-⑤ PEG 化セルトリズマブ(certolizmab pegol)

serious (5.1)

viral therapy (5.3)

patients receiving TNF blockers (5.4)

Cimzia® (certolizumab pegol)

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)

Lyophilized powder for solution for subcutaneous injection Initial U.S. Approval: 2008

WARNING: RISK OF SERIOUS INFECTIONS See full prescribing information for complete boxed warning.

Tuberculosis (TB), invasive fungal, and other opportunistic infections, some fatal, have occurred. Perform test for latent TB; if positive, start treatment for TB prior to starting CIMZIA. Monitor all patients for active TB during CIMZIA treatment, even if initial tuberculin skin test is negative (5.1, 5.2).

-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)
 - -DOSAGE AND ADMINISTRATION-
- 400 mg subcutaneously initially and at Weeks 2 and 4 (2.1)
- If response occurs, follow with 400 mg subcutaneously every four weeks (2.1)

-DOSAGE FORMS AND STRENGTHS--

200 mg lyophilized powder for reconstitution with 1 mL of sterile Water for Injection, USP (3)

-CONTRAINDICATIONS-----

None (4)

DRUG INTERACTIONS

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Mechanism of Action 12.2 **Pharmacodynamics**

12.3 **Pharmacokinetics**

NONCLINICAL TOXICOLOGY

Carcinogenesis, Mutagenesis, and Impairment of Fertility

---WARNINGS AND PRECAUTIONS---Serious infections - do not start CIMZIA during an active infection. If an

Hepatitis B virus reactivation - monitor HBV carriers during and several

Cases of lymphoma and other malignancies have been observed among

Demyelinating disease, exacerbation or new onset, may occur (5.6)

Cytopenias, pancytopenia - advise patients to seek immediate medical

attention if symptoms develop, and consider stopping CIMZIA (5.7)

-ADVERSE REACTIONS-

upper respiratory tract infection, urinary tract infection, and arthralgia (6.1)

The most common adverse reactions (incidence ≥5% and higher than placebo):

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-

See 17 for PATIENT COUNSELING INFORMATION and MEDICATION

Revised: 4/2008

Anakinra - increased risk of serious infections (5.8, 7.1)

Live vaccines - do not give with CIMZIA (5.11, 7.2) Laboratory tests – may interfere with aPTT tests (7.3)

Lupus-like syndrome - stop CIMZIA if syndrome develops (5.10)

Anaphylaxis or serious allergic reactions may occur (5.5)

Heart failure, worsening or new onset may occur (5.9)

months after therapy. If reactivation occurs, stop CIMZIA and begin anti-

infection develops, monitor carefully, and stop CIMZIA if infection becomes

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Cimzia® (certolizumab pegol)

FULL PRESCRIBING INFORMATION

WARNING: RISK OF SERIOUS INFECTIONS

Tuberculosis (frequently disseminated or extrapulmonary at clinical presentation), invasive fungal infections, and other opportunistic infections, have been observed in patients receiving CIMZIA. Some of these infections have been fatal. Anti-tuberculosis treatment of patients with latent tuberculosis infection reduces the risk of reactivation in patients receiving treatment with TNF blockers such as CIMZIA. However, active tuberculosis has developed in patients receiving CIMZIA whose tuberculin test was negative.

Evaluate patients for tuberculosis risk factors and test for latent tuberculosis infection prior to initiating CIMZIA and during therapy. Initiate treatment of latent tuberculosis infection prior to therapy with CIMZIA. Monitor patients receiving CIMZIA for signs and symptoms of active tuberculosis, including patients who tested negative for latent tuberculosis infection [see Warnings and Precautions (5.1, 5.2) and Adverse Reactions (6.1)].

1 INDICATIONS AND USAGE

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.

2 DOSAGE AND ADMINISTRATION

2.1 Recommended Dosing

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 Preparation Instructions

CIMZIA should be prepared by a health care professional.

CIMZIA is provided in a package that contains everything required to reconstitute and inject the drug as described below. CIMZIA should be brought to room temperature before reconstituting to facilitate dissolution.

Reconstitute two 200 mg vials of CIMZIA for each dose. Using appropriate aseptic technique, reconstitute each lyophilized vial of CIMZIA with 1 mL of sterile Water for Injection, USP, using a syringe with a 20 gauge needle. Gently swirl each vial of CIMZIA without shaking so that all of the lyophilized powder comes into contact with the sterile Water for Injection. Leave the vials undisturbed to fully reconstitute (this may take as long as 30 minutes). Reconstituted CIMZIA has a concentration of approximately 200 mg/mL.

Do not leave reconstituted CIMZIA at room temperature for more than 2 hours prior to administration. Once reconstituted, CIMZIA can be stored in the vials for up to 24 hours at 2 to 8 °C (36 to 46 °F) prior to injection. Do not freeze.

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2.3 Administration Instructions

CIMZIA should be administered by a health care professional.

Once reconstituted, CIMZIA is a clear to opalescent, colorless to pale yellow liquid with no visible particulates or gels in solution. Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. Reconstituted CIMZIA with obvious particulate matter or discoloration should be discarded.

Prior to injecting, reconstituted CIMZIA should be at room temperature. Using a new 20 gauge needle for each vial, withdraw the reconstituted solution into a separate syringe for each vial, resulting in two syringes each containing 1 mL of CIMZIA (200 mg). Switch each 20 gauge needle to a 23 gauge needle and inject the full contents of each syringe subcutaneously into separate sites on the abdomen or thigh.

3 DOSAGE FORMS AND STRENGTHS

CIMZIA is supplied as a sterile, white, lyophilized powder for reconstitution and then subcutaneous administration. Each single-use vial provides approximately 200 mg certolizumab pegol.

4 CONTRAINDICATIONS

None.

5 WARNINGS AND PRECAUTIONS

5.1 Serious Infections

Serious infections, sepsis, and cases of opportunistic infections, including fatalities, have been reported in patients receiving TNF blockers, including CIMZIA. Many of the serious infections reported have occurred in patients on concomitant immunosuppressive therapy that, in addition to their Crohn's disease, could predispose them to infections. In postmarketing experience with TNF blockers, infections have been observed with various pathogens including viral, bacterial, fungal, and protozoal organisms, and infections have been noted in all organ systems. Infections have been reported in patients receiving CIMZIA alone or in conjunction with immunosuppressive agents.

Do not initiate treatment with CIMZIA in patients with active infections, including chronic or localized infections. Monitor patients for signs and symptoms of infection while on and after treatment with CIMZIA. Patients who develop a new infection while undergoing treatment with CIMZIA should be monitored closely. Discontinue administration of CIMZIA if a patient develops a serious infection. Exercise caution when considering the use of CIMZIA in patients with a history of recurrent infection, concomitant immunosuppressive therapy, or underlying conditions that may predispose them to infections, or patients who have resided in regions where tuberculosis and histoplasmosis are endemic. The benefits and risks of CIMZIA

treatment should be carefully considered before initiation of CIMZIA therapy [see Adverse Reactions (6.1)].

5.2 Tuberculosis

As observed with other TNF blockers, tuberculosis associated with the administration of CIMZIA in clinical studies has been reported, including fatalities.

Before initiation of therapy with CIMZIA, evaluate patients for tuberculosis risk factors and test for latent tuberculosis infection. Initiate treatment of latent tuberculosis infections prior to therapy with CIMZIA. When tuberculin skin testing is performed for latent tuberculosis infection, an induration size of 5 mm or greater should be considered positive, even if vaccinated previously with Bacille Calmette-Guerin (BCG). If latent infection is diagnosed, institute appropriate prophylaxis in accordance with the current guidelines from the Centers for Disease Control and Prevention.

Consider the possibility of undetected latent tuberculosis, especially 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. All patients treated with CIMZIA should have a thorough history taken prior to initiating therapy. Some patients who have previously received treatment for latent or active tuberculosis have developed active tuberculosis while being treated with TNF blockers.

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. Anti-tuberculosis therapy prior to initiating CIMZIA should also be considered in patients who have several, or highly significant, risk factors for tuberculosis infection and have a negative test for latent tuberculosis, but the decision to initiate anti-tuberculosis therapy in the patients should only be made after taking into account both the risk for latent tuberculosis infection and the risks of anti-tuberculosis therapy. If necessary, consult a physician with experience in the treatment of tuberculosis.

Monitor patients receiving CIMZIA for signs and symptoms of active tuberculosis, particularly because tests for latent tuberculosis infection may be falsely negative. Instruct patients to seek medical advice if signs/symptoms (e.g., persistent cough, wasting, weight loss, low grade fever) suggestive of a tuberculosis infection occur.

5.3 Hepatitis B Virus Reactivation

Use of TNF blockers, including CIMZIA, may increase the risk of reactivation of hepatitis B virus (HBV) in patients who are chronic carriers of this virus. In some instances, HBV reactivation occurring in conjunction with TNF blocker therapy has been fatal. The majority of reports have occurred in patients concomitantly receiving other medications that suppress the immune system, which may also contribute to HBV reactivation.

Evaluate patients at risk for HBV infection for prior evidence of HBV infection before initiating CIMZIA therapy. Exercise caution in prescribing CIMZIA for patients identified as carriers of HBV. Adequate data are not available on the safety or efficacy of treating patients who are carriers of HBV with anti-viral therapy in conjunction with TNF blocker therapy to prevent HBV reactivation. Patients who are carriers of HBV and require treatment with CIMZIA should be closely monitored for clinical and laboratory signs of active HBV infection throughout therapy and for several months following termination of therapy.

In patients who develop HBV reactivation, discontinue CIMZIA and initiate effective anti-viral therapy with appropriate supportive treatment. The safety of resuming TNF blocker therapy after HBV reactivation is controlled is not known. Therefore, exercise caution when considering resumption of CIMZIA therapy in this situation and monitor patients closely.

5.4 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 investigational uses, malignancies (excluding non-melanoma skin cancer) were observed at a rate (95% confidence interval) of 0.6 (0.4, 0.8) per 100 patient-years among 4,650 CIMZIA-treated patients versus a rate of 0.6 (0.2, 1.7) per 100 patient-years among 1,319 placebo-treated patients. The size of the control group and limited duration of the controlled portions of the studies precludes the ability to draw firm conclusions.

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 lymphoma among 1,319 placebo-treated patients.

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 or other diseases 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. The potential role of TNF blocker therapy in the development of malignancies is not known.

5.5 Hypersensitivity Reactions

The following symptoms that could be compatible with hypersensitivity reactions have been reported rarely following CIMZIA administration to patients: angioedema, dyspnea, hypotension, rash, serum sickness, and urticaria. If such reactions occur, discontinue further administration of CIMZIA and institute appropriate therapy. There are no data on the risks of using CIMZIA in patients who have experienced a severe hypersensitivity reaction towards another TNF blocker; in these patients caution is needed [see Adverse Reactions (6.1)].

5.6 Neurologic Reactions

Use of TNF blockers, including CIMZIA, has been associated with rare cases of new onset or exacerbation of clinical symptoms and/or radiographic evidence of demyelinating disease. Exercise caution in considering the use of CIMZIA in patients with pre-existing or recent-onset central nervous system demyelinating disorders. Rare cases of neurological disorders, including seizure disorder, optic neuritis, and peripheral neuropathy have been reported in patients treated with CIMZIA; the causal relationship to CIMZIA remains unclear [see Adverse Reactions (6.1)].

5.7 Hematological Reactions

Rare reports of pancytopenia, including aplastic anemia, have been reported with TNF blockers. Adverse reactions of the hematologic system, including medically significant cytopenia

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(e.g., leukopenia, pancytopenia, thrombocytopenia) have been infrequently reported with CIMZIA [see Adverse Reactions (6.1)]. The causal relationship of these events to CIMZIA remains unclear.

Although no high risk group has been identified, exercise caution in patients being treated with CIMZIA who have ongoing, or a history of, significant hematologic abnormalities. Advise all patients to seek immediate medical attention if they develop signs and symptoms suggestive of blood dyscrasias or infection (e.g., persistent fever, bruising, bleeding, pallor) while on CIMZIA. Consider discontinuation of CIMZIA therapy in patients with confirmed significant hematologic abnormalities.

5.8 Use with Anakinra

Serious infections were seen in clinical studies with concurrent use of anakinra (an interleukin-1 antagonist) and another TNF blocker, with no added benefit. Because of the nature of the adverse reactions seen with this combination therapy, similar toxicities may also result from combination of anakinra and other TNF blockers. Therefore, the combination of CIMZIA and anakinra is not recommended [see Drug Interactions (7.1)].

5.9 Heart Failure

Cases of worsening congestive heart failure (CHF) and new onset CHF have been reported with TNF blockers. CIMZIA has not been formally studied in patients with CHF; however, in clinical studies in CHF of another TNF blocker, a higher rate of serious CHF-related adverse reactions was observed. Exercise caution when using CIMZIA in patients who have heart failure and monitor them carefully.

5.10 Autoimmunity

Treatment with CIMZIA may result in the formation of autoantibodies and, rarely, in the development of a lupus-like syndrome. If a patient develops symptoms suggestive of a lupus-like syndrome following treatment with CIMZIA, discontinue treatment [see Adverse Reactions (6.1)].

5.11 Immunizations

No data are available on the response to vaccinations or the secondary transmission of infection by live vaccines in patients receiving CIMZIA. Do not administer live vaccines or attenuated vaccines concurrently with CIMZIA.

5.12 Immunosuppression

Since TNF mediates inflammation and modulates cellular immune responses, the possibility exists for TNF blockers, including CIMZIA, to affect host defenses against infections and malignancies. The impact of treatment with CIMZIA on the development and course of malignancies, as well as active and/or chronic infections, is not fully understood [see Warnings and Precautions (5.1, 5.2, 5.3, 5.4) and Adverse Reactions (6.1)]. The safety and efficacy of CIMZIA in patients with immunosuppression has not been formally evaluated.

6 ADVERSE REACTIONS

6.1 Clinical Trials Experience

The most serious adverse reactions were:

- Serious Infections [see Warnings and Precautions (5.1, 5.2)]
- Malignancies [see Warnings and Precautions (5.4)]

The data described below reflect exposure to CIMZIA at 400 mg subcutaneous dosing in studies of patients with Crohn's disease. In the safety population in controlled studies, a total of 620 subjects with Crohn's disease received CIMZIA at a dose of 400 mg, and 614 subjects received placebo (including subjects randomized to placebo in Study CD2 following open label dosing of CIMZIA at Week 0, 2, 4). In controlled and uncontrolled studies, 1,564 subjects received CIMZIA at some dose level, of whom 1,350 subjects received 400 mg CIMZIA. Approximately 55% of subjects were female, 45% were male, and 94% were Caucasian. The majority of patients in the active group were between the ages of 18 and 64.

During controlled clinical studies, the proportion of patients with serious adverse reactions was 10% for CIMZIA and 9% for placebo. The most common adverse reactions (occurring in \geq 5% of Cimzia-treated patients, and with a higher incidence compared to placebo) in controlled clinical studies with CIMZIA was upper respiratory infection (20% CIMZIA, 13% placebo), urinary tract infection (7% CIMZIA, 6% placebo), and arthralgia (6% CIMZIA, 4% placebo).

The proportion of patients who discontinued treatment due to adverse reactions in the controlled clinical studies was 8% for CIMZIA and 7% for placebo. The most common adverse reactions leading to the discontinuation of CIMZIA (for at least 2 patients and with a higher incidence than placebo) were abdominal pain (0.4% CIMZIA, 0.2% placebo), diarrhea (0.4% CIMZIA, 0% placebo), and intestinal obstruction (0.4% CIMZIA, 0% placebo).

Because clinical studies are conducted under widely varying and controlled conditions, adverse reaction rates observed in clinical studies of a drug cannot be directly compared to rates in the clinical studies of another drug, and may not predict the rates observed in a broader patient population in clinical practice.

Infections

The incidence of infections in controlled clinical studies was 38% for CIMZIA-treated patients and 30% for placebo-treated patients. The infections consisted primarily of upper respiratory infection (20% CIMZIA, 13% placebo). The incidence of serious infections during the controlled clinical studies was 3% for CIMZIA-treated patients and 1% for placebo-treated patients. Serious infections observed included bacterial and viral infections, pneumonia, and pyelonephritis [see Warnings and Precautions (5.1, 5.2)].

Tuberculosis and Opportunistic Infections

In completed and ongoing clinical studies that include over 4,650 patients, the overall rate of tuberculosis is approximately 0.5 per 100 patient-years. The rate in Crohn's disease studies was 0.3 cases per 100 patient-years. The reports include cases of pulmonary and disseminated tuberculosis. Cases of opportunistic infection have also been reported in clinical trials. Some cases of opportunistic infections and tuberculosis have been fatal [see Warnings and Precautions (5.2)].

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 (5.4)].

<u>Autoantibodies</u>

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. The impact of long-term treatment with CIMZIA on the development of autoimmune diseases is unknown [see Warnings and Precautions (5.10)].

Immunogenicity

Patients were tested at multiple time points for antibodies to certolizumab pegol during Studies CD1 and CD2. The overall percentage of antibody positive patients was 8% in patients continuously exposed to CIMZIA, of which approximately 80% 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 antibody-positive patients (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.

The data reflect the percentage of patients whose test results were considered positive for antibodies to certolizumab pegol in an ELISA assay, and are highly dependent on the sensitivity and specificity of the assay. The observed incidence of antibody (including neutralizing 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 medications, and underlying disease. For these reasons, comparison of the incidence of antibodies to certolizumab pegol with the incidence of antibodies to other products may be misleading.

Hypersensitivity Reactions

The following symptoms that could be compatible with hypersensitivity reactions have been reported rarely following CIMZIA administration to patients: angioedema, dermatitis allergic, dizziness (postural), dyspnea, hot flush, hypotension, injection site reactions, malaise, pyrexia, rash, serum sickness, and (vasovagal) syncope [see Warnings and Precautions (5.5)].

Other Adverse Reactions

The most commonly occurring adverse reactions in controlled trials of Crohn's disease were described above. Other serious or significant adverse reactions reported in controlled and uncontrolled studies in Crohn's disease and other diseases under investigation, occurring in patients receiving CIMZIA at doses of 400 mg or other doses include:

Blood and lymphatic system disorders: Anemia, leukopenia, lymphadenopathy, pancytopenia, and thrombophilia.

Cardiac disorders: Angina pectoris, arrhythmias, cardiac failure, hypertensive heart disease, my ocardial infarction, my ocardial ischemia, pericardial effusion, and pericarditis.

Eye disorders: Optic neuritis, retinal hemorrhage, and uveitis.

General disorders and administration site conditions: Bleeding and injection site reactions.

Hepatobiliary disorders: Elevated liver enzymes and hepatitis.

Immune system disorders: Alopecia totalis.

Psychiatric disorders: Anxiety, bipolar disorder, and suicide attempt.

Renal and urinary disorders: Nephrotic syndrome and renal failure.

Reproductive system and breast disorders: Menstrual disorder.

Skin and subcutaneous tissue disorders: Dermatitis, erythema nodosum, and urticaria.

Vascular disorders: Vasculitis.

6.2 Adverse Reaction Information from Other Sources

Cases of severe skin reactions, including Stevens-Johnson syndrome, toxic epidermal necrolysis, and erythema multiforme, have been identified during post-approval use of other TNF blockers. 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.

7 DRUG INTERACTIONS

7.1 Anakinra

Concurrent administration of anakinra (an interleukin-1 antagonist) and another TNF blocker has shown an increased risk of serious infections, an increased risk of neutropenia, and no added benefit compared to these medicinal products alone. Therefore, the combination of

anakinra with other TNF blockers, including CIMZIA, may also result in similar toxicities [see Warnings and Precautions (5.8)].

7.2 Live Vaccines

Do not give live (including attenuated) vaccines concurrently with CIMZIA [see Warnings and Precautions (5.11)].

7.3 Laboratory Tests

Interference with certain coagulation assays has been detected in patients treated with CIMZIA. Certolizumab pegol may cause erroneously elevated aPTT assay results in patients without coagulation abnormalities. This effect has been observed with the PTT-LA test 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 Category B – Because certolizumab pegol does not cross-react with mouse or rat TNF α , reproduction studies were performed in rats using a rodent anti-murine TNF α pegylated Fab' fragment (cTN3 PF) similar to certolizumab pegol. Reproduction studies have been performed in rats at doses up to 100 mg/kg and have revealed no evidence of impaired fertility or harm to the fetus due to cTN3 PF. There are, however, no adequate and well-controlled studies of CIMZIA in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

8.3 Nursing Mothers

It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from CIMZIA, a decision should be made whether to discontinue nursing or discontinue the drug, taking into account the importance of the drug to the mother.

8.4 Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

8.5 Geriatric Use

Clinical studies of CIMZIA did not include sufficient numbers of patients aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences in responses between the elderly and younger patients. A population pharmacokinetic analysis of all patients enrolled in CIMZIA clinical studies concluded that there was no apparent difference in drug concentration regardless of age. Because there is a higher incidence of infections in the elderly population in general, use caution when treating the elderly [see Warnings and Precautions (5.1)].