$  x ULN occurred in 0.9% of CIMZIA 200 mg or CIMZIA 400 mg arms and none in placebo arm.

#### *Psoriasis-Related Adverse Events*

In controlled clinical studies in psoriasis, change of plaque psoriasis into a different psoriasis sub-types (including erythrodermic, pustular and guttate), was observed in <1% of Cimzia treated subjects.

#### Adverse Reactions of Special Interest Across Indications

## Infections

The incidence of infections in controlled studies in Crohn's disease was 38% for CIMZIA-treated patients and 30% for placebo-treated patients. The infections consisted primarily of upper respiratory infections (20% for CIMZIA, 13% for placebo). The incidence of serious infections during the controlled clinical studies was 3% per patient-year for CIMZIA-treated patients and 1% for placebo-treated patients. Serious infections observed included bacterial and viral infections, pneumonia, and pyelonephritis.

The incidence of new cases of infections in controlled clinical studies in rheumatoid arthritis was 0.91 per patient-year for all CIMZIA-treated patients and 0.72 per patient-year for placebo-treated patients. The infections consisted primarily of upper respiratory tract infections, herpes infections, urinary tract infections, and lower respiratory tract infections. In the controlled rheumatoid arthritis studies, there were more new cases of serious infection adverse reactions in the CIMZIA treatment groups, compared to the placebo groups (0.06 per patient-year for all CIMZIA doses vs. 0.02 per patient-year for placebo). Rates of serious infections in the 200 mg every other week dose group were 0.06 per patient-year and in the 400 mg every 4 weeks dose group were 0.04 per patient-year. Serious infections included tuberculosis, pneumonia, cellulitis, and pyelonephritis. In the placebo group, no serious infection occurred in more than one subject. There is no evidence of increased risk of infections with continued exposure over time [*see Warnings and Precautions (5.1)*].

In controlled clinical studies in psoriasis, the incidence rates of infections were similar in the CIMZIA and placebo groups. The infections consisted primarily of upper respiratory tract infections and viral infections (including herpes infections). Serious adverse events of infection occurred in CIMZIA-treated patients during the placebo-controlled periods of the pivotal studies (pneumonia, abdominal abscess, and hematoma infection) and Phase 2 study (urinary tract infection, gastroenteritis, and disseminated tuberculosis).

## Tuberculosis and Opportunistic Infections

In completed and ongoing global clinical studies in all indications including 5,118 CIMZIA-treated patients, the overall rate of tuberculosis is approximately 0.61 per 100 patient-years across all indications.

The majority of cases occurred in countries with high endemic rates of TB. Reports include cases of disseminated (miliary, lymphatic, and peritoneal) as well as pulmonary TB. The median time to onset of TB for all patients exposed to CIMZIA across all indications was 345 days. In the studies with CIMZIA in RA, there were 36 cases of TB among 2,367 exposed patients, including some fatal cases. Rare cases of opportunistic infections have also been reported in these clinical trials. In Phase 2 and Phase 3 studies with CIMZIA in plaque psoriasis, there were 2 cases of TB among 1112 exposed patients [*see Warnings and Precautions (5.1)*].

## Malignancies

In clinical studies of CIMZIA, the overall incidence rate of malignancies was similar for CIMZIA-treated and control patients. For some TNF blockers, more cases of malignancies have been observed among patients receiving those TNF blockers compared to control patients [*see Warnings and Precautions (5.2)*].

## Heart Failure

In placebo-controlled and open-label studies, cases of new or worsening heart failure have been reported for CIMZIA-treated patients. The majority of these cases were mild to moderate and occurred during the first year of exposure [*see Warnings and Precautions (5.3)*].

## Hypersensitivity Reactions

The following symptoms that could be compatible with hypersensitivity reactions have been reported rarely following CIMZIA administration to patients: angioedema, allergic dermatitis, dizziness

(postural), dyspnea, hot flush, hypotension, injection site reactions, malaise, pyrexia, rash, serum sickness, and (vasovagal) syncope [see *Warnings and Precautions (5.4)*].

### Autoantibodies

In clinical studies in Crohn's disease, 4% of patients treated with CIMZIA and 2% of patients treated with placebo that had negative baseline ANA titers developed positive titers during the studies. One of the 1,564 Crohn's disease patients treated with CIMZIA developed symptoms of a lupus-like syndrome.

In clinical trials of TNF blockers, including CIMZIA, in patients with RA, some patients have developed ANA. Four patients out of 2,367 patients treated with CIMZIA in RA clinical studies developed clinical signs suggestive of a lupus-like syndrome. The impact of long-term treatment with CIMZIA on the development of autoimmune diseases is unknown [see *Warnings and Precautions (5.9)*].

## **6.2 Immunogenicity**

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. Additionally, 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 certolizumab pegol in the studies described below with the incidence of antibodies in other studies or to other products may be misleading.

Patients with Crohn's disease were tested at multiple time points for antibodies to certolizumab pegol during Studies CD1 and CD2. In patients continuously exposed to CIMZIA, the overall percentage of patients who were antibody positive to CIMZIA on at least one occasion was 8%; approximately 6% were neutralizing *in vitro*. No apparent correlation of antibody development to adverse events or efficacy was observed. Patients treated with concomitant immunosuppressants had a lower rate of antibody development than patients not taking immunosuppressants at baseline (3% and 11%, respectively). The following adverse events were reported in Crohn's disease patients who were antibody-positive (N = 100) at an incidence at least 3% higher compared to antibody-negative patients (N = 1,242): abdominal pain, arthralgia, edema peripheral, erythema nodosum, injection site erythema, injection site pain, pain in extremity, and upper respiratory tract infection.

In two long-term (up to 7 years of exposure), open-label Crohn's disease studies, overall 23% (207/903) of patients developed antibodies against certolizumab pegol on at least one occasion. Of the 207 patients who were antibody positive, 152 (73%) had a persistent reduction of drug plasma concentration, which represents 17% (152/903) of the study population. The data from these two studies do not suggest an association between the development of antibodies and adverse events.

The overall percentage of patients with antibodies to certolizumab pegol detectable on at least one occasion was 7% (105 of 1,509) in the rheumatoid arthritis placebo-controlled trials. Approximately one third (3%, 39 of 1,509) of these patients had antibodies with neutralizing activity *in vitro*. Patients treated with concomitant immunosuppressants (MTX) had a lower rate of antibody development than patients not taking immunosuppressants at baseline. Patients treated with concomitant immunosuppressant therapy (MTX) in RA-I, RA-II, RA-III had a lower rate of neutralizing antibody formation overall than patients treated with CIMZIA monotherapy in RA-IV (2% vs. 8%). Both the loading dose of 400 mg every other week at Weeks 0, 2 and 4 and concomitant use of MTX were associated with reduced immunogenicity.

Antibody formation was associated with lowered drug plasma concentration and reduced efficacy. In patients receiving the recommended CIMZIA dosage of 200 mg every other week with concomitant MTX, the ACR20 response was lower among antibody positive patients than among antibody-negative patients (Study RA-I, 48% versus 60%; Study RA-II 35% versus 59%, respectively). In Study RA-III, too few patients developed antibodies to allow for meaningful analysis of ACR20 response by antibody status. In Study RA-IV (monotherapy), the ACR20 response was 33% versus 56%,



antibody-positive versus antibody-negative status, respectively [see *Clinical Pharmacology (12.3)*]. No association was seen between antibody development and the development of adverse events.

Approximately 8 % (22/265) and 19% (54/281) of subjects with psoriasis who received CIMZIA 400 mg every 2 weeks and CIMZIA 200 mg every 2 weeks for 48 weeks, respectively, developed antibodies to certolizumab pegol. Of the subjects who developed antibodies to certolizumab pegol, 45% (27/60) had antibodies that were classified as neutralizing. Antibody formation was associated with lowered drug plasma concentration and reduced efficacy.

A more sensitive and drug tolerant electrochemiluminescence (ECL)-based bridging assay was used for the first time in the nr-axSpA-1 study, resulting in a greater proportion of samples having measurable antibodies to certolizumab pegol and thus a greater incidence of patients being classed as antibody positive. In the placebo-controlled trial in patients with non-radiographic axial spondyloarthritis, after up to 52 weeks of treatment, the overall incidence of patients who were antibody positive to certolizumab pegol was 97% (248/255 patients). Of these antibody positive patients, higher titers were associated with reduced certolizumab pegol plasma levels.

The data above reflect the percentage of patients whose test results were considered positive for antibodies to certolizumab pegol in an ELISA or ECL-based bridging assay, and are highly dependent on the sensitivity and specificity of the assay.

### **6.3 Postmarketing Experience**

The following adverse reactions have been identified during post-approval use of CIMZIA. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to estimate reliably their frequency or establish a causal relationship to drug exposure.

*Vascular disorder:* systemic vasculitis has been identified during post-approval use of TNF blockers.

*Skin:* case of severe skin reactions, including Stevens-Johnson syndrome, toxic epidermal necrolysis, erythema multiforme, new or worsening psoriasis (all sub-types including pustular and palmoplantar), and lichenoid skin reaction have been identified during post-approval use of TNF blockers.

*Immune System Disorders:* sarcoidosis

*Neoplasms benign, malignant and unspecified (including cysts and polyps):* Melanoma, Merkel cell carcinoma (neuroendocrine carcinoma of the skin) [see *Warnings and Precautions (5.2)*].

## **7 DRUG INTERACTIONS**

### **7.1 Use with Anakinra, Abatacept, Rituximab, and Natalizumab**

An increased risk of serious infections has been seen in clinical studies of other TNF-blocking agents used in combination with anakinra or abatacept, with no added benefit. Formal drug interaction studies have not been performed with rituximab or natalizumab. Because of the nature of the adverse events seen with these combinations with TNF blocker therapy, similar toxicities may also result from the use of CIMZIA in these combinations. There is not enough information to assess the safety and efficacy of such combination therapy. Therefore, the use of CIMZIA in combination with anakinra, abatacept, rituximab, or natalizumab is not recommended [see *Warnings and Precautions (5.8)*].

### **7.2 Live Vaccines**

Avoid use of live (including attenuated) vaccines concurrently with CIMZIA [see *Warnings and Precautions (5.10)*].

### 7.3 Laboratory Tests

Interference with certain coagulation assays has been detected in patients treated with CIMZIA. Certolizumab pegol may cause erroneously elevated activated partial thromboplastin time (aPTT) assay results in patients without coagulation abnormalities. This effect has been observed with the PTT-Lupus Anticoagulant (LA) test and Standard Target Activated Partial Thromboplastin time (STA-PTT) Automate tests from Diagnostica Stago, and the HemosIL APTT-SP liquid and HemosIL lyophilized silica tests from Instrumentation Laboratories. Other aPTT assays may be affected as well. Interference with thrombin time (TT) and prothrombin time (PT) assays has not been observed. There is no evidence that CIMZIA therapy has an effect on *in vivo* coagulation.

## 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 CIMZIA during pregnancy. For more information, healthcare providers or patients can contact:

MotherToBaby Pregnancy Studies conducted by the Organization of Teratology Information Specialists (OTIS). The OTIS AutoImmune Diseases Study at 1-877-311-8972 or visit <http://mothertobaby.org/pregnancy-studies/>

#### Risk Summary

Limited data from the ongoing pregnancy registry on use of CIMZIA in pregnant women are not sufficient to inform a risk of major birth defects or other adverse pregnancy outcomes. However, certolizumab pegol plasma concentrations obtained from two studies of CIMZIA use during the third trimester of pregnancy demonstrated that placental transfer of certolizumab pegol was negligible in most infants at birth, and low in other infants at birth (*see Data*). There are risks to the mother and fetus associated with active rheumatoid arthritis or Crohn's disease. The theoretical risks of administration of live or live-attenuated vaccines to the infants exposed *in utero* to CIMZIA should be weighed against the benefits of vaccinations (*see Clinical Considerations*). No adverse developmental effects were observed in animal reproduction studies during which pregnant rats were administered intravenously a rodent anti-murine TNF $\alpha$  pegylated Fab' fragment (cTN3 PF) similar to certolizumab pegol during organogenesis at up to 2.4 times the recommended human dose of 400 mg every four weeks.

The estimated background risk of major birth defects and miscarriage for the indicated population(s) are unknown. All pregnancies have a background risk of birth defect, loss, or other adverse outcomes. In the U.S. general population, the estimated background risks of major birth defects and miscarriage in clinically recognized pregnancies are 2 to 4% and 15 to 20%, respectively.

#### Clinical Considerations

##### *Disease-Associated Maternal and/or Embryo/Fetal Risk*

Published data suggest that the risk of adverse pregnancy outcomes in women with rheumatoid arthritis or Crohn's disease is correlated with maternal disease activity and that active disease increases the risk of adverse pregnancy outcomes, including fetal loss, preterm delivery (before 37 weeks of gestation), low birth weight (less than 2500 g) and small for gestational age birth.

##### *Fetal/Neonatal Adverse Reactions*

Due to its inhibition of TNF $\alpha$ , CIMZIA administered during pregnancy could affect immune responses in the *in utero*-exposed newborn and infant. The clinical significance of BLQ or low levels is unknown for *in utero*-exposed infants. Additional data available from one exposed infant suggest that CIMZIA may be eliminated at a slower rate in infants than in adults (*see Data*). The safety of administering live or live-attenuated vaccines in exposed infants is unknown.

























Patients with enthesitis at baseline were evaluated for mean improvement in Leeds Enthesitis Index (LEI). CIMZIA-treated patients receiving either 200 mg every 2 weeks or 400 mg every 4 weeks showed a reduction in enthesitis of 1.8 and 1.7, respectively as compared with a reduction in placebo-treated patients of 0.9 at week 12. Similar results were observed for this endpoint at week 24. Treatment with CIMZIA resulted in improvement in skin manifestations in patients with PsA.

**Table 8: ACR Responses in Study PsA001 (Percent of Patients)**

Response <sup>(c)</sup>			
	Placebo N=136	CIMZIA <sup>(a)</sup> 200 mg Q2W N=138	CIMZIA <sup>(b)</sup> 400 mg Q4W N=135
<b>ACR20</b>			
Week 12	24%	58%	52%
Week 24	24%	64%	56%
<b>ACR50</b>			
Week 12	11%	36%	33%
Week 24	13%	44%	40%
<b>ACR70</b>			
Week 12	3%	25%	13%
Week 24	4%	28%	24%

<sup>(a)</sup> CIMZIA administered every 2 weeks preceded by a loading dose of 400 mg at Weeks 0, 2 and 4

<sup>(b)</sup> CIMZIA administered every 4 weeks preceded by a loading dose of 400 mg at Weeks 0, 2 and 4

<sup>(c)</sup> Results are from the randomized set. Non-responder Imputation (NRI) is used for patients who escaped therapy or had missing data.

**Table 9: Components of ACR Response in Study PsA001**

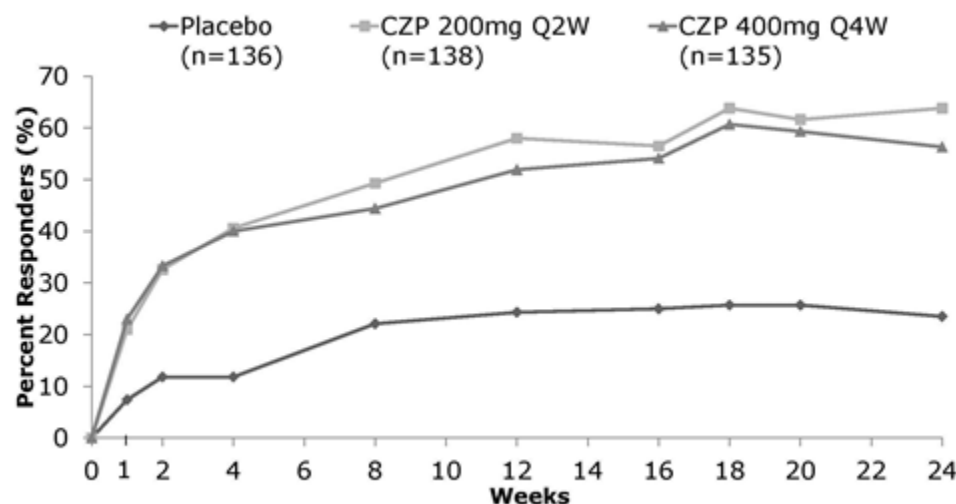
Parameter	Placebo <sup>(c)</sup> N=136		CIMZIA <sup>(a)</sup> 200 mg Q2W N=138		CIMZIA <sup>(b)</sup> 400 mg Q4W N=135	
	Baseline	Week 12	Baseline	Week 12	Baseline	Week 12
<b>Number of tender joints (0-68)<sup>(d)</sup></b>	20	17	22	11	20	11
<b>Number of swollen joints (0-66)<sup>(d)</sup></b>	10	9	11	4	11	5
<b>Physician global assessment<sup>(d, e)</sup></b>	59	44	57	25	58	29
<b>Patient global assessment<sup>(d, e)</sup></b>	57	50	60	33	60	40
<b>Pain<sup>(d, f)</sup></b>	60	50	60	33	61	39

<b>Disability index (HAQ)<sup>(d, g)</sup></b>	1.30	1.15	1.33	0.87	1.29	0.90
<b>CRP (mg/L)</b>	18.56	14.75	15.36	5.67	13.71	6.34

- (a) CIMZIA administered every 2 weeks preceded by a loading dose of 400 mg at Weeks 0, 2 and 4  
 (b) CIMZIA administered every 4 weeks preceded by a loading dose of 400 mg at Weeks 0, 2 and 4  
 (c) Results are from the entire placebo group  
 (d) Last Observation Carried Forward is used for missing data, early withdrawals or placebo escape  
 (e) Patient and Physician Global Assessment of Disease Activity, VAS 0=best 100= worst  
 (f) The Patient Assessment of Arthritis Pain, VAS 0=no pain and 100= most severe pain  
 (g) The HAQ-DI, 4 point scale 0=without difficulty and 3=unable to do  
 All values presented represent the mean  
 Results are from the randomized set (either with imputation or observed case)

The percent of patients achieving ACR20 responses by visit for PsA001 is shown in Figure 2.

**Figure 2: Study PsA001-ACR20 Response Over 24 Weeks\***



Randomized Set. Non-responder imputation used for patients with missing data or those who escaped therapy.  
 \*The same patients may not have responded at each time point.

### Radiographic Response

In study PsA001, inhibition of progression of structural damage was assessed radiographically and expressed as the change in modified total Sharp score (mTSS) and its components, the Erosion Score (ES) and Joint Space Narrowing score (JSN) at week 24, compared to baseline. The mTSS score was modified for psoriatic arthritis by addition of hand distal interphalangeal (DIP) joints.

Patients treated with CIMZIA 200 mg every other week demonstrated greater reduction in radiographic progression compared with placebo-treated patients at Week 24 as measured by change from baseline in total modified mTSS Score (estimated mean score was 0.18 in the placebo group compared with -0.02 in the CIMZIA 200 mg group; 95% CI for the difference was (-0.38, -0.04)). Patients treated

with CIMZIA 400 mg every four weeks did not demonstrate greater inhibition of radiographic progression compared with placebo-treated patients at Week 24.

#### Physical Function Response

In Study PsA001, CIMZIA-treated patients showed improvement in physical function as assessed by the Health Assessment Questionnaire – Disability Index (HAQ-DI) at Week 24 as compared to placebo (estimated mean change from baseline was 0.19 in the placebo group compared with 0.54 in the CIMZIA 200 mg group; 95% CI for the difference was (-0.47, -0.22) and 0.46 in the CIMZIA 400 mg group; 95% CI for the difference was (-0.39, -0.14)).

### **14.4 Ankylosing Spondylitis**

The efficacy and safety of CIMZIA were assessed in one multicenter, randomized, double-blind, placebo-controlled study (AS-1) in 325 patients  $\geq 18$  years of age with adult-onset active axial spondyloarthritis for at least 3 months. The majority of patients in the study had active AS.

Patients had active disease as defined by the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI)  $\geq 4$ , and spinal pain  $\geq 4$  on a 0 to 10 Numerical Rating Scale (NRS). Patients must have been intolerant to or had an inadequate response to at least one NSAID. Patients were treated with a loading dose of CIMZIA 400 mg at Weeks 0, 2 and 4 (for both treatment arms) or placebo followed by either 200 mg of CIMZIA every 2 weeks or 400 mg of CIMZIA every 4 weeks or placebo. Concomitant NSAIDs were received by 91% of the AS patients. The primary efficacy variable was the proportion of patients achieving an ASAS20 response at Week 12.

#### Clinical Response

In study AS-1, at Week 12, a greater proportion of AS patients treated with CIMZIA 200 mg every 2 weeks or 400 mg every 4 weeks achieved ASAS 20 response compared to AS patients treated with placebo (Table 10). Responses were similar in patients receiving CIMZIA 200 mg every 2 weeks and CIMZIA 400 mg every 4 weeks. The results of the components of the ASAS response criteria and other measures of disease activity are shown in Table 11.

**Table 10: ASAS Responses in AS patients at Weeks 12 and 24 in study AS-1**

<b>Parameters</b>	<b>Placebo N=57</b>	<b>CIMZIA<sup>(a)</sup> 200 mg every 2 weeks N=65</b>	<b>CIMZIA<sup>(b)</sup> 400 mg every 4 weeks N=56</b>
<b>ASAS20</b>			
Week 12	37%	57%	64%
Week 24	33%	68%	70%
<b>ASAS40</b>			
Week 12	19%	40%	50%
Week 24	16%	48%	59%

<sup>(a)</sup>CIMZIA administered every 2 weeks preceded by a loading dose of 400 mg at Weeks 0, 2 and 4

<sup>(b)</sup>CIMZIA administered every 4 weeks preceded by a loading dose of 400 mg at Weeks 0, 2 and 4

All percents reflect the proportion of patients who responded in the full analysis set



**Table 11: Components of the ASAS response criteria and other measures of disease activity in AS patients at baseline and Week 12 in study AS-1**

	Placebo N=57		CIMZIA <sup>(a)</sup> 200 mg every 2 weeks N=65		CIMZIA <sup>(b)</sup> 400 mg every 4 weeks N=56	
	Baseline	Week 12	Baseline	Week 12	Baseline	Week 12
ASAS20 response criteria						
-Patient Global Assessment (0-10)	6.9	5.6	7.3	4.2	6.8	3.8
-Total spinal pain (0-10)	7.3	5.8	7.0	4.3	6.9	4.0
-BASFI (0-10) <sup>(c)</sup>	6.0	5.2	5.6	3.8	5.7	3.8
-Inflammation (0-10)	6.7	5.5	6.7	3.8	6.4	3.4
BASDAI (0-10) <sup>(d)</sup>	6.4	5.4	6.5	4.0	6.2	3.7
BASMI <sup>(e)</sup>	4.8	4.4	4.2	3.6	4.3	3.9

<sup>(a)</sup>CIMZIA administered every 2 weeks preceded by a loading dose of 400 mg at Weeks 0, 2 and 4

<sup>(b)</sup>CIMZIA administered every 4 weeks preceded by a loading dose of 400 mg at Weeks 0, 2 and 4

<sup>(c)</sup>BASFI is Bath Ankylosing Spondylitis Functional Index

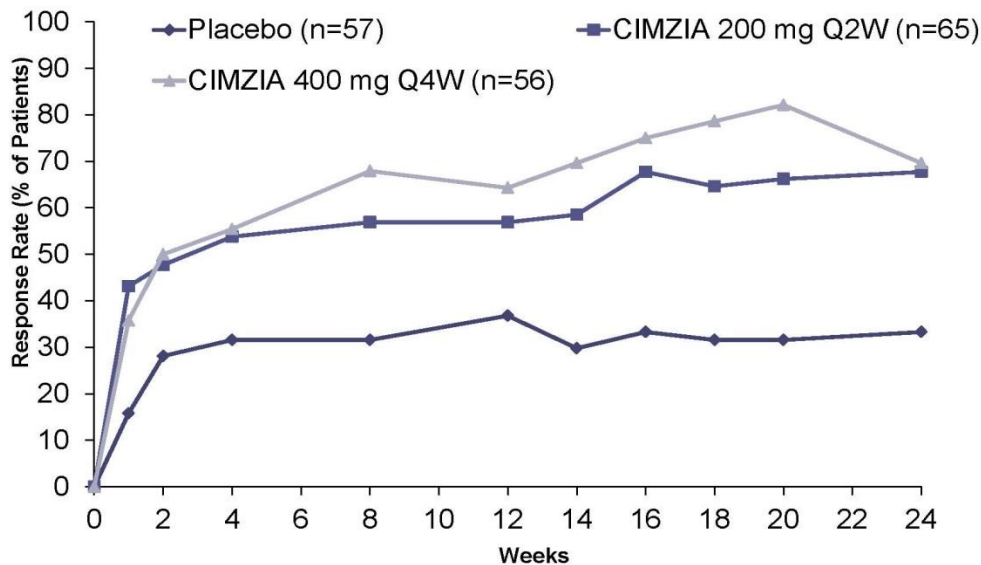
<sup>(d)</sup>BASDAI is Bath Ankylosing Spondylitis Disease Activity Index

<sup>(e)</sup>BASMI is Bath Ankylosing Spondylitis Metrology Index

All values presented represent the mean in the full analysis set

The percent of AS patients achieving ASAS20 responses by visit for Study AS001 is shown in Figure 3. Among patients receiving CIMZIA, clinical responses were seen in some AS patients within one to two weeks after initiation of therapy.

**Figure 3: Study AS-1: ASAS20 response over 24 weeks in AS patients \***



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

## 14.5 Non-radiographic Axial Spondyloarthritis

The efficacy and safety of CIMZIA were assessed in a multicenter, randomized, double-blind, placebo-controlled study (nr-axSpA-1) (NCT02552212) in 317 subjects  $\geq 18$  years of age with adult-onset active axial spondyloarthritis for at least 12 months. Patients must have had objective signs of inflammation indicated by C-reactive protein (CRP) levels above the upper limit of normal and/or sacroiliitis on magnetic resonance imaging (MRI), indicative of inflammatory disease [positive CRP ( $>$  ULN) and/or positive MRI], but without definitive radiographic evidence of structural damage on sacroiliac joints.

Patients had active disease as defined by the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI)  $\geq 4$ , and spinal pain  $\geq 4$  on a 0 to 10 Numerical Rating Scale (NRS). Patients must have been intolerant to or had an inadequate response to at least two NSAIDs. Patients were treated with a loading dose of CIMZIA 400 mg at Weeks 0, 2 and 4 or placebo followed by 200 mg of CIMZIA every 2 weeks or placebo. Utilization and dose adjustment of concomitant medications (including NSAIDs, DMARDs, corticosteroids, opioids) were permitted at any time. Patients were allowed to transition to use of open-label CIMZIA at any time at the discretion of the investigator. However, no patients transitioned before Week 12. The primary endpoint was the proportion of patients achieving an Ankylosing Spondylitis Disease Activity Score-Major Improvement (ASDAS-MI) response at Week 52. The ASDAS is a composite weighted scoring system that assesses disease activity, including patient-reported outcomes and CRP levels. A response in ASDAS-Major Improvement (MI) is indicated by a change from baseline of  $\geq 2.0$  in the ASDAS and/or reaching the lowest possible ASDAS value.

### Clinical Response

In study nr-axSpA-1, at Week 52, a greater proportion of nr-axSpA patients treated with CIMZIA had ASDAS-MI response compared to patients treated with placebo. At both Weeks 12 and 52, ASAS40 responses were greater for patients treated with CIMZIA compared to patients treated with placebo (Table 12). The components of the ASDAS-MI and ASAS response criteria are shown in Table 13.

**Table 12: Clinical Responses in nr-axSpA patients at Weeks 12 and 52 in study nr-axSpA-1**

Parameters	Placebo N=158	CIMZIA <sup>(a)</sup> 200 mg every 2 weeks N=159	CIMZIA 200 mg versus Placebo Odds ratio (95% CI)
<b>ASDAS-MI</b>			
Week 52	7%	47%	15.2 (7.3, 31.6)
<b>ASAS-40</b>			
Week 12	11%	48%	7.4 (4.1, 13.4)
Week 52	16%	57%	7.4 (4.3, 12.6)

<sup>(a)</sup>CIMZIA administered every 2 weeks preceded by a loading dose of 400 mg at Weeks 0, 2, and 4

All percents reflect the proportion of patients who were responders and remained in the study and on randomized treatment in the full analysis set. Patients who initiated open-label CIMZIA, or discontinued randomized treatment and remained in the study, or were missing Week 52 visit data were imputed as non-responders.

**Table 13: Components of the ASDAS-MI and ASAS response criteria and other measures of disease activity in nr-axSpA patients at baseline, and at Week 12 in study nr-axSpA-1**

	Placebo N=158		CIMZIA <sup>(a)</sup> 200 mg every 2 weeks N=159	
	Baseline (SD)	Week 12 (SD)	Baseline (SD)	Week 12 (SD)
Total Spinal Pain (0-10)	6.9 (1.8)	6.0 (2.3)	7.0 (1.9)	3.9 (2.6)
Patient Global Assessment of Disease Activity (0-10)	6.7 (2.0)	5.9 (2.4)	6.8 (1.9)	3.8 (2.6)
C-Reactive Protein (mg/L)	15.8 (17.7)	13.2 (17.2)	15.8 (17.8)	6.7 (15.1)
BASDAI (0-10) <sup>(b)</sup>	6.8 (1.3)	5.7 (2.1)	6.9 (1.4)	3.9 (2.2)
- Back Pain	7.4 (1.3)	6.2 (2.1)	7.4 (1.4)	4.1 (2.5)
- Peripheral pain and swelling (0-10)	6.2 (2.2)	5.3 (2.5)	6.3 (2.3)	3.7 (2.4)
- Inflammation <sup>(c)</sup>	6.7 (1.8)	5.5 (2.4)	6.9 (1.8)	3.6 (2.4)
BASFI (0-10) <sup>(d)</sup>	5.4 (2.2)	4.9 (2.4)	5.4 (2.1)	3.2 (2.3)
BASMI <sup>(e)</sup>	2.8 (1.4)	2.7 (1.4)	3.0 (1.3)	2.6 (1.4)

<sup>(a)</sup>CIMZIA administered every 2 weeks preceded by a loading dose of 400 mg at Weeks 0, 2, and 4

<sup>(b)</sup>BASDAI is Bath Ankylosing Spondylitis Disease Activity Index

<sup>(c)</sup>The average of BASDAI question 5 and 6 concerning morning stiffness intensity and duration.

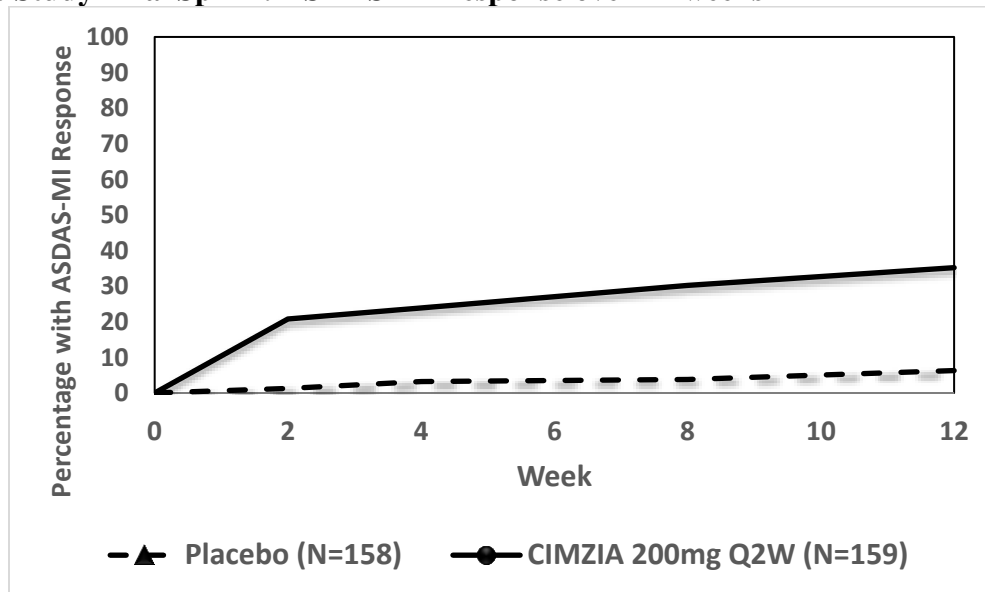
<sup>(d)</sup>BASFI is Bath Ankylosing Spondylitis Functional Index

<sup>(e)</sup>BASMI is Bath Ankylosing Spondylitis Metrology Index

Mean and standard deviation in parenthesis were presented based on full analysis set.

The percentage of nr-axSpA patients achieving ASDAS-MI response by visit for study nr-axSpA-1 is shown in Figure 4.

**Figure 4: Study nr-axSpA-1: ASDAS-MI response over 12 weeks \***



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

In study AS-1, at Week 12, patients with nr-axSpA treated with CIMZIA 200 mg every 2 weeks and CIMZIA 400 mg every 4 weeks had an ASAS 20 response of 42% and 47%, respectively, compared to 20% of patients treated with placebo. The ASAS 40 response in patients treated with CIMZIA 200 mg every 2 weeks and 400 mg every 4 weeks was 30% and 37%, respectively, compared to 11% of patients treated with placebo at Week 12 (*see Section 14.4*).

#### Other Health Related Outcomes

In study nr-axSpA-1, at Week 12, patients treated with CIMZIA achieved significantly greater improvement from baseline in the Ankylosing Spondylitis Quality of Life Questionnaire (ASQoL) score compared to patients treated with placebo.

### **14.6 Plaque Psoriasis**

Three multicenter, randomized, double-blind studies (Study PS-1 [NCT02326298], Study PS-2 [NCT02326272], and Study PS-3 [NCT02346240]) enrolled subjects 18 years of age or older with moderate-to-severe plaque psoriasis who were eligible for systemic therapy or phototherapy. Subjects had a Physician Global Assessment (PGA) of  $\geq 3$  (“moderate”) on a 5-category scale of overall disease severity, a Psoriasis Area and Severity Index (PASI) score  $\geq 12$ , and body surface area (BSA) involvement of  $\geq 10\%$ .

Studies PS-1 (234 subjects) and PS-2 (227 subjects) randomized subjects to placebo, CIMZIA 200 mg every other week (following a loading dose of CIMZIA 400 mg at Weeks 0, 2, and 4), or CIMZIA 400 mg every other week. Studies PS-1 and PS-2 assessed the co-primary endpoints of the proportion of patients who achieved a PASI 75 and PGA of “clear” or “almost clear” with at least a 2-point improvement at Week 16. Other evaluated outcomes were PASI 90 at Week 16 and maintenance of efficacy to Week 48.

Study PS-3 randomized 559 subjects to receive placebo, CIMZIA 200 mg every other week (following a loading dose of CIMZIA 400 mg at Weeks 0, 2, and 4), CIMZIA 400 mg every other week up to Week 16, or a biologic comparator (up to Week 12). Study PS-3 assessed the proportion of patients who achieved a PASI 75 at Week 12 as the primary endpoint. Other evaluated outcomes were PGA of “clear” or “almost clear” at Week 16, PASI 75 at Week 16, PASI 90 at Week 16, and maintenance of efficacy to Week 48.

Of the 850 subjects randomized to receive placebo or CIMZIA in these placebo-controlled studies, 29% of patients were naïve to prior systemic therapy for the treatment of psoriasis, 47% had received prior phototherapy or chemophototherapy, and 30% had received prior biologic therapy for the treatment of psoriasis. Of the 850 subjects, 14% had received at least one TNF alpha agent and 16% had received an anti-IL agent. Eighteen percent of subjects reported a history of psoriatic arthritis at baseline.

Across all studies and treatment groups, the mean PASI score at baseline was 20 and ranged from 12 to 69. The baseline PGA score ranged from moderate (70%) to severe (30%). Mean baseline BSA was 25% and ranged from 10% to 96%. Subjects were predominantly men (64%) and White (94%), with a mean age of 46 years.

#### Clinical Response

Table 15 presents the efficacy results of PS-1, PS-2, and PS-3 at Week 16.

**Table 15: Efficacy Results at Week 16 in Adults with Plaque Psoriasis in PS-1, PS-2, and PS-3 [MI<sup>(a)</sup>]**

	Study PS-1			Study PS-2			Study PS-3 <sup>(e)</sup>		
	Placebo (N=51)	CIMZIA 200mg <sup>(c)</sup> Q2W (N=95)	CIMZIA 400mg Q2W (N=88)	Placebo (N=49)	CIMZIA 200mg Q2W (N=91)	CIMZIA 400mg Q2W (N=87)	Placebo (N=57)	CIMZIA 200mg Q2W (N=165)	CIMZIA 400mg Q2W (N=167)
PGA of 0 or 1 <sup>(b, d)</sup>	4%	45%	55%	3%	61%	65%	4%	52%	62%
PASI 75 <sup>(b)</sup>	7%	65%	75%	13%	81%	82%	4%	69%	75%
PASI 90	0%	36%	44%	5%	50%	52%	0%	40%	49%

<sup>(a)</sup> Missing data was imputed using multiple imputation based on the MCMC method.

<sup>(b)</sup> The co-primary efficacy endpoints at Week 16 in PS-1 and PS-2.

<sup>(c)</sup> Subjects received 400 mg of CIMZIA at Weeks 0, 2, and 4, followed by 200 mg every other week.

<sup>(d)</sup> PGA score of 0 (clear) or 1 (almost clear).

<sup>(e)</sup> The primary endpoint in PS-3 was PASI 75 at Week 12.

Examination of age, gender, prior use of biologics, and prior use of systemic therapies did not identify difference in response to CIMZIA among these subgroups.

Based on a post-hoc subgroup analysis in subjects with moderate-to-severe psoriasis, stratified by  $\leq 90$  kg or  $>90$  kg, subjects with both lower body weight and lower disease severity may achieve an acceptable response with CIMZIA 200 mg.

### Maintenance of Response

In PS-1 and PS-2, among subjects who were PASI 75 responders at Week 16 and received CIMZIA 400 mg every other week, the PASI 75 response rates at Week 48 were 94% and 81%, respectively. In subjects who were PASI 75 responders at Week 16 and received CIMZIA 200 mg every other week, the PASI 75 response rates at Week 48 were 81% and 74%, respectively.

In PS-1 and PS-2, among subjects who were PGA clear or almost clear responders at Week 16 and received CIMZIA 400 mg every other week, the PGA response rates at Week 48 were 79% and 73%, respectively. In subjects who were PGA clear or almost clear responders at Week 16 and received CIMZIA 200 mg every other week, the PGA response rates at Week 48 were 79% and 76%, respectively.

In PS-3 study, subjects who achieved a PASI 75 response at Week 16 were re-randomized to either continue treatment with CIMZIA or be withdrawn from therapy (i.e., receive placebo). At Week 48, 98% of subjects who continued on CIMZIA 400 mg every other week were PASI 75 responders as compared to 36% of subjects who were re-randomized to placebo. Among PASI 75 responders at Week 16 who received CIMZIA 200 mg every other week and were re-randomized to either CIMZIA 200 mg every other week or placebo, there was also a higher percentage of PASI 75 responders at Week 48 in the CIMZIA group as compared to placebo (80% and 46%, respectively).

## **16 HOW SUPPLIED/STORAGE AND HANDLING**

### Storage and Stability

Refrigerate carton between 2 to 8 °C (36 to 46 °F). Do not freeze. Do not separate contents of carton prior to use. Do not use beyond expiration date, which is located on the drug label and carton. Protect solution from light.

Unopened CIMZIA vials may also be stored at room temperature up to a maximum of 25°C (77°F) for 6 months, but not exceeding the original expiration date. If stored at room temperature, do not place back in refrigerator and write the new expiration date on the carton in the space provided.

Lyophilized Powder for Reconstitution:

NDC 50474-700-62

CIMZIA (certolizumab pegol) for injection is supplied as a sterile white, lyophilized powder in a single-dose vial for subcutaneous use.

*Pack Content*

<u>Qty.</u>	<u>Item</u>
2	Type I glass vials with rubber stopper and overseals each containing 200 mg of lyophilized CIMZIA for reconstitution.
2	2 mL Type I glass vials containing 1 mL sterile Water for Injection
2	3 mL plastic syringes
4	20 gauge needles (1 inch)
2	23 gauge needles (1 inch)
8	Alcohol swabs

Prefilled Syringe

NDC 50474-710-79

CIMZIA (certolizumab pegol) injection is supplied as a sterile, clear to opalescent, colorless to pale yellow solution in a single-dose prefilled syringe for subcutaneous use.

2 alcohol swabs and 2 single-dose prefilled glass syringes with a fixed 25 ½ gauge thin-wall needle, each containing 200 mg (1 mL) of CIMZIA. The needle shield inside the removable cap of the CIMZIA prefilled syringe contains a derivative of natural rubber latex which may cause allergic reactions and should be handled with caution by latex-sensitive individuals [*see Warnings and Precautions (5.4)*].

Prefilled Syringe Starter Kit

NDC 50474-710-81

6 alcohol swabs and 6 single dose prefilled glass syringes with a fixed 25 ½ gauge thin-wall needle. The Starter Kit contains 3 sets of 2 prefilled syringes to provide sufficient drug supply for the initial 3 induction doses at the start of treatment. Each prefilled syringe contains 200 mg (1 mL) of CIMZIA.

When necessary, CIMZIA prefilled syringes may be stored at room temperature up to 77 °F (25 °C) in the original carton to protect from light for a single period of up to 7 days. Once a CIMZIA prefilled syringe has been stored at room temperature, do not place back in refrigerator. Write the date removed from the refrigerator in the space provided on the carton and discard if not used within the 7-day period.

**17 PATIENT COUNSELING INFORMATION**

Advise the patient to read the FDA-approved patient labeling (Medication Guide and Instructions for Use)

Risk of Serious Infections

Inform patients that CIMZIA may lower the ability of the immune system to fight infections. Instruct patients of the importance of contacting their doctor if they develop any symptoms of infection, including tuberculosis and reactivation of hepatitis B virus infections.

Because caution should be exercised in prescribing CIMZIA to patients with clinically important active infections, advise patients of the importance of informing their health care providers about all aspects of their health [*see Warnings and Precautions (5.1, 5.5)*].

### Malignancies

Counsel patients about the possible risk of lymphoma and other malignancies while receiving CIMZIA [see *Warnings and Precautions* (5.2)].

### Other Medical Conditions

Advise patients to report any signs of new or worsening medical conditions such as heart disease, neurological disease, or autoimmune disorders [see *Warnings and Precautions* (5.3, 5.6, 5.9)]. Advise patients to report promptly any symptoms suggestive of a cytopenia such as bruising, bleeding, or persistent fever [see *Warnings and Precautions* (5.7)].

### Hypersensitivity Reactions

Advise patients to seek immediate medical attention if they experience any symptoms of severe hypersensitivity reactions. Advise latex-sensitive patients that the needle shield inside the removable cap of the CIMZIA prefilled syringe contains a derivative of natural rubber latex [see *Warnings and Precautions* (5.4)].

### Pregnancy

Advise patients that there is a pregnancy registry that monitors pregnancy outcomes in women exposed to CIMZIA during pregnancy, patients can call 1-877-311-8972 [see *Use in Specific Populations* 8.1].

### Preparation and Administration of CIMZIA Using the Prefilled Syringe

Instruct patients and caregivers on how to inject the Prefilled Syringe. Complete instructions are provided in the *Instructions for Use* packaged in each CIMZIA Prefilled Syringe kit.

- If refrigerated, remove the prefilled syringe from the carton and let it warm to room temperature.
- Inspect the liquid in the prefilled syringe. It should be clear and colorless to yellow and free from particulates. Discard the syringe if cloudy, discolored or contains particulates.
- Suitable sites for injection include the thigh or abdomen. Inject at least 1 inch from the previous site.
- Do not inject into areas where the skin is tender, bruised, red or hard, or where there are scars or stretch marks.

Instruct patients and caregivers in proper syringe and needle disposal technique.

- To avoid needle-stick injury, do not to place the needle cap back on the syringe or otherwise recap the needle.
- Properly dispose of needles and syringes in a puncture-proof container.
- Do not reuse the injection materials.

Manufactured by:  
UCB, Inc.  
1950 Lake Park Drive  
Smyrna, GA 30080  
US License No. 1736

**MEDICATION GUIDE**  
CIMZIA® (CIM-zee-uh)  
(certolizumab pegol)  
injection for subcutaneous use

**What is the most important information I should know about CIMZIA?**

**CIMZIA may cause serious side effects, including:**

- **CIMZIA is a prescription medicine called a Tumor Necrosis Factor (TNF) blocker** that can lower the ability of your immune system to fight infections. Some people who received CIMZIA have developed serious infections, including tuberculosis (TB) and infections caused by viruses, fungi, or bacteria that have spread throughout the body. Some of these serious infections have caused hospitalization and death.
  - Your healthcare provider should test you for TB before starting CIMZIA.
  - Your healthcare provider should monitor you closely for signs and symptoms of TB during treatment with CIMZIA.

**Before starting CIMZIA, tell your healthcare provider if you:**

- think you have an infection or have symptoms of an infection such as:
  - fever, sweat, or chills
  - cough
  - blood in phlegm
  - warm, red, or painful skin or sores on your body
  - burning when you urinate or urinate more often than normal
  - muscle aches
  - shortness of breath
  - weight loss
  - diarrhea or stomach pain
  - feeling very tired
- are being treated for an infection.
- get a lot of infections or have infections that keep coming back.
- have diabetes, HIV-1 or a weak immune system. People with these conditions have a higher chance for infections.
- have tuberculosis (TB), or have been in close contact with someone with TB.
- were born in, live, have lived, or traveled to certain countries where there is more risk for getting TB. Ask your healthcare provider if you are not sure.
- live, have lived, or traveled to certain parts of the country (such as the Ohio and Mississippi River valleys and the Southwest) where there is an increased risk for getting certain kinds of fungal infections (histoplasmosis, coccidioidomycosis, candidiasis, aspergillosis, blastomycosis, and pneumocystosis). These infections may develop or become more severe if you receive CIMZIA. Ask your healthcare provider if you do not know if you have lived in an area where these infections are common.
- have or have had hepatitis B.
- use the medicine Kineret (anakinra), Orencia® (abatacept), Rituxan® (rituximab), or Tysabri® (natalizumab).

**Stop using CIMZIA, and tell your healthcare provider right away** if you have any of the symptoms of an infection listed above.

- **Cancer.**
  - For people who receive TNF blockers, including CIMZIA, the chances of getting certain types of cancers may increase.
  - Some children, teenagers, and young adults who received TNF blockers, including CIMZIA, have developed lymphoma and other certain types of rare cancers, some of which have caused death. These cancers are not usually seen in this age group. **CIMZIA is not for use in children.**
  - People with inflammatory diseases including rheumatoid arthritis, psoriatic arthritis, or ankylosing spondylitis, especially those with very active disease, may be more likely to get lymphoma.
  - Some people who receive TNF blockers, including CIMZIA, have developed a rare type of cancer which may cause death, called hepatosplenic T-cell lymphoma. Most of these people were male teenagers and young adult males with Crohn's disease or ulcerative colitis. Also, most of these people had been treated with both a TNF blocker and another medicine called IMURAN® (azathioprine) or PURINETHOL® (6-mercaptopurine, 6-MP).
  - Some people who receive CIMZIA, have developed certain types of skin cancer. Tell your healthcare provider if you develop any changes in the appearance of your skin, including growths on your skin, during or after treatment with



CIMZIA. You should see your healthcare provider periodically during treatment for skin examinations, especially if you have a history of skin cancer.

### What is CIMZIA?

CIMZIA is a prescription medicine called a Tumor Necrosis Factor (TNF) blocker used in adults to:

- Lessen the signs and symptoms of moderately to severely active Crohn's disease (CD) in adults who have not been helped enough by usual treatments
- Treat moderately to severely active rheumatoid arthritis (RA)
- Treat active psoriatic arthritis (PsA)
- Treat active ankylosing spondylitis (AS)
- Treat active non-radiographic axial spondyloarthritis (nr-axSpA) with measures of inflammation
- Treat moderate to severe plaque psoriasis (PsO) in adults who may benefit from taking injections or pills (systemic therapy) or phototherapy (treatment using ultraviolet light alone or with pills)

It is not known if CIMZIA is safe and effective in children.

### Before receiving CIMZIA, tell your healthcare provider about all of your medical conditions, including if you:

- have an infection.
- have or have had lymphoma or any other type of cancer.
- have or had congestive heart failure.
- are allergic to rubber or latex. The plastic needle shield inside the removable cap of the prefilled syringe contains natural rubber.
- have or have had seizures, any numbness or tingling, or a disease that affects your nervous system such as multiple sclerosis or Guillain-Barre syndrome.
- have or had serious blood conditions.
- are scheduled to receive a vaccine. Do not receive a live vaccine while receiving CIMZIA.
- are allergic to certolizumab pegol or any of the ingredients in CIMZIA. See the end of this Medication Guide for a complete list of the ingredients in CIMZIA.
- are pregnant or plan to become pregnant. You and your doctor should decide if you should continue to take CIMZIA while you are pregnant. It is not known if CIMZIA will harm your unborn baby. **Pregnancy Registry:** If you become pregnant during treatment with CIMZIA, talk to your healthcare provider about registering in the pregnancy exposure registry for CIMZIA. You can enroll in this registry by calling 1-877-311-8972. The purpose of this registry is to collect information about the safety of CIMZIA during pregnancy.
- are breastfeeding or plan to breastfeed. Talk to your healthcare provider about the best way to feed your baby during treatment with CIMZIA.

**Tell your healthcare provider about all the medicines you take**, including prescription and over the counter medicines, vitamins and herbal supplements.

Know the medicines you take. Keep a list of them to show to your healthcare provider and pharmacist when you get a new medicine.

### How will I receive CIMZIA?

- CIMZIA comes as lyophilized powder or as a solution in a prefilled syringe for injection.
  - If your healthcare provider prescribes the CIMZIA powder, it should be injected by a healthcare provider. Each dose of CIMZIA will be given as 1 or 2 separate injections under the skin (subcutaneous injection) in your stomach area (abdomen) or upper thighs.
  - If your healthcare provider prescribes the CIMZIA prefilled syringe, you will be trained on how to inject CIMZIA.

- You will receive a **CIMZIA Prefilled Syringe Kit** including a complete **“Instructions for Use”** booklet for instructions on how to inject CIMZIA the right way.
- Read the detailed **“Instructions for Use”** for instructions about how to prepare and inject your dose of CIMZIA, and how to properly throw away used syringes containing the needle.
- Do not give yourself an injection of CIMZIA unless you have been shown by your healthcare provider. A family member or friend can also be trained to help you give your injection. Talk to your healthcare provider if you have questions.
- CIMZIA prefilled syringe is given as an injection under the skin (subcutaneous injection) in your stomach area (abdomen) or upper thighs. Your healthcare provider will tell you how much and how often to inject CIMZIA. Do not use more CIMZIA or inject more often than prescribed.
- You may need more than 1 injection at a time depending on your prescribed dose of CIMZIA. If you are prescribed more than 1 injection, each injection should be given at a different site in your stomach or upper thighs and at least 1 inch from your last injection.
- Make sure the solution in the CIMZIA prefilled syringe is clear and colorless to yellow and free from particles. **Do not use the CIMZIA prefilled syringe if the medicine is cloudy, discolored, or contains particles.**

### **What are the possible side effects of CIMZIA?**

**CIMZIA can cause serious side effects, including:**

- See **“What is the most important information I should know about CIMZIA?”**
- **Heart failure including new heart failure or worsening of heart failure you already have.** Symptoms include shortness of breath, swelling of your ankles or feet, or sudden weight gain.
- **Allergic reactions.** Get medical help right away if you have any signs of an allergic reaction which include a skin rash, swelling or itching of the face, tongue, lips, or throat, or trouble breathing.  
The plastic needle shield inside the removable cap of the prefilled syringe contains natural rubber and may cause an allergic reaction if you are sensitive to latex.
- **Hepatitis B virus reactivation in people who carry the virus in their blood.** In some cases, people who received CIMZIA have died because of the hepatitis B virus being reactivated. Your healthcare provider should monitor you carefully before and during treatment with CIMZIA to see if you carry the hepatitis B virus in your blood. Tell your healthcare provider if you have any of the following symptoms:
  - feel unwell
  - tiredness (fatigue)
  - pain on the right side of your stomach (abdomen)
  - skin or eyes look yellow
  - poor appetite or vomiting
- **New or worsening nervous system problems, such as multiple sclerosis (MS), Guillain-Barre syndrome, seizures, or inflammation of the nerves of the eyes.** Symptoms may include:
  - dizziness
  - problems with your vision
  - numbness or tingling
  - weakness in your arms or legs
- **Blood problems.** Your body may not make enough of the blood cells that help fight infections or help stop bleeding. Symptoms include a fever that does not go away, bruising or bleeding very easily, or looking very pale. Tell your healthcare provider right away if you have any bruising, bleeding or a fever that does not go away.
- **Immune reactions including a lupus-like syndrome.** Symptoms include shortness of breath, joint pain, or a rash on the cheeks or arms that worsens with sun exposure.

Call your healthcare provider right away if you have any serious side effects listed above.

**The most common side effects of CIMZIA include** upper respiratory infections (flu, cold), rash, urinary tract infections (bladder infections).

These are not all of the possible side effects of CIMZIA.

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 CIMZIA?**

- Keep CIMZIA in the refrigerator between 36°F to 46°F (2°C to 8°C).
- Do not freeze CIMZIA.
- Protect CIMZIA from light. Store CIMZIA in the carton it came in.
- Do not use CIMZIA if the medicine is expired. Check the expiration date on the prefilled syringe or carton.
- The CIMZIA prefilled syringe is made of glass. Do not drop or crush the syringe.

**Keep CIMZIA and all medicines out of the reach of children.**

**General information about the safe and effective use of CIMZIA.**

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use CIMZIA for a condition for which it was not prescribed. Do not give CIMZIA to other people, even if they have the same symptoms that you have. It may harm them. You can ask your pharmacist or healthcare provider for information about CIMZIA that is written for health professionals.

**What are the ingredients in CIMZIA?**

**CIMZIA lyophilized powder:**

**Active ingredient:** certolizumab pegol

**Inactive ingredients:** lactic acid, polysorbate, sucrose

CIMZIA lyophilized powder is mixed with sterile Water for Injection.

**CIMZIA prefilled syringe:**

**Active ingredient:** certolizumab pegol

**Inactive ingredients:** sodium acetate, sodium chloride, Water for Injection

CIMZIA has no preservatives.

Product manufactured by:

UCB, Inc. 1950 Lake Park Drive Smyrna, GA 30080

US License No. 1736

For more information, go to [www.CIMZIA.com](http://www.CIMZIA.com) or call 1-866-424-6942.

This Medication Guide has been approved by the U.S. Food and Drug Administration.

Revised: April 2020