**HIGHLIGHTS OF PRESCRIBING INFORMATION**

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

**AUBAGIO®** (teriflunomide), for oral use

Initial U.S. Approval: 2012

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**INDICATIONS AND USAGE**

- **Relapsing Multiple Sclerosis (MS)**: To include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults. (1)

**WARNING: HEPATOTOXICITY and EMBRYOFETAL TOXICITY**

See full prescribing information for complete boxed warning.

- **Hepatotoxicity**
  - Clinically significant and potentially life-threatening liver injury, including acute liver failure requiring transplant, has been reported in patients treated with AUBAGIO in the postmarketing setting (5.1). Concomitant use of AUBAGIO with other hepatotoxic drugs may increase the risk of severe liver injury. Obtain transaminase and bilirubin levels within 6 months before initiation of AUBAGIO and monitor ALT levels at least monthly for six months (5.1). If drug induced liver injury is suspected, discontinue AUBAGIO and start accelerated elimination procedure (5.3).
- **Embryofetal Toxicity**
  - Teratogenicity and embryolethality occurred in animals administered teriflunomide (5.2, 8.1). Exclude pregnancy prior to initiating AUBAGIO therapy (4, 5.2, 8.1, 8.3).

**Recent Major Changes**

- **Boxed Warning**: 11/2020
- **Warnings and Precautions (5.1, 5.6, 5.7)**: 11/2020
- **Warnings and Precautions (5.11)**: 4/2021

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**DOSAGE AND ADMINISTRATION**

- **7 mg or 14 mg orally once daily**, with or without food. (2)

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**CONTRAINDICATIONS**

- Severe hepatic impairment (4, 5.1)
- Pregnancy (4, 5.2, 8.1)
- Hypersensitivity (4, 5.5)
- Current leflunomide treatment (4)

**WARNINGS AND PRECAUTIONS**

- Elimination of AUBAGIO can be accelerated by administration of cholestyramine or activated charcoal for 11 days. (5.3)
- AUBAGIO may decrease WBC. A recent CBC should be available before starting AUBAGIO. Monitor for signs and symptoms of infection. Consider suspending treatment with AUBAGIO in case of serious infection. Do not start AUBAGIO in patients with active infections. (5.4)
- Stop AUBAGIO if patient has anaphylaxis, angioedema, Stevens-Johnson syndrome, toxic epidermal necrolysis, drug reaction with eosinophilia and systemic symptoms; initiate rapid elimination. (5.3, 5.5, 5.6, 5.7)
- If patient develops symptoms consistent with peripheral neuropathy, evaluate patient and consider discontinuing AUBAGIO. (5.8)
- AUBAGIO may increase blood pressure. Measure blood pressure at treatment initiation and monitor blood pressure during treatment. (5.9)

**ADVERSE REACTIONS**

Most common adverse reactions (≥10% and ≥2% greater than placebo): headache, diarrhea, alopecia, increase in ALT. (6)

To report SUSPECTED ADVERSE REACTIONS, contact Genzyme Corporation at 1-800-745-4447 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

**DRUG INTERACTIONS**

- Drugs metabolized by CYP2C8 and OAT3 transporters: Monitor patients because teriflunomide may increase exposure of these drugs. (7)
- Teriflunomide may increase exposure of ethinylestradiol and levonorgestrel. Choose an appropriate oral contraceptive. (7)
- Drugs metabolized by CYP1A2: Monitor patients because teriflunomide may decrease exposure of these drugs. (7)
- Warfarin: Monitor INR as teriflunomide may decrease INR. (7)
- Drugs metabolized by BCRP and OATP1B1/B3 transporters: Monitor patients because teriflunomide may increase exposure of these drugs. (7)
- Rosuvastatin: The dose of rosvastatin should not exceed 10 mg once daily in patients taking AUBAGIO. (7)

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide

Revised: 04/2021

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**WARNING: HEPATOTOXICITY AND EMBRYOFETAL TOXICITY**

- **Hepatotoxicity**
  - Clinically significant and potentially life-threatening liver injury, including acute liver failure requiring transplant, has been reported in patients treated with AUBAGIO in the postmarketing setting [see Warnings and Precautions (5.1)]. Concomitant use of AUBAGIO with other hepatotoxic drugs may increase the risk of severe liver injury.
  - Obtain transaminase and bilirubin levels within 6 months before initiation of AUBAGIO therapy. Monitor ALT levels at least monthly for six months after starting AUBAGIO [see Warnings and Precautions (5.1)]. If drug induced liver injury is suspected, discontinue AUBAGIO and start an accelerated elimination procedure with cholestyramine or charcoal [see Warnings and Precautions (5.3)].
  - Patients with pre-existing liver disease may be at increased risk of developing elevated serum transaminases when taking AUBAGIO.

- **Embryofetal Toxicity**
  - AUBAGIO is contraindicated for use in pregnant women and in females of reproductive potential who are not using effective contraception because of the potential for fetal harm. Teratogenicity and embryolethality occurred in animals at plasma teriflunomide exposures similar to or lower than that in humans at the maximum recommended human dose (MRHD) of 14 mg/day [see Use in Specific Populations (8.1)].
  - AUBAGIO is contraindicated for use in pregnant women and in females of reproductive potential not using effective contraception [see Contraindications (4)].
  - Teratogenicity and embryolethality occurred in animals at plasma teriflunomide exposures similar to or lower than that in humans at the maximum recommended human dose (MRHD) of 14 mg/day [see Use in Specific Populations (8.1)].

1 INDICATIONS AND USAGE

AUBAGIO® is indicated for the treatment of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults.

2 DOSAGE AND ADMINISTRATION

The recommended dose of AUBAGIO is 7 mg or 14 mg orally once daily. AUBAGIO can be taken with or without food.

- Obtain transaminase and bilirubin levels within 6 months before initiation of AUBAGIO therapy. Monitor ALT levels at least monthly for six months after starting AUBAGIO [see Warnings and Precautions (5.1)].
- Obtain a complete blood cell count (CBC) within 6 months before the initiation of treatment with AUBAGIO. Further monitoring should be based on signs and symptoms of infection [see Warnings and Precautions (5.4)].
- Prior to initiating AUBAGIO, screen patients for latent tuberculosis infection with a tuberculin skin test or blood test for mycobacterium tuberculosis infection [see Warnings and Precautions (5.4)].
- Exclude pregnancy prior to initiation of treatment with AUBAGIO in females of reproductive potential [see Warnings and Precautions (5.2)].
- Check blood pressure before start of AUBAGIO treatment and periodically thereafter [see Warnings and Precautions (5.3)].

3 DOSAGE FORMS AND STRENGTHS

AUBAGIO is available as 7 mg and 14 mg tablets. The 14 mg tablet is a pale blue to pastel blue, pentagonal film-coated tablet with the dose strength imprinted on one side and engraved with the corporate logo on the other side. Each tablet contains 14 mg of teriflunomide.

The 7 mg tablet is a very light greenish-blue to pale greenish-blue, hexagonal film-coated tablet with the dose strength imprinted on one side and engraved with the corporate logo on the other side. Each tablet contains 7 mg of teriflunomide.

4 CONTRAINDICATIONS

AUBAGIO is contraindicated in patients with severe hepatic impairment [see Warnings and Precautions (5.1)].

- Pregnant women and females of reproductive potential not using effective contraception
- Patients with severe hepatic impairment [see Warnings and Precautions (5.1)].
- Patients with a history of hypersensitivity reaction to teriflunomide, leflunomide, or to any of the active ingredients in AUBAGIO. Reactions have included anaphylaxis, angioedema, and serious skin reactions [see Warnings and Precautions (5.5)].
- Coadministration with leflunomide [see Clinical Pharmacology (12.3)].

5 WARNINGS AND PRECAUTIONS

5.1 Hepatotoxicity

Clinically significant and potentially life-threatening liver injury, including acute liver failure requiring transplant, has been reported in patients treated with AUBAGIO in the postmarketing setting. Patients with pre-existing liver disease and patients taking other hepatotoxic drugs may be at increased risk for developing liver injury when taking AUBAGIO. Clinically significant liver injury can occur at any time during treatment with AUBAGIO.

Patients with pre-existing acute or chronic liver disease, or those with serum alanine aminotransferase (ALT) greater than or equal to the upper limit of normal (ULN) before initiating treatment, should not normally be treated with AUBAGIO. AUBAGIO is contraindicated in patients with severe hepatic impairment [see Contraindications (4)].

In placebo-controlled trials in adult patients, ALT greater than three times the ULN occurred in 61/1045 (5.8%) and 62/1002 (6.2%) of patients receiving AUBAGIO 7 mg and 14 mg, respectively, and 38/997 (3.8%) of patients receiving placebo, during the treatment period. These elevations occurred mostly within the first year of treatment. Half of the cases returned to normal without drug discontinuation. In clinical trials, if ALT elevation was greater than three times the ULN on two consecutive tests, AUBAGIO was discontinued and patients underwent an accelerated elimination procedure [see Warnings and Precautions (5.3)]. Of the patients who underwent discontinuation and accelerated elimination in clinical trials, half returned to normal or near normal values within 3 months.

One patient in the controlled trials in adult patients developed ALT 32 times the ULN and jaundice 5 months after initiation of AUBAGIO 14 mg treatment. The patient was hospitalized for 5 weeks and recovered after plasmapheresis and cholestyramine accelerated elimination procedure. AUBAGIO-induced liver injury in this patient could not be ruled out.

Obtain serum transaminase and bilirubin levels within 6 months before initiation of AUBAGIO therapy. Monitor ALT levels at least monthly for six months after starting AUBAGIO. Consider additional monitoring when AUBAGIO is given with other potentially hepatotoxic drugs.

Discontinuing AUBAGIO in general is not expected to increase the risk of clinically significant liver injury. However, one fatal case of Klebsiella pneumonia sepsis occurred in a patient taking AUBAGIO 14 mg for 1.7 years. Fatal infections have been reported in the postmarketing setting in patients receiving AUBAGIO. This condition may be at increased risk of developing elevated serum transaminases when taking AUBAGIO.

5.2 Embryofetal Toxicity

AUBAGIO may cause fetal harm when administered to a pregnant woman. Teratogenicity and embryofetal lethality occurred in animal reproduction studies in multiple animal species at plasma teriflunomide exposures similar to or lower than that in humans at the maximum recommended human dose (MRHD) of 14 mg/day [see Use in Specific Populations (8.1)].

AUBAGIO is contraindicated for use in pregnant women and in females of reproductive potential not using effective contraception [see Contraindications (4)].

5.3 Procedure for Accelerated Elimination of Teriflunomide

Teriflunomide is eliminated slowly from the plasma [see Clinical Pharmacology (12.3)]. Without an accelerated elimination procedure, it takes on average 8 months to reach plasma concentrations less than 0.02 mg/L. Although because of the risk of severe liver injury, this half-life may be at least as long as 2 years. An accelerated elimination procedure could be used at any time after discontinuation of AUBAGIO. Elimination can be accelerated by either of the following procedures:

- Administration of cholestyramine 8 g every 8 hours for 11 days. If cholestyramine 8 g 3 times a day is not well tolerated, cholestyramine 8 g 3 times a day can be used.
- Administration of 50 mg oral activated charcoal powder every 12 hours for 11 days.

If either elimination procedure is poorly tolerated, treatment days do not need to be consecutive unless there is a need to lower teriflunomide plasma concentration rapidly.

At the end of 11 days, both regimens successfully accelerated teriflunomide elimination, leading to more than 98% decrease in teriflunomide plasma concentrations. Use of the accelerated elimination procedure may potentially result in return of disease activity if the patient had been responding to AUBAGIO treatment.

5.4 Bone Marrow Effects/Immunosuppression Potential/Infections

Bone Marrow Effects

A mean decrease compared to baseline in white blood cell (WBC) count of approximately 15% (mainly neutrophils and lymphocytes) and in platelet count of approximately 10% was observed in placebo-controlled clinical trials in adult patients with 7 mg and 14 mg of AUBAGIO. The decrease in WBC count occurred during the first 6 weeks and WBC count remained low during treatment. In placebo-controlled studies in adult patients, neutrophil count <1.5 x 10^9/L was observed in 12% and 16% of patients receiving AUBAGIO 7 mg and 14 mg, respectively, compared with 7% of patients receiving placebo; lymphocyte count <0.8 x 10^9/L was observed in 10% and 12% of patients receiving AUBAGIO 7 mg and 14 mg, respectively, compared with 6% of patients receiving placebo. No cases of serious pancytopenia were reported in premarketing clinical trials of AUBAGIO but rare cases of pancytopenia and agranulocytosis have been observed in the postmarketing setting with leflunomide. A similar risk of lefllunomide-induced pancytopenia associated with AUBAGIO, including rare cases with platelet counts less than 50,000/mm^3, have been reported in the postmarketing setting. Obtain a complete blood cell count (CBC) within 6 months before the initiation of treatment with AUBAGIO. Further monitoring should be based on signs and symptoms suggestive of bone marrow suppression.

5.5 Infections

Risk of Infection/Tuberculosis Screening

Patients with active acute or chronic infections should not start treatment until the infection(s) is resolved. If a patient develops a serious infection consider suspending treatment with AUBAGIO and start an accelerated elimination procedure. Rely on the benefits of virus prevention and resumption of therapy. Instruct patients receiving AUBAGIO to report symptoms of infections to a physician.

AUBAGIO is not recommended for patients with severe immunodeficiency, bone marrow disease, or severe, uncontrolled infections. Medications like AUBAGIO that have immunosuppression potential may increase the risk of infections in the patient. In placebo-controlled studies of AUBAGIO in adult patients, no overall increase in the risk of serious infections was observed [see Warnings and Precautions (5.3)].

In clinical trials, AUBAGIO therapy was not associated with an increased risk of serious infections. In clinical studies with AUBAGIO, cyto-megalovirus hepatitis reactivation has been observed.
In clinical studies with AUBAGIO in adult patients, cases of tuberculosis have been observed. Prior to initiating AUBAGIO, screen patients for latent tuberculosis infection with a tuberculin skin test or with a blood test for mycobacterium tuberculosis infection. AUBAGIO has not been studied in patients with a positive tuberculin screen, and the safety of AUBAGIO in individuals with latent tuberculosis infection is unknown. For patients testing positive in tuberculin screening, treat by standard medical practice prior to therapy with AUBAGIO.

Vaccination

No clinical data are available on the efficacy and safety of live vaccinations in patients taking AUBAGIO. Vaccination with live vaccines is not recommended. The long half-life of AUBAGIO should be considered when contemplating administration of a live vaccine after stopping AUBAGIO.

Malignancy

The risk of malignancy, particularly lymphoproliferative disorders, is increased with the use of some immunosuppressive medications. There is a potential for immunosuppression with AUBAGIO. No apparent increased risk of malignancies and lymphoproliferative disorders was reported in the AUBAGIO clinical trials, but larger and longer-term studies would be needed to determine whether there is an increased risk of malignancy or lymphoproliferative disorders with AUBAGIO.

5.5 Hypersensitivity Reactions

AUBAGIO may cause anaphylaxis and severe allergic reactions (see Contraindications (4)). Signs and symptoms have included dyspnea, urticaria, and angioedema including lips, eyes, throat, and tongue. Inform patients of the signs and symptoms of anaphylaxis and angioedema.

5.6 Serious Skin Reactions

Cases of serious skin reactions, sometimes fatal, including Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), and drug reaction with eosinophilia and systemic symptoms (DRESS) (see Warnings and Precautions (5.7)), have been reported with AUBAGIO. Fatal outcomes were reported in one case of TEN and one case of DRESS. Inform patients of the signs and symptoms that may signal a serious skin reaction. Instruct patients to discontinue AUBAGIO and seek immediate medical care should these signs and symptoms occur. Unless the reaction is clearly not drug related, discontinue AUBAGIO and begin an accelerated elimination procedure immediately (see Warnings and Precautions (5.3)). In such cases, patients should not be re-exposed to teriflunomide (see Contraindications (4)).

5.7 Drug Reaction with Eosinophilia and Systemic Symptoms

Drug reaction with eosinophilia and systemic symptoms (DRESS), also known as multorgan hypersensitivity, has occurred with AUBAGIO. One fatal case of DRESS that occurred in close temporal association with the initiation of AUBAGIO treatment has been reported in the postmarketing setting. DRESS typically, although not exclusively, presents with fever, rash, lymphadenopathy and/or facial swelling, in association with other organ system involvement, such as hepatitis, nephritis, hematologic abnormalities, myocarditis, or myositis, sometimes resembling an acute viral infection. Eosinophilia is the variable in its expression, and other organ systems not noted here may be involved. It is important to note that early manifestations of hypersensitivity (e.g., fever, lymphadenopathy) may be present even though rash is not evident. If such signs or symptoms are present, the patient should be evaluated immediately. Discontinue AUBAGIO, unless an alternative etiology for the signs or symptoms is established, and begin an accelerated elimination procedure immediately (see Warnings and Precautions (5.3)). In such cases, patients should not be re-exposed to teriflunomide (see Contraindications (4)).

5.8 Peripheral Neuropathy

In placebo-controlled studies in adult patients, peripheral neuropathy, including both polyneuropathy and mononeuropathy (e.g., carpal tunnel syndrome), occurred more frequently in patients taking AUBAGIO than in patients taking placebo. The incidence of peripheral neuropathy confirmed by nerve conduction studies was 1.4% (13 patients) and 1.9% (17 patients) of patients receiving 7 mg and 14 mg of AUBAGIO, respectively, compared with 0.4% receiving placebo (4 patients). Treatment was discontinued in 0.7% (8 patients) with confirmed peripheral neuropathy (3 patients receiving AUBAGIO 7 mg and 5 patients receiving AUBAGIO 14 mg). Five of them recovered following treatment discontinuation. Not all cases of peripheral neuropathy received with continued treatment. Peripheral neuropathy also occurred in patients receiving leflunomide.

Age older than 60 years, concomitant neurotoxic medications, and diabetes may increase the risk for peripheral neuropathy. If a patient taking AUBAGIO develops symptoms consistent with peripheral neuropathy, perform a peripheral nerve conduction test to rule out other potential causes. Discontinue AUBAGIO and perform an accelerated elimination procedure (see Warnings and Precautions (5.3)).

5.9 Increased Blood Pressure

In placebo-controlled studies in adult patients, the mean change from baseline to the end of study in systolic blood pressure was +2.3 mmHg and +2.7 mmHg for AUBAGIO 7 mg and 14 mg, respectively, and +0.6 mmHg for placebo. The change from baseline in diastolic blood pressure was +1.4 mmHg and +1.9 mmHg for AUBAGIO 7 mg and 14 mg, respectively, and -0.3 mmHg for placebo. Hypertension was an adverse reaction in 3.1% and 4.3% of patients treated with 7 mg or 14 mg of AUBAGIO compared with 1.8% for placebo. Check blood pressure before start of AUBAGIO treatment and periodically thereafter. Elevated blood pressure should be appropriately managed during treatment with AUBAGIO.

5.10 Respiratory Effects

Interstitial lung disease, including acute interstitial pneumonitis, has been reported with AUBAGIO in the postmarketing setting.Interstitial lung disease and worsening of pre-existing interstitial lung disease have been reported during treatment with leflunomide. There were no reports of interstitial lung disease in patients taking AUBAGIO in uncontrolled extension studies, one to nine years after initiation of treatment. A relationship between AUBAGIO and interstitial lung disease has not been established.

Cardiovascular Deaths

Four cardiovascular deaths, including three sudden deaths, and one myocardial infarction in a patient with a history of hyperlipidemia and hyperension were reported among approximately 2600 patients exposed to AUBAGIO in the premarketing database. These cardiovascular deaths occurred during uncontrolled extension studies, one to nine years after initiation of treatment. A relationship between AUBAGIO and cardiovascular death has not been established.

Acute Renal Failure

In placebo-controlled studies, creatinine values increased more than 100% over baseline in 8/1045 (0.8%) patients in the 7 mg AUBAGIO group and 1/1002 (0.1%) patients in the 14 mg AUBAGIO group versus 3/997 (0.3%) patients in the placebo group. Renal elevations were accompanied by hyperkalemia. AUBAGIO may cause acute uric acid nephropathy with transient acute renal failure because AUBAGIO increases renal uric acid clearance.

Drug-induced liver injury (DILI)

In clinical trials, 18% of AUBAGIO-treated patients had had hypophosphatemia with serum phosphorus levels of less than 0.3 mmol/L compared to 7% of placebo-treated patients; 4% of AUBAGIO-treated patients had hypophosphatemia with serum phosphorus levels at least 0.3 mmol/L but less than 0.6 mmol/L, compared to 0.8% of placebo-treated patients. No patient in any treatment group had a serum phosphorus below 0.3 mmol/L.

6.2 Postmarketing Experience

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

6.3 Laboratory Abnormalities

6.4 Adverse Reactions in Pooled Placebo-Controlled Studies in Patients with Relapsing Forms of Multiple Sclerosis

Table 1: Adverse Reactions in Pooled Placebo-Controlled Studies in Patients with Relapsing Forms of Multiple Sclerosis

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>AUBAGIO 7 mg</th>
<th>AUBAGIO 14 mg</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N=1045)</td>
<td>(N=1002)</td>
<td>(N=997)</td>
<td></td>
</tr>
<tr>
<td>Headache</td>
<td>18%</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>13%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>Alopecia</td>
<td>10%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>Neutropenia</td>
<td>8%</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>Paresthesia</td>
<td>8%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Amythralia</td>
<td>8%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Neutropenia</td>
<td>4%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
</tr>
</tbody>
</table>

6.5 Acute Renal Failure

In placebo-controlled studies, creatinine values increased more than 100% over baseline in 8/1045 (0.8%) patients in the 7 mg AUBAGIO group and 1/1002 (0.1%) patients in the 14 mg AUBAGIO group versus 3/997 (0.3%) patients in the placebo group. Renal elevations were accompanied by hyperkalemia. AUBAGIO may cause acute uric acid nephropathy with transient acute renal failure because AUBAGIO increases renal uric acid clearance.

6.6 Hypophosphatemia

In clinical trials, 18% of AUBAGIO-treated patients had hypophosphatemia with serum phosphorus levels of less than 0.3 mmol/L compared to 7% of placebo-treated patients; 4% of AUBAGIO-treated patients had hypophosphatemia with serum phosphorus levels at least 0.3 mmol/L but less than 0.6 mmol/L, compared to 0.8% of placebo-treated patients. No patient in any treatment group had a serum phosphorus below 0.3 mmol/L.

7. DRUG INTERACTIONS

7.1 Effect of AUBAGIO on CYP2C8 Substrates

Teriflunomide is an inhibitor of CYP2C8 in vivo. In patients taking AUBAGIO, exposure of drugs metabolized by CYP2C8 (e.g., paltaxel, pigliglazone, repaglinide, rosiglitazone) may be increased. Determine the dose of these patients and also the dose of the concomitant drug(s) metabolized by CYP2C8 as required (see Clinical Pharmacology (12.3)).

Effect of AUBAGIO on Warfarin

Coadministration of AUBAGIO with warfarin requires close monitoring of the international normalized ratio (INR) because AUBAGIO may decrease INR by approximately 25%.
Effect of AUBAGIO on Oral Contraceptives

AUBAGIO may increase the systemic exposures of ethinylestradiol and levonorgestrel. Consideration should be given to the type or dose of contraceptive used in combination with AUBAGIO [see Clinical Pharmacology (12.3)].

Effect of AUBAGIO on CYP1A2 Substrates

Teriflunomide may be a weak inducer of CYP1A2 in vivo. In patients taking AUBAGIO, exposure of drugs metabolized by CYP1A2 (e.g., alosertin, doxilane, tetraphyline, tizanidine) may be reduced. Monitor these patients and adjust the dose of the concomitant drug(s) metabolized by CYP1A2 as required [see Clinical Pharmacology (12.3)].

Effect of AUBAGIO on Organic Anion Transporter 3 (OAT3) Substrates

Teriflunomide has been studied in vivo in patients taking AUBAGIO, exposure of drugs which are OAT3 substrates (e.g., celofaxin, cidemine, ciprofloxacin, penicillin G, ketoprofen, furosemide, methotrexate, zidovudine) may be increased. Monitor these patients and adjust the dose of the concomitant drug(s) which are OAT3 substrates as required [see Clinical Pharmacology (12.3)].

Effect of AUBAGIO on BCPR and Organic Anion Transporting Polyplet B1 and B3 (OATP1B1/1B3) Substrates

Teriflunomide inhibits the activity of BCPR and OATP1B1/1B3 in vivo. For a patient taking AUBAGIO, the dose of rosuvastatin should not exceed 10 mg once daily. For other substrates of BCPR (e.g., mitoxantrone) and OATP1B1/1B3 (e.g., the OATP family [e.g., methothrexate, rifampin], especially HMG-CoA reductase inhibitors [e.g., atorvastatin, atenolide, pravastatin, repaglinide, and simvastatin]), consider reducing the dose of these drugs and monitor patients closely for signs and symptoms of increased exposures to the drugs while patients are taking AUBAGIO [see Clinical Pharmacology (12.3)].

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 AUBAGIO during pregnancy. Healthcare providers and patients are encouraged to report pregnancies by calling 1-800-745-4447, option 2.

Risk Summary

AUBAGIO is contraindicated for use in pregnant women and females of reproductive potential not using effective contraception because of the potential for fetal harm based on animal data [see Contraindications (4), Warnings and Precautions (5.2, 5.3)].

In animal reproduction studies in rabbit and rat, oral administration of teriflunomide during organogenesis caused teratogenicity and embryolethality at plasma exposures (AUC) lower than that at the maximum recommended human dose (MRHD) of 14 mg/day [see Data]. Available human data from pregnancy registry, clinical trials, pharmacovigilance cases, and published literature are too limited to draw any conclusions, but they do not clearly indicate increased birth defects or miscarriage associated with inadvertent teriflunomide exposure in the early first trimester when followed by an accelerated elimination procedure [see Clinical Considerations and Data]. There are no human data pertaining to the use of teriflunomide late in the first trimester or beyond.

In the US general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2%-4% and 15%-20%, respectively. The background risk of major birth defects and miscarriage in the indicated population is unknown.

Clinical Considerations

Fetal/Neonatal adverse reactions

Lowering the plasma concentration of teriflunomide by instituting an accelerated drug elimination procedure as soon as pregnancy is detected may decrease the risk to the fetus from AUBAGIO. The accelerated drug elimination procedure includes verifying that the plasma teriflunomide concentration is less than 0.02 mg/L [see Warnings and Precautions (5.3) and Clinical Pharmacology (12.3)].

Data

Human data

Available human data are limited. Prospective reported data (from clinical trials and postmarketing reports) from >150 pregnancies in patients treated with teriflunomide and >300 pregnancies in patients treated with placebo do not demonstrate an increased rate of congenital malformations or miscarriage following teriflunomide exposure in the early first trimester when followed by an accelerated elimination procedure. Specific patterns of major congenital malformations in humans have not been observed. Limitations of these data include an inadequate number of reported pregnancies from which to draw conclusions; therefore, the short duration of drug exposure in reported pregnancies, which precludes a full evaluation of the fetal risks, incomplete reporting, and the inability to control for confounders (such as underlying maternal disease and use of concomitant medications).

Animal data

When teriflunomide (oral doses of 1, 3, or 10 mg/kg/day) was administered to pregnant rats throughout the period of organogenesis, high incidences of fetal malformation (primarily craniofacial, and axial and appendicular skeletal defects) and fetal death were observed at doses associated with maternal toxicity. Adverse effects on fetal development were observed following dosing at various stages throughout organogenesis. Maternal plasma exposure at the no-effect level (1.0 mg/kg/day) for fetal developmental toxicity in rats was less than that in humans at the maximum recommended human dose (MRHD, 14 mg/day).

Administration of teriflunomide (oral doses of 1, 5, or 12 mg/kg/day) to pregnant rabbits throughout organogenesis resulted in high incidences of fetal malformation (primarily craniofacial, and axial and appendicular skeletal defects) and fetal death were observed at doses associated with maternal toxicity. Adverse effects on fetal development were observed following dosing at various stages throughout organogenesis. Maternal plasma exposure at the no-effect level (1.0 mg/kg/day) for fetal developmental toxicity in rabbits was less than that in humans at the MRHD.

In studies in which teriflunomide (oral doses of 0.05, 0.1, 0.3, 0.6, or 1.0 mg/kg/day) was administered to rats during gestation and lactation, decreased growth, eye and skin abnormalities, and high incidences of malformation (limb defects) and postnatal death were observed in the offspring at doses not associated with maternal toxicity. Maternal plasma exposure at the no-effect dose for prenatal and postnatal developmental toxicity in rats (0.10 mg/kg/day) was less than that in humans at the MRHD.

In animal reproductive studies of leflunomide, embryolethality and teratogenic effects were observed in postnatal developmental toxicity in rats was less than that in humans at the maximum recommended human dose (MRHD). Maternal plasma exposure at the no-effect level (1.0 mg/kg/day) for fetal toxicity. Maternal plasma exposure at the no-effect level (1.0 mg/kg/day) for fetal developmental toxicity was reported in 1.8% (2/109) of patients who received AUBAGIO compared to no patients in the placebo group. All patients in the pediatric trial recovered or were recovering after treatment discontinuation and accelerated elimination procedure [see Warnings and Precautions (5.11)].

Additionally, elevated or abnormal blood creatine phosphokinase was reported in 6.4% of pediatric patients who received AUBAGIO compared to no patients in the placebo group.

Juvenile Animal Toxicity Data

Oral administration of teriflunomide (0.3, 0.3, 3, or 6 mg/kg/day) to young rats on postnatal days 21 to 70 resulted in suppression of immune function (T-cell dependent antibody response) at the mid and high doses, and adverse effects on male reproductive organs (reduced sperm count) and altered neurobehavioral function (increased locomotor activity) at the high dose. At the no-effect dose (0.3 mg/kg/day) for developmental toxicity in juvenile rats, plasma exposures were less than those in pediatric patients at the doses of AUBAGIO tested in the clinical study.

8.5 Geriatric Use

Clinical studies of AUBAGIO did not include patients over 65 years old.

8.6 Hepatic Impairment

No dosage adjustment is necessary for patients with mild and moderate hepatic impairment. The pharmacokinetics of teriflunomide in severe hepatic impairment has not been evaluated. AUBAGIO is contraindicated in patients with severe hepatic impairment [see Contraindications (4), Warnings and Precautions (5.1), and Clinical Pharmacology (12.3)].

8.7 Renal Impairment

No dosage adjustment is necessary for patients with mild, moderate, and severe renal impairment [see Clinical Pharmacology (12.3)].

10 OVERDOSAGE

There is no experience regarding teriflunomide overdose or intoxication in humans. Teriflunomide 70 mg daily up to 14 days was well tolerated by healthy subjects.

In the event of clinically significant overdose or toxicity, cholestyramine or activated charcoal is recommended to accelerate elimination [see Warnings and Precautions (5.3)].

11 DESCRIPTION

AUBAGIO (teriflunomide) is an oral de novo pyrimidine synthesis inhibitor of the DHO-DH enzyme, with the chemical name (Z)-2-Cyano-3-hydroxybut-2-enoic acid-(4-fluoromethylphenyl)amide. Its molecular weight is 270.21, and the empirical formula is C_{18}H_{18}F_{2}N_{2}O_{4} with the following chemical structure:

![Chemical Structure]

Teriflunomide is a white to almost white powder that is sparingly soluble in acetone, slightly soluble in polyethylene glycol and ethanol, very slightly soluble in isopropanol and practically insoluble in water. Teriflunomide is formulated as film-coated tablets for oral administration. AUBAGIO tablets contain 7 mg or 14 mg of teriflunomide in the following inactive ingredients: lactose monohydrate, corn starch, hydroxypropyl cellulose, microcrystalline cellulose, sodium starch glycolate, and magnesium stearate. The film coating for the 14 mg tablet is made of hypromellose, titanium dioxide, talc, polyethylene glycol and indigo carmine aluminum lake. In addition to these, the 7 mg tablet film coating includes iron oxide yellow.
mechanism by which teriflunomide exerts its therapeutic effect in multiple sclerosis is unknown but may involve a reduction in the number of activated lymphocytes in CNS.

12.2 Pharmacokinetics
Potential to Prolong the QT Interval
In a placebo-controlled, thorough QT study performed in healthy adult subjects, there was no evidence that teriflunomide caused QT interval prolongation of clinical significance (i.e., the upper bound of the 90% confidence interval for the largest placebo-adjusted, baseline-corrected QTc was below 10 ms).

12.3 Pharmacokinetics
Teriflunomide is the principal active metabolite of leflunomide and is responsible for leflunomide’s activity in vivo. At recommended doses, teriflunomide and leflunomide result in a similar range of plasma concentrations of teriflunomide. Based on a population analysis of teriflunomide in healthy adult volunteers and adult MS patients, median t1/2 was approximately 16 and 19 days after repeated doses of 7 mg and 14 mg, respectively. It takes approximately 3 months to reach steady-state concentrations. The estimated AUC accumulation ratio is approximately 30 after repeated doses of 7 or 14 mg.

Absorption
Median time to reach maximum plasma concentrations is between 1 to 4 hours post dose following oral administration of teriflunomide. Food does not have a clinically relevant effect on teriflunomide pharmacokinetics.

Distribution
Teriflunomide is extensively bound to plasma protein (>99%) and is mainly distributed in plasma. The volume of distribution is 11 L after a single intravenous (IV) administration.

Metabolism
Teriflunomide is the major circulating moiety detected in plasma. The primary biotransformation pathway to minor metabolites of teriflunomide is hydrolysis, with oxidation being a minor pathway. Secondary pathways involve oxidation, N-acetylation and sulfate conjugation.

Elimination
Teriflunomide is eliminated mainly through direct biliary excretion of unchanged drug as well as renal excretion of metabolites. Over 21 days, 60% of the administered dose is excreted via feces (37.5%) and urine (22.6%). After an accelerated elimination procedure with cholestyramine, an additional 23.1% was recovered (mostly in feces). After a single IV administration, the total body clearance of teriflunomide is 30.5 mL/h.

Drug Interaction Studies
Teriflunomide is not metabolized by CYP3A4 or flavin monoamine oxidase enzymes. The potential effect of AUBAGIO on other drugs CYP2C9 substrates
There was an increase in mean rapamycin Cmax and AUC (1.7- and 2.4-fold, respectively) following repeated doses of teriflunomide and a single dose of 0.25 mg rapamycin, suggesting that teriflunomide is an inhibitor of CYP2C9 in vivo. The magnitude of interaction could be further elevated at the higher recombinant rapamycin dose [see Drug Interactions (7)].

CYP1A2 substrates
Repeated doses of teriflunomide decreased mean Cmax and AUC of caffeine by 18% and 55%, respectively, suggesting that teriflunomide may be a weak inducer of CYP1A2 in vivo [see Drug Interactions (7)].

OAT3 substrates
There was an increase in mean fexofenadine Cmax and AUC (1.43- and 1.54-fold, respectively), following repeated doses of teriflunomide, suggesting that teriflunomide is an inhibitor of organic anion transporter 3 (OAT3) in vivo [see Drug Interactions (7)].

BCRP and OATP1B1/1B3 substrates
There was an increase in mean rosuvastatin Cmax and AUC (2.65- and 2.51-fold, respectively) following repeated doses of teriflunomide, suggesting that teriflunomide is an inhibitor of BCRP transporter and organic anion transporting polypeptide 1B1 and 1B3 (OATP1B1/1B3) [see Drug Interactions (7)].

Oral contraceptives
There was an increase in mean ethinylestradiol Cmax and AUC (1.58- and 1.54-fold, respectively) and levonorgestrel Cmax and AUC (1.33- and 1.41-fold, respectively) following repeated doses of teriflunomide [see Drug Interactions (7)].

Teriflunomide did not affect the pharmacokinetics of bupropion (a CYP2B6 substrate), midazolam (a CYP3A4 substrate), S-warfarin (a CYP2C9 substrate), omeprazole (a CYP2C19 substrate), and metoprolol (CYP2D6 substrate).

The potential effect of other drugs on AUBAGIO
Potent CYP and transporter inducers: Rifampin did not affect the pharmacokinetics of teriflunomide. Specific Populations
Hepatic impairment
Mild and moderate hepatic impairment had no impact on the pharmacokinetics of teriflunomide. The pharmacokinetics of teriflunomide in severe hepatic impairment has not been evaluated [see Contraindications (4), Warnings and Precautions (6.1), and Use in Specific Populations (8.7)].
Renal impairment
Severe renal impairment had no impact on the pharmacokinetics of teriflunomide [see Use in Specific Populations (8.7)].
Gender
In a population analysis, the clearance rate for teriflunomide is 3% less in females than in males.
Race
Effect of race on the pharmacokinetics of teriflunomide cannot be adequately assessed due to a low number of non-white patients in the clinical trials.

13 NONCLINICAL TOXICOLOGY
13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility
Carcinogenesis
No evidence of carcinogenicity was observed in lifetime carcinogenicity bioassays in mouse and rat. In mouse, teriflunomide was administered orally at doses up to 12 mg/kg/day for up to 95–104 weeks; plasma teriflunomide exposures (AUC) at the highest dose tested are approximately 5 times that in humans at the maximum recommended human dose (MRHD, 14 mg/day). In rat, teriflunomide was administered orally at doses up to 4 mg/kg/day for up to 97–104 weeks; plasma teriflunomide AUCs at the highest doses tested are less than that in humans at the MRHD.

Mutagenesis
Teriflunomide was negative in the in vitro bacterial reverse mutation (Ames) assay, the in vitro HPR assay, and in in vivo micronucleus and chromosomal aberration assays. Teriflunomide was positive in an in vitro chromosomal aberration assay in human lymphocytes, with and without metabolic activation.

Addition of uridine (to supplement the pyrimidine pool) reduced the magnitude of the clastogenic effect; however, teriflunomide was positive in the in vitro chromosomal aberration assay, even in the presence of uridine.

4-Trifluoromethylglyline (4-TFGA), a minor metabolite of teriflunomide, was positive in the in vitro bacterial reverse mutation (Ames) assay, the in vitro HPR assay, and the in vitro chromosomal aberration assay in mammalian cells. 4-TFGA was negative in in vivo micronucleus and chromosomal aberration assays.

14 CLINICAL STUDIES
Four randomized, controlled, double-blind clinical trials established the efficacy of AUBAGIO in patients with relapsing forms of multiple sclerosis.

Study 1 was a double-blind, placebo-controlled clinical trial that evaluated once daily doses of AUBAGIO 7 mg and AUBAGIO 14 mg for up to 26 months in patients with relapsing forms of multiple sclerosis. Patients were required to have a diagnosis of multiple sclerosis exhibiting a relapsing clinical course, with or without progression, and to have experienced at least one relapse over the year preceding the trial or at least two relapses over the two years preceding the trial. Patients were required not to have received interferon-beta for at least four months, or any other multiple sclerosis medication for at least six months before entering the study, nor were these medications permitted during the study. Neurological evaluations were to be performed at screening, every 12 weeks until week 106, and after suspected relapses. MRI was to be performed at screening, and at week 24, 48, 72, and 108. The primary endpoint was the annualized relapse rate (ARR).

In Study 1, 1098 patients were randomized to receive AUBAGIO 7 mg (n=366), AUBAGIO 14 mg (n=369), or placebo (n=363). At entry, patients had an Expanded Disability Status Scale (EDSS) score ≤5.5. Patients had a mean age of 38 years, mean disease duration of 5 years, and mean EDSS at baseline of 2.7. A total of 91% of patients had relapsing remitting multiple sclerosis, and 9% had a progressive form of multiple sclerosis with relapses. The mean duration of treatment was 65.5, 62.7, and 63.1 days for AUBAGIO 7 mg, AUBAGIO 14 mg, and placebo, respectively. The percentage of patients who completed the study treatment period was 75%, 73%, and 71% for AUBAGIO 7 mg, AUBAGIO 14 mg, and placebo, respectively.

There was a statistically significant reduction in ARR for patients who received AUBAGIO 7 mg or AUBAGIO 14 mg, compared to patients who received placebo (see Table 2). There was a consistent reduction of the ARR noted in subgroups defined by sex, age group, prior multiple sclerosis therapy, and baseline disease activity.

There was a statistically significant reduction in the relative risk of disability progression at week 108 sustained for 12 weeks (as measured by at least a 1-point increase from baseline EDSS ≤5.5 or a 0.5 point increase for those with a baseline EDSS >5.5) in the AUBAGIO 14 mg group compared to placebo (see Table 2 and Figure 1).

The effect of AUBAGIO on several magnetic resonance imaging (MRI) variables, including the lesion volume of T2 and hypointense T1 lesions, was assessed in Study 1. The change in total lesion volume from baseline was significantly lower in the AUBAGIO 7 mg and AUBAGIO 14 mg groups than in the placebo group. Patients in both AUBAGIO groups had significantly fewer gadolinium-enhancing lesions per T1-weighted scan than those in the placebo group (see Table 2).

Table 2: Clinical and MRI Results of Study 1

<table>
<thead>
<tr>
<th></th>
<th>AUBAGIO 7 mg</th>
<th>AUBAGIO 14 mg</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>56.9</td>
<td>57.6</td>
<td>56.9</td>
</tr>
<tr>
<td>Gender</td>
<td>50%</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>Race</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Clinical Endpoints</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annualized relapse rate</td>
<td>0.370</td>
<td>0.369</td>
<td>0.539</td>
</tr>
<tr>
<td>Relative risk reduction</td>
<td>31%</td>
<td>31%</td>
<td>–</td>
</tr>
<tr>
<td>Percent of patients remaining relapse-free at week 108</td>
<td>53.7%</td>
<td>56.5%</td>
<td>49.7%</td>
</tr>
<tr>
<td>Percent disability progression at week 108</td>
<td>21.7%</td>
<td>20.2%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Hazard ratio</td>
<td>0.76</td>
<td>0.70</td>
<td>–</td>
</tr>
<tr>
<td>MRI Endpoints</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median change from baseline in Total lesion volume (mL) at week 108</td>
<td>0.755</td>
<td>0.945</td>
<td>1.127</td>
</tr>
<tr>
<td>Mean number of Gd-enhancing T1-lesions per scan</td>
<td>0.570</td>
<td>0.261</td>
<td>1.331</td>
</tr>
</tbody>
</table>

†p-values based on cubic root transformed data for total lesion volume.
Study 2 was a double-blind, placebo-controlled clinical trial that evaluated once daily doses of AUBAGIO 7 mg and AUBAGIO 14 mg for up to 40 months in patients with relapsing forms of multiple sclerosis. Patients were required to have a diagnosis of multiple sclerosis exhibiting a relapsing clinical course and to have experienced at least one relapse over the year preceding the trial, or at least two relapses over the two years preceding the trial. Patients were required not to have received any multiple sclerosis medication for at least three months before entering the trial, nor were these medications permitted during the trial. Neurological evaluations were to be performed at screening, every 12 weeks until completion, and after every suspected relapse. The primary endpoint was the ARR.

A total of 1165 patients received AUBAGIO 7 mg (n=407), AUBAGIO 14 mg (n=370), or placebo (n=388). Patients had a mean age of 38 years, a mean disease duration of 5 years, and a mean EDSS at baseline of 2.7. A total of 98% of patients had relapsing remitting multiple sclerosis, and 42% had a progressive form of multiple sclerosis with relapses. The mean duration of treatment was 552, 567, and 571 days for AUBAGIO 7 mg, AUBAGIO 14 mg, and placebo, respectively. The percentage of patients who completed the study treatment period was 67%, 66%, and 68% for AUBAGIO 7 mg, AUBAGIO 14 mg, and placebo, respectively. There was a statistically significant reduction in the ARR for patients who received AUBAGIO 7 mg or AUBAGIO 14 mg compared to patients who received placebo (see Table 3). There was a consistent reduction of the ARR noted in subgroups defined by sex, age, prior multiple sclerosis therapy, and baseline disease activity. There was a statistically significant reduction in the relative risk of disability progression at week 108 sustained for 12 weeks (as measured by at least a 1-point increase from baseline EDSS ≤3.5 or a 0.5 point increase for those with a baseline EDSS >5.0) in the AUBAGIO 14 mg group compared to placebo (see Table 3 and Figure 2).

Study 3 was a double-blind, placebo-controlled clinical trial that evaluated once daily doses of AUBAGIO 7 mg and AUBAGIO 14 mg for up to 108 weeks in patients with relapsing multiple sclerosis. Patients were required to have had a first clinical event consistent with acute demyelination occurring within 90 days of randomization with 2 or more T2 lesions at least 3 mm in diameter that were characteristic of multiple sclerosis. A total of 614 patients received AUBAGIO 7 mg (n=203), AUBAGIO 14 mg (n=214), or placebo (n=197). Patients had a mean age of 32 years, EDSS at baseline of 1.7, and mean disease duration of two months. The proportion of patients free of relapse was greater in the AUBAGIO 7 mg (70.5%, p<0.05) and AUBAGIO 14 mg (72.2%, p<0.05) groups than in the placebo group (61.7%). The effect of AUBAGIO on MRI activity was also demonstrated in Study 4, a randomized, double-blind, placebo-controlled trial of multiple sclerosis patients with relapse. In Study 4, MRI was to be performed at baseline, 6 weeks, 12 weeks, 14 weeks, 30 weeks, and 36 weeks after treatment initiation. A total of 179 patients were randomized to AUBAGIO 7 mg (n=61), AUBAGIO 14 mg (n=57), or placebo (n=61). Baseline demographics were consistent across treatment groups. The primary endpoint was the average number of unique active lesions/MRI scan during treatment. The mean number of unique active lesions per brain MRI scan during the 36-week treatment period was lower in patients treated with AUBAGIO 7 mg (1.06) and AUBAGIO 14 mg (0.98) as compared to placebo (2.69), the difference being statistically significant for both (p=0.0023 and p=0.0052, respectively).

16 HOW SUPPLIED/STORAGE AND HANDLING

AUBAGIO is available as 7 mg and 14 mg tablets. The 14 mg tablet is pale blue to pastel blue, pentagonal film-coated tablet with dose strength “14” imprinted on one side and engraved with corporate logo on the other side. Each tablet contains 14 mg of teriflunomide. The 7 mg tablet is very light greenish-bluish grey to pale greenish-blue, hexagonal film-coated tablet imprinted with dose strength “7” on one side and engraved with corporate logo on the other side. Each tablet contains 7 mg of teriflunomide. AUBAGIO 14 mg tablets are supplied as:

- NDC 58468-0210-2 Carton of 28 tablets containing 1 wallet composed of 2 folded blister cards of 14 tablets per blister card
- NDC 58468-0210-4 Carton containing a bottle of 30 tablets
- NDC 58468-0210-1 Carton of 5 tablets with one blister card with five tablets

AUBAGIO 7 mg tablets are supplied as:

- NDC 58468-0211-1 Carton of 28 tablets containing 1 wallet composed of 2 folded blister cards of 14 tablets per blister card
- NDC 58468-0211-4 Carton containing a bottle of 30 tablets
- NDC 58468-0211-2 Carton of 5 tablets with one blister card with five tablets

Store at 68°F to 77°F (20°C to 25°C) with excursions permitted between 59°F and 86°F (15°C and 30°C).

17 PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Medication Guide). A Medication Guide is required for distribution with AUBAGIO.

Hepatotoxicity

Inform patients that AUBAGIO may cause liver injury, which can be life-threatening, and that their liver enzymes will be checked before starting AUBAGIO and at least monthly for 6 months after starting AUBAGIO [see Dosage and Administration (2) and Warnings and Precautions (5.1)]. Advise patients that they should contact their physician if they have any unexplained nausea, vomiting, abdominal pain, fatigue, anorexia, or jaundice and/or dark urine.

Embryofetal Toxicity

- Advise females of reproductive potential o of the potential for fetal harm if AUBAGIO is taken during pregnancy o to notify their healthcare provider immediately if a pregnancy occurs or is suspected o to use effective contraception during treatment with AUBAGIO and until the teriflunomide plasma concentration is verified to be less than 0.02 mg/L [see Warnings and Precautions (5.2, 5.3), Use in Specific Populations (8.1, 8.3), Clinical Pharmacology (12.3)].
- Inform men taking AUBAGIO and not wishing to father a child to use effective contraception to minimize any possible risk to the fetus; their female partners should also use effective contraception.
- Advise men wishing to father a child to discontinue use of AUBAGIO and undergo an accelerated elimination procedure.

Pregnancy Exposure Registry

There is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to AUBAGIO during pregnancy [see Use in Specific Populations (8.1)].

Availability of an Accelerated Elimination Procedure

Advise patients that AUBAGIO may stay in the blood for up to 2 years after the last dose and that an accelerated elimination procedure may be used if needed [see Warnings and Precautions (5.3)].

Risk of Infections

Inform patients that they may develop a lowering of their white blood cell counts and that their blood counts will be checked before starting AUBAGIO.

Inform patients that they may be more likely to get infections when taking AUBAGIO and that they should contact their physician if they develop symptoms of infection, particularly in case of fever [see Warnings and Precautions (5.4)].

Advise patients that the use of some vaccines should be avoided during treatment with AUBAGIO and for at least 6 months after discontinuation.

Hypersensitivity Reactions

Advise patients to discontinue AUBAGIO and seek immediate medical attention if any signs or symptoms of a hypersensitivity reaction occur [see Contraindications (4) and Warnings and Precautions (5.5)]. Signs and symptoms can include dyspnea, urticaria, angioedema involving the lips, eyes, throat, or tongue, or skin rash.
Peripheral Neuropathy

Advises patients to discontinue AUBAGIO and seek immediate medical attention if any signs of a serious skin reaction, such as SJS or TEN, occur (see Warnings and Precautions [5.7]). Signs and symptoms can include rash, mouth sores, blisters, or peeling skin.

DRESS/Multi-organ Hypersensitivity

Instruct patients and caregivers that a fever or rash associated with signs of other organ system involvement (e.g., lymphadenopathy, hepatic dysfunction) may be drug-related and should be reported to their healthcare provider immediately. AUBAGIO should be discontinued immediately if a serious hypersensitivity reaction is suspected (see Warnings and Precautions [5.7]).

Peripheral Neuropathy

Inform patients that they may develop peripheral neuropathy. Advise patients that they should contact their physician if they develop symptoms of peripheral neuropathy, such as numbness or tingling of hands or feet (see Warnings and Precautions [5.6]).

Increased Blood Pressure

Inform patients that AUBAGIO may increase blood pressure (see Warnings and Precautions [5.9]).

Lactation

Advise females not to breastfeed during treatment with AUBAGIO (see Use in Specific Populations [8.2]).

Medication Guide

AUBAGIO® (oh-BAH-gee-oh) (teriflunomide) tablets, for oral use

Read this Medication Guide before you start using AUBAGIO and each time you get a refill. There may be new information. This information does not take the place of talking with your doctor about your medical condition or your treatment.

What is the most important information I should know about AUBAGIO?

AUBAGIO may cause serious side effects, including:

- Liver problems: AUBAGIO may cause serious liver problems, including liver failure that can be life-threatening and may require a liver transplant. Your risk of developing serious liver problems may be higher if you already have liver problems or take other medicines that also affect your liver. Your doctor should do blood tests to check your liver:
  - within 6 months before you start taking AUBAGIO
  - 1 time a month for 6 months after you start taking AUBAGIO

  Call your doctor right away if you have any of the following symptoms of liver problems:
  - nausea
  - vomiting
  - stomach pain
  - loss of appetite
  - tiredness
  - your skin or the whites of your eyes turn yellow
  - dark urine

- Harm to your unborn baby: AUBAGIO may cause harm to your unborn baby. Do not take AUBAGIO if you are pregnant. Do not take AUBAGIO unless you are using effective birth control.
  - If you are a female, you should have a pregnancy test before you start taking AUBAGIO. Use effective birth control during your treatment with AUBAGIO.
  - After stopping AUBAGIO, continue using effective birth control until you have blood tests to make sure your blood levels of AUBAGIO are low enough. If you become pregnant while taking AUBAGIO or within 2 years after you stop taking it, tell your doctor right away.
  - AUBAGIO Pregnancy Registry. If you become pregnant while taking AUBAGIO or during the 2 years after you stop taking AUBAGIO, talk to your doctor about enrolling in the AUBAGIO Pregnancy Registry at 1-800-745-4447, option 2. The purpose of this registry is to collect information about your health and your baby’s health.

- For men taking AUBAGIO:
  - If your female partner plans to become pregnant, you should stop taking AUBAGIO and ask your doctor how to quickly lower the levels of AUBAGIO in your blood.
  - If your female partner does not plan to become pregnant, you and your female partner should use effective birth control during your treatment with AUBAGIO. AUBAGIO remains in your blood after you stop taking it, so continue using effective birth control until AUBAGIO blood levels have been checked and they are low enough.

AUBAGIO may stay in your blood for up to 2 years after you stop taking it. Your doctor can prescribe a medicine to help lower your blood levels of AUBAGIO more quickly. Talk to your doctor if you want more information about this.

What is AUBAGIO?

- AUBAGIO is a prescription medicine used to treat relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults.
- It is not known if AUBAGIO is safe and effective in children.

Who should not take AUBAGIO?

Do not take AUBAGIO if you:

- have severe liver problems.
- are pregnant or are of childbearing age and not using effective birth control.
- have had an allergic reaction to leflunomide, teriflunomide, or any other ingredients in AUBAGIO. Please see the end of this Medication Guide for a complete list of ingredients in AUBAGIO.
- take a medicine called leflunomide.

What should I tell my doctor before taking AUBAGIO?

Before you take AUBAGIO, tell your doctor about all of your medical conditions, including if you:

- have liver or kidney problems.
- have a fever or infection, or you are unable to fight infections.
- have numbness or tingling in your hands or feet that is different from your MS symptoms.
- have diabetes.
- have had serious skin problems when taking other medicines.
- have breathing problems.
- have high blood pressure.
- are breastfeeding or plan to breastfeed. It is not known if AUBAGIO passes into your breast milk. You and your doctor should decide if you will take AUBAGIO or breastfeed. You should not do both.

Tell your doctor about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Using AUBAGIO and other medicines may affect each other causing serious side effects. AUBAGIO may affect the way other medicines work, and other medicines may affect how AUBAGIO works. Especially tell your doctor if you take medicines that could raise your chance of getting infections, including medicines used to treat cancer or to control your immune system.

Ask your doctor or pharmacist for a list of these medicines if you are not sure.

Know the medicines you take. Keep a list of them to show your doctor or pharmacist when you get a new medicine.

How should I take AUBAGIO?

- Take AUBAGIO exactly as your doctor tells you to take it.
- Take AUBAGIO 1 time each day.
- Take AUBAGIO with or without food.
What are possible side effects of AUBAGIO?
AUBAGIO may cause serious side effects, including:

- see “What is the most important information I should know about AUBAGIO?”
- decreases in your white blood cell count. Your white blood cell counts should be checked before you start taking AUBAGIO. When you have a low white blood cell count you:
  - may have more frequent infections. You should have a skin test for TB (tuberculosis) before you start taking AUBAGIO. Tell your doctor if you have any of these symptoms of an infection:
    - fever
    - tiredness
    - body aches
    - chills
    - nausea
    - vomiting
  - should not receive certain vaccinations during your treatment with AUBAGIO and for 6 months after your treatment with AUBAGIO ends.
- allergic reactions. Stop taking AUBAGIO and call your doctor right away or get emergency medical help if you have difficulty breathing, itching, swelling on any part of your body including in your lips, eyes, throat, or tongue.
- serious skin reactions. AUBAGIO may cause serious skin reactions that may lead to death. Stop taking AUBAGIO and call your doctor right away or get emergency medical help if you have any of the following symptoms: rash or redness and peeling, mouth sores or blisters.
- other types of allergic reactions or serious problems that may affect different parts of the body such as your liver, kidneys, heart, or blood cells. You may or may not have a rash with these types of reactions. Other symptoms you may have are:
  - severe muscle pain
  - swollen lymph glands
  - swelling of your face
  - unusual bruising or bleeding
  - weakness or tiredness
  - yellowing of your skin or the white part of your eyes
  - if you have a fever or rash with any of the above symptoms, stop taking AUBAGIO and call your doctor right away.
- numbness or tingling in your hands or feet that is different from your MS symptoms. You have a higher chance of getting these symptoms if you:
  - are over 60 years of age
  - take certain medicines that affect your nervous system
  - have diabetes
  - Tell your doctor if you have numbness or tingling in your hands or feet that is different from your MS.
- high blood pressure. Your doctor should check your blood pressure before you start taking AUBAGIO and while you are taking AUBAGIO.
- new or worsening breathing problems. These may be serious and lead to death. Call your doctor right away or get emergency medical help if you have shortness of breath or coughing with or without fever.

The most common side effects of AUBAGIO include:
- headache
- diarrhea
- nausea
- hair thinning or loss (alopecia)
- increases in the results of blood tests to check your liver function

These are not all the possible side effects of AUBAGIO. For more information, ask your doctor or pharmacist.

Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.