# TRYVIO- aprocitentan tablet, film coated Idorsia Pharmaceuticals Ltd

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#### HIGHLIGHTS OF PRESCRIBING INFORMATION

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

TRYVIO™ (aprocitentan) tablets, for oral use Initial U.S. Approval: 2024

#### **WARNING: EMBRYO-FETAL TOXICITY**

#### See full prescribing information for complete boxed warning.

- TRYVIO can cause major birth defects if used by pregnant patients and is contraindicated in pregnancy. (4.1, 5.1, 8.1)
- Patients who can become pregnant: Exclude pregnancy prior to initiation of treatment, monthly during treatment, and for one month after stopping TRYVIO. (2.2, 5.1, 8.3)
- Patients who can become pregnant: Use acceptable contraception prior to initiation of treatment, during treatment, and for one month after stopping TRYVIO. (2.2, 4.1, 5.1, 8.3)
- TRYVIO is only available through a restricted distribution program called the TRYVIO REMS. (5.2)

INDICATIONS AND USAGE					
TRYVIO is an endothelin receptor antagonist indicated for the treatment of hypertension in combination with other antihypertensive drugs, to lower blood pressure in adult patients who are not adequately					
controlled on other drugs. Lowering blood pressure reduces the risk of fatal and non-fatal cardiovascular events, primarily strokes and myocardial infarctions. (1)					
DOSAGE AND ADMINISTRATION					
• The recommended dosage of TRYVIO is 12.5 mg orally once daily, with or without food. (2.1)					
DOSAGE FORMS AND STRENGTHS					
Tablets: 12.5 mg (3)					
CONTRAINDICATIONS					
Pregnancy (4.1)					
Hypersensitivity (4.2)					
WARNINGS AND PRECAUTIONS					
<ul> <li>ERAs cause hepatotoxicity and liver failure. Measure serum aminotransferase levels and total bilirubin prior to initiation of treatment and repeat periodically during treatment and as clinically indicated. (5.3)</li> <li>Fluid retention may require intervention (5.4)</li> <li>Decreases in hemoglobin (5.5)</li> <li>Decreased sperm counts (5.6)</li> </ul>					
ADVERSE REACTIONS					
Most common adverse reactions (more frequent than placebo and $\geq$ 2% in TRYVIO-treated patients) are edema/fluid retention and anemia. (6.1)					
To report SUSPECTED ADVERSE REACTIONS, contact Idorsia Pharmaceuticals Ltd at 1-833-400-9611 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.					

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.

• Lactation: Advise not to breastfeed. (8.2)

**Revised: 4/2024** 

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#### **FULL PRESCRIBING INFORMATION**

#### WARNING: EMBRYO-FETAL TOXICITY

- TRYVIO can cause major birth defects if used by pregnant patients [see Contraindications (4.1), Warnings and Precautions (5.1), Use in Specific Populations (8.1)].
- In patients who can become pregnant, obtain a negative pregnancy test prior to initiation of TRYVIO and counsel patients to take monthly pregnancy tests during treatment and one month after discontinuation of TRYVIO [see Dosage and Administration (2.2) and Use in Specific Populations (8.3)].
- To prevent pregnancy, patients who can become pregnant should use acceptable methods of contraception before the start of, during, and for one month after stopping treatment [see Contraindications (4.1), Warnings and Precautions (5.1), Use in Specific Populations (8.3)].
- Because of the risk of birth defects, TRYVIO is only available through a restricted program called the TRYVIO Risk Evaluation and Mitigation Strategy (REMS) [see Warning and Precautions (5.2)].

#### 1 INDICATIONS AND USAGE

TRYVIO, in combination with other antihypertensive drugs, is indicated for the treatment of hypertension, to lower blood pressure (BP) in adult patients who are not adequately controlled on other drugs. Lowering BP reduces the risk of fatal and non-fatal cardiovascular events, primarily strokes and myocardial infarctions. These benefits have been seen in controlled trials of antihypertensive drugs from a wide variety of pharmacologic classes. There are no controlled trials demonstrating reduction of risk of these events with TRYVIO.

Control of high BP should be part of comprehensive cardiovascular risk management, including, as appropriate, lipid control, diabetes management, antithrombotic therapy, smoking cessation, exercise, and limited sodium intake. Many patients will require more than one drug to achieve BP goals. For specific advice on goals and management, see published guidelines, such as those of the National High Blood Pressure Education Program's Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC).

Numerous antihypertensive drugs, from a variety of pharmacologic classes and with different mechanisms of action, have been shown in randomized controlled trials to reduce cardiovascular morbidity and mortality, and it can be concluded that it is BP reduction, and not some other pharmacologic property of the drugs, that is largely responsible for those benefits. The largest and most consistent cardiovascular outcome benefit has been a reduction in the risk of stroke, but reductions in myocardial infarction and cardiovascular mortality also have been seen regularly.

Elevated systolic or diastolic pressure causes increased cardiovascular risk, and the absolute risk increase per mmHg is greater at higher BPs, so that even modest reductions of severe hypertension can provide substantial benefit. Relative risk reduction from BP 2 reduction is similar across populations with varying absolute risk, so the absolute benefit is greater in patients who are at higher risk independent of their hypertension (for example, patients with diabetes or hyperlipidemia), and such patients

would be expected to benefit from more aggressive treatment to a lower BP goal.

#### **2 DOSAGE AND ADMINISTRATION**

#### 2.1 Recommended Dosage

The recommended dosage of TRYVIO is 12.5 mg orally once daily.

Swallow tablets whole. TRYVIO may be taken with or without food.

If a dose is missed, skip the missed dose and take the next dose at the regular time. Do not take two doses on the same day.

# 2.2 Pregnancy Testing in Females of Reproductive Potential

Initiate treatment with TRYVIO in females of reproductive potential only after confirmation of a negative pregnancy test. Patients should exclude pregnancy with negative pregnancy tests monthly during treatment and one month after discontinuation of treatment with TRYVIO [see Boxed Warning, Contraindications (4.1), Warnings and Precautions (5.1), Use in Specific Populations (8.3)].

#### **3 DOSAGE FORMS AND STRENGTHS**

TRYVIO (aprocitentan) tablets are available as:

• 12.5 mg: yellow to orange round, film-coated tablet, debossed with "AN" on one side and plain on the other side.

#### 4 CONTRAINDICATIONS

# 4.1 Pregnancy

Use of TRYVIO is contraindicated in pregnancy. To prevent pregnancy, patients who can become pregnant should use acceptable contraception prior to initiation of treatment, during treatment, and for one month after discontinuation of treatment with TRYVIO [see Warnings and Precautions (5.1) and Use in Specific Populations (8.1)].

# 4.2 Hypersensitivity

TRYVIO is contraindicated in patients who are hypersensitive to approximate any of its excipients [see Adverse Reactions (6.1)].

#### **5 WARNINGS AND PRECAUTIONS**

# **5.1 Embryo-Fetal Toxicity**

Based on data from animal reproduction studies with endothelin receptor antagonists (ERAs), TRYVIO can cause fetal harm when administered during pregnancy and is contraindicated for use in patients who are pregnant. Exclude pregnancy and ensure use of acceptable contraceptive methods prior to initiation of treatment with TRYVIO. Counsel patients who can become pregnant about the potential risk to a fetus. Patients

should monitor for pregnancy monthly during treatment and one month after discontinuation of treatment and avoid pregnancy by using acceptable contraception methods prior to initiation of treatment with TRYVIO, during treatment, and for one month after the final dose of TRYVIO. If pregnancy is detected, discontinue TRYVIO [see Dosage and Administration (2.2), Contraindications (4.1), Warnings and Precautions (5.2), Use in Specific Populations (8.1, 8.3)].

#### **5.2 TRYVIO REMS**

TRYVIO is available only through a restricted program under a REMS called the TRYVIO REMS because of the risk of embryo-fetal toxicity [see Contraindications (4.1), Warnings and Precautions (5.1), Use in Specific Populations (8.1, 8.3)].

Important requirements of the TRYVIO REMS include the following:

- Prescribers must be certified with the TRYVIO REMS by enrolling and completing training.
- Pharmacies that dispense TRYVIO must be certified with the TRYVIO REMS.

Further information is available at www.TRYVIOREMS.com or 1-866-429-8964.

# 5.3 Hepatotoxicity

Elevations of aminotransferases and hepatotoxicity are known effects of ERAs, including TRYVIO. Elevations in alanine transaminase (ALT) or aspartate aminotransferase (AST) of greater than 5-fold upper limit of normal (ULN) were observed rarely in patients treated with aprocitentan in the clinical trial, including cases with positive rechallenge. There were no reports of patients with ALT and/or AST >3 × ULN and total bilirubin >2 × ULN or cases of liver failure observed in TRYVIO-treated patients in the clinical trials. To reduce the risk of potential serious hepatotoxicity, measure serum aminotransferase levels and total bilirubin prior to initiation of treatment and repeat during treatment periodically and as clinically indicated.

Do not initiate TRYVIO in patients with elevated aminotransferases ( $>3 \times ULN$ ) or moderate to severe hepatic impairment.

Advise patients with symptoms suggesting hepatotoxicity (nausea, vomiting, right upper quadrant pain, fatigue, anorexia, scleral icterus, jaundice, dark urine, fever, or itching) to immediately stop treatment with TRYVIO and seek medical attention.

If sustained, unexplained, clinically relevant aminotransferase elevations occur, or if elevations are accompanied by an increase in bilirubin  $>2 \times ULN$ , or if clinical symptoms of hepatotoxicity occur, discontinue TRYVIO.

#### 5.4 Fluid Retention

Fluid retention and peripheral edema are known effects of ERAs, including TRYVIO [see Adverse Reactions (6.1)]. Edema/fluid retention was reported in 9% of TRYVIO-treated patients compared with 18% of patients receiving aprocitentan 25 mg (twice the recommended dose) and 2% on placebo in the clinical trial, requiring additional diuretic use in some patients. Older age and chronic kidney disease are risk factors for edema/fluid retention with TRYVIO. TRYVIO has not been studied in patients with heart failure New York Heart Association stage III-IV, unstable cardiac function, or with NTproBNP ≥500 pg/mL. TRYVIO is not recommended in these patients.

Monitor for signs and symptoms of fluid retention, weight gain, and worsening heart failure. If clinically significant fluid retention develops, treat appropriately, and consider discontinuation of TRYVIO.

## 5.5 Hemoglobin Decrease

Decreases in hemoglobin concentration and hematocrit have occurred following administration of other ERAs and were observed in the clinical trial with TRYVIO. Hemoglobin decreases usually presented early, stabilized thereafter, and were reversible after discontinuation. A decrease in hemoglobin of >2 g/dL from baseline was observed in 7% of patients compared to 1% of placebo patients. A decrease to below 10.0 g/dL was observed in 3% of TRYVIO-treated patients compared to 0 patients taking placebo. Initiation of TRYVIO is not recommended in patients with severe anemia. Measure hemoglobin prior to initiation of treatment and periodically during treatment as clinically indicated [see Adverse Reactions (6.1)].

# **5.6 Decreased Sperm Counts**

TRYVIO, like other ERAs, may have an adverse effect on spermatogenesis. Counsel men about potential effects on fertility [see Use in Specific Populations (8.3) and Nonclinical Toxicology (13.1)].

#### **6 ADVERSE REACTIONS**

Clinically significant adverse reactions that appear in other sections of the labeling include:

- Embryo-fetal toxicity [see Warnings and Precautions (5.1)]
- Hepatotoxicity [see Warnings and Precautions (5.3)]
- Fluid retention [see Warnings and Precautions (5.4)]
- Hemoglobin decrease [see Warnings and Precautions (5.5)]
- Decreased sperm counts [see Warnings and Precautions (5.6)]

# 6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The safety of TRYVIO was evaluated in a placebo-controlled phase 3 clinical study (PRECISION, NCT03541174) in adults with uncontrolled BP (systolic blood pressure [SBP] ≥140 mmHg) despite the use of at least three antihypertensive medications.

In this study, 724 patients received any dose of aprocitentan, with 633 patients treated for at least 26 weeks, 192 patients for at least 47 weeks, and 99 patients for at least 48 weeks.

The most frequently reported adverse reactions to TRYVIO during the 4-week double-blind placebo-controlled treatment period (part 1) of the PRECISION study are presented in Table 1.

# placebo-treated patients during the initial 4-week doubleblind placebo-controlled treatment (part 1)

Adverse Reaction	12.5 mg N = 243	Placebo N = 242
	%	%
Edema/fluid retention	9.1	2.1
Anemia	3.7	0

#### Hypersensitivity Reactions

During the initial 4-week double-blind placebo-controlled treatment period (part 1), 0.8% of patients experienced an adverse reaction of hypersensitivity (i.e., rash, erythema, allergic edema) on TRYVIO compared to no reports in patients treated with placebo. One patient experienced allergic dermatitis requiring hospitalization while receiving approcitentan 25 mg.

# Laboratory Tests

Initiation of TRYVIO may cause an initial small decrease in estimated glomerular filtration rate (eGFR) that occurs within the first 6 weeks of starting therapy and then stabilizes.

In the initial 4-week double-blind treatment period, TRYVIO 12.5 mg caused a mean decrease of about 0.8 g/dL in hemoglobin compared to no change in the placebo patients.

#### **8 USE IN SPECIFIC POPULATIONS**

# 8.1 Pregnancy

# Risk Summary

Based on animal reproduction studies with other ERAs, TRYVIO can cause embryo-fetal toxicity, including birth defects and fetal death when administered to a pregnant patient and is contraindicated during pregnancy [see Contraindications (4.1)]. Administration of macitentan, where approximately  $\geq 50\%$  of total exposure was to aprocitentan, was teratogenic in rats and rabbits at all doses tested (see Data). Available data from reports of pregnancy in clinical trials with TRYVIO are insufficient to rule out a drug-associated risk of major birth defects, miscarriage or other adverse maternal or fetal outcomes. Advise pregnant patients of the potential risk to a fetus.

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

There is a Pregnancy Safety Study that monitors pregnancy outcomes in women exposed to TRYVIO during pregnancy. Healthcare providers should report any prenatal exposure to TRYVIO by calling 1-866-429-8964.

#### Data

Animal Data

In embryo-fetal development toxicity studies in pregnant rats and rabbits given macitentan (for which aprocitentan is a major metabolite) during the period of major organogenesis, cardiovascular and mandibular arch fusion malformations were observed at all doses studied. The lowest doses in rats and rabbits produced aprocitentan exposures that were equivalent to and 15-fold, respectively, the clinical exposures at the maximum recommended human dose (MRHD) based on area under the curve (AUC).

In pre- and post-natal development studies, female rats given macitentan (for which aprocitentan is a major metabolite) from late pregnancy through lactation showed reduced pup survival and impairment of the male fertility of the offspring at all doses. The lowest dose produced aprocitentan exposures approximately 2-fold the clinical exposures at the MRHD based on AUC.

#### 8.2 Lactation

# Risk Summary

There are no data on the presence of aprocitentan in human milk, the effects on the breastfed infant, or the effect on milk production. In rats, aprocitentan was excreted into milk during lactation (see Data). When a drug is present in animal milk, it is likely that the drug will be present in human milk. Because of the potential for serious adverse reactions in breastfed infants, advise women not to breastfeed during treatment with TRYVIO.

#### Data

A single  $^{14}$ C-radiolabeled macitentan dose of 3 mg/kg was given orally to lactating Wistar rats. Approximentan was consistently observed in milk samples across all collection times after oral administration.

# 8.3 Females and Males of Reproductive Potential

Based on data from animal reproductive toxicity studies with other ERAs, TRYVIO can cause fetal harm, including birth defects and fetal death, when administered to a pregnant patient and is contraindicated during pregnancy [see Contraindications (4.1), Use in Specific Populations (8.1)].

# **Pregnancy Testing**

Verify the pregnancy status of patients prior to initiating TRYVIO. Patients who can become pregnant should exclude pregnancy with a negative pregnancy test monthly during treatment, and one month after discontinuation of treatment with TRYVIO. The patient should contact their physician immediately if onset of menses is delayed or pregnancy is suspected. If the pregnancy test is positive, the physician and patient must discuss the risks to the patient, the pregnancy, and the fetus [see Warnings and Precautions (5.1), Dosage and Administration (2.2), Contraindications (4.1)].

# **Contraception**

Patients using TRYVIO who can become pregnant should use acceptable contraception prior to initiation of treatment, during treatment, and for one month after discontinuation of treatment with TRYVIO [see Warnings and Precautions (5.1)].

# **Infertility**

Other ERAs have shown an adverse effect on spermatogenesis in humans and/or animals. TRYVIO, like other ERAs, may impair fertility in males of reproductive potential. It is not known whether effects on fertility would be reversible [see Warnings and Precautions (5.6), Nonclinical Toxicology (13.1)].

#### 8.4 Pediatric Use

The safety and efficacy of TRYVIO in pediatric patients have not been established.

#### 8.5 Geriatric Use

Of the total number of subjects in the PRECISION study of TRYVIO, 321 (44%) were 65 years and older, while 72 (10%) were 75 years and older. Edema/fluid retention was more common in these patients than younger patients [see Warnings and Precautions (5.4)].

No dose adjustment is required in patients over the age of 65 years [see Clinical Pharmacology (12.3)].

# 8.6 Renal Impairment

TRYVIO is not recommended in patients with kidney failure (eGFR <15 mL/min) or on dialysis. The effect of kidney failure (eGFR <15 mL/min) or dialysis on aprocitentan pharmacokinetics is unknown [see Clinical Pharmacology (12.3)]. Patients with renal impairment are at increased risk of edema/fluid retention [see Warnings and Precautions (5.4)].

No dose adjustment is required in patients with mild to severe renal impairment (eGFR ≥15 mL/min).

# 8.7 Hepatic Impairment

TRYVIO is not recommended in patients with moderate and severe hepatic impairment (Child-Pugh class B and C) because these patients may be at increased risk for poor outcomes from hepatotoxicity.

No dose adjustment is required in patients with mild hepatic impairment (Child-Pugh class A) [see Clinical Pharmacology (12.3)].

#### **10 OVERDOSAGE**

TRYVIO has been administered as a single dose of up to 600 mg, and as multiple doses of up to 100 mg daily, to healthy subjects (48 and 8 times the recommended dose, respectively). Adverse events of headache, nasal congestion, nausea, and upper respiratory tract infection were observed. In the event of an overdose, standard supportive measures should be taken, as required. Dialysis is unlikely to be effective because aprocitentan is highly protein-bound. Consult a Certified Poison Control Center for the most up-to-date information on the management of overdosage (1-800-222-1222 or www.poison.org).

#### 11 DESCRIPTION

TRYVIO (aprocitentan) is an ERA. The chemical name of aprocitentan is N-[5-(4-bromophenyl)-6- [2-[(5-bromo-2-pyrimidinyl)oxy]ethoxy]-4-pyrimidinyl]-sulfamide. It has a molecular formula of  $C_{16}H_{14}Br_{2}N_{6}O_{4}S$  and a molecular weight of 546.2 g/mol.

The structural formula is:

Aprocitentan is a white to off-white powder that is insoluble in water.

TRYVIO is available as film-coated 12.5 mg strength tablets for oral administration. The inactive ingredients in TRYVIO are croscarmellose sodium, hydroxypropyl cellulose, lactose monohydrate, magnesium stearate, and microcrystalline cellulose.

The film coating contains the following inactive ingredients: hydroxypropyl cellulose, iron oxide black, iron oxide red, iron oxide yellow, polyvinyl alcohol, silica colloidal hydrated, talc, titanium dioxide, and triethyl citrate.

#### 12 CLINICAL PHARMACOLOGY

#### 12.1 Mechanism of Action

Approximation is an ERA that inhibits the binding of endothelin (ET)-1 to  $\text{ET}_{A}$  and  $\text{ET}_{B}$  receptors.

ET-1, via its receptors ( $ET_A$  and  $ET_B$ ), mediates a variety of deleterious effects such as vasoconstriction, fibrosis, cell proliferation, and inflammation. In hypertension, ET-1 can cause endothelial dysfunction, vascular hypertrophy and remodeling, sympathetic activation, and increased aldosterone synthesis.

# 12.2 Pharmacodynamics

Aprocitentan exposure-response relationships and the time course of pharmacodynamic response are not fully characterized.

# Cardiac Electrophysiology

At eight times the recommended dose, clinically significant QTc interval prolongation was not observed.

#### 12.3 Pharmacokinetics

The aprocitentan mean (%CV)  $C_{max}$  is approximately 1.3 mcg/mL (19) following a single 25 mg dose (twice the recommended dose). The mean (%CV) aprocitentan AUC to the dosing interval ( $AUC_{0-tau}$ ) is approximately 23 mcg $\Box$ h/mL (17) following a single 25 mg dose. Aprocitentan plasma concentrations increased in a dose-proportional manner following once-daily administration of 5, 25, and 100 mg (0.4 times the recommended dose to 8 times the recommended dose). Aprocitentan steady state is reached by Day 8 with approximately 3-fold accumulation following once daily administration. Aprocitentan is primarily unchanged in plasma following oral TRYVIO administration.

# **Absorption**

The absolute oral bioavailability of aprocitentan is unknown. The time to reach  $C_{\text{max}}$  is between 4 and 5 hours after administration of 25 mg aprocitentan (twice the recommended dose).

#### Effect of Food

No clinically significant differences in approcitentan pharmacokinetics were observed following administration of a high-fat, high-calorie meal (approximately 150, 250, and 500–600 calories from protein, carbohydrate, and fat, respectively) in healthy subjects.

#### **Distribution**

The apparent volume of distribution of aprocitentan is approximately 20 L. Aprocitentan is >99% bound to plasma proteins, primarily albumin. Protein binding is not affected by renal or hepatic impairment. The aprocitentan blood-to-plasma ratio is 0.63.

#### Elimination

The approximately 41 hours, and the apparent clearance is approximately 0.3 L/h.

#### <u>Metabolism</u>

Aprocitentan is primarily metabolized by UGT1A1- and UGT2B7-mediated N-glucosidation and non-enzymatic hydrolysis.

#### **Excretion**

After a single dose of radiolabeled approcitentan, approximately 52% of the dose was eliminated via urine (0.2% unchanged) and 25% via feces (6.8% unchanged).

# Specific Populations

No clinically significant differences in the pharmacokinetics of aprocitentan were observed based on age (18–84 years), sex, race/ethnicity, body weight (44–196 kg), between patients and healthy subjects, mild to severe renal impairment (eGFR ≥15 mL/min), or mild to moderate hepatic impairment (Child-Pugh class A to B). The effect of kidney failure (eGFR <15 mL/min), dialysis, or severe hepatic impairment (Child-Pugh class C) on aprocitentan pharmacokinetics is unknown.

# **Drug Interaction Studies**

# Clinical Studies and Model-Informed Approaches

No clinically significant differences in the pharmacokinetics of the following drugs were observed when used concomitantly with aprocitentan: midazolam (CYP3A4 substrate) or rosuvastatin (breast cancer resistance protein [BCRP] substrate).

#### In Vitro Studies

*UDP-glucuronosyltransferase (UGT) inducers:* Concomitant administration of aprocitentan with UGT inducers may decrease aprocitentan exposure.

CYP450 enzymes: Aprocitentan inhibits CYP3A4 and all members of the CYP2C family, but did not inhibit CYP1A2, CYP2A6, CYP2B6, CYP2D6, and CYP2E1. Aprocitentan is an inducer of CYP3A4 but did not induce CYP1A2 or CYP2C9.

UGT enzymes: Aprocitentan is a substrate and inhibitor of UGT1A1 and UGT2B7.

<u>Transporter systems:</u> Aprocitentan is a substrate of P-glycoprotein (P-gp) and BCRP. However, inhibitors of these transporters are not anticipated to influence the PK of aprocitentan. Aprocitentan is an inhibitor of BCRP, bile salt export pump (BSEP), and sodium taurocholate co-transporting polypeptide (NTCP), but does not inhibit P-gp, organic cationic transporter (OCT)1, OCT2, human multi-drup and toxin compound extrusion (MATE)1, or MATE2K. Aprocitentan does not inhibit organic anion transporter (OAT)1, OAT3, OATP1B1, or OATP1B3 at therapeutic concentrations.

#### 13 NONCLINICAL TOXICOLOGY

#### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

#### <u>Carcinogenesis</u>

Two-year carcinogenicity studies with macitentan (for which aprocitentan is a major metabolite) did not identify any carcinogenic potential at doses up to 100 mg/kg/day and 250 mg/kg/day in mice and rats, which produced aprocitentan exposures approximately 30-fold and 11-fold, respectively, the clinical aprocitentan exposure at the MRHD based on AUC.

# <u>Mutagenesis</u>

Aprocitentan did not induce mutagenicity or genotoxicity in a standard battery of *in vitro* and *in vivo* assays that included a bacterial reverse mutation assay, a chromosome aberration test in human lymphocytes, and an *in vivo* bone marrow micronucleus test in rats.

# **Impairment of Fertility**

In a fertility study in male rats given aprocitentan for 15 weeks at doses up to 250 mg/kg/day, no effect on fertility or spermatogenesis was observed at 52-fold the clinical exposure at the MRHD based on AUC. In repeated dose toxicity studies, treatment with aprocitentan resulted in testicular tubular degeneration/atrophy in male rats and dogs at high doses of 250 mg/kg/day and 25 mg/kg/day, respectively, which represents approximately 41- and 52-fold the clinical exposure at the MRHD, based on AUC, respectively. The testicular toxicity was not evident in male rats and dogs at 50 mg/kg/day and 5 mg/kg/day, respectively, which represents approximately 14- and 10-fold the clinical exposure at the MRHD based on AUC.

In female rats given approcitentan prior to mating, minimally increased pre-implantation loss was observed at doses  $\geq 50$  mg/kg/day, which represent  $\geq 23$ -fold the clinical exposure at the MRHD based on AUC. No impact on fertility was observed at 10 mg/kg/day, which represents 5-fold the clinical exposure at the MRHD based on AUC.

#### 14 CLINICAL STUDIES

The efficacy of TRYVIO (aprocitentan) was evaluated in a multipart, phase 3 multicenter study (PRECISION, NCT03541174) in adults with SBP ≥140 mmHg who were prescribed at least three antihypertensive medications. The trial included a placebo run-in period, which was followed by three parts as described below. Prior to the placebo run-in period, all patients were switched to standard background antihypertensive therapy consisting of an angiotensin receptor blocker, a calcium channel blocker, and a diuretic, which was continued throughout the study. Patients with concomitant use of beta-blockers continued this treatment throughout the study.

Following the 4-week placebo run-in period, 730 patients were randomized equally to aprocitentan at either 12.5 mg, 25 mg, or placebo once daily during the initial 4-week double-blind (DB) treatment period (part 1). At the end of 4 weeks, all patients entered the single-blind treatment period (part 2) where they received 25 mg aprocitentan once daily for 32 weeks. At the end of the 32 weeks, patients were re-randomized to receive either 25 mg aprocitentan or placebo, once daily, during a 12-week DB-withdrawal period (part 3).

The primary efficacy endpoint was the change in sitting SBP (SiSBP) from baseline to Week 4 during part 1, measured at trough by unattended automated office blood pressure (uAOBP).

The key secondary endpoint was the change in SiSBP measured at trough by uAOBP from Week 36 (i.e., prior to randomized withdrawal to 25 mg aprocitentan or placebo in part 3) to Week 40.

Patients had a mean age of 62 years (range 24 to 84 years) and 60% were male. Patients were White (83%), African American (11%) or Asian (5%). Approximately 10% were Hispanic. The mean body mass index (BMI) was 34 kg/m² (range 18 to 64 kg/m²). At baseline, 19% of patients had an eGFR 30–59 mL/min/1.73 m² and 3% had an eGFR 15–29 mL/min/1.73 m². At baseline, 24% of patients had a urine albumin-to-creatinine ratio (UACR) of 30–300 mg/g and 13% had a UACR >300 mg/g. Approximately 54% of patients had a medical history of diabetes mellitus, 31% ischemic heart disease, and 20% congestive heart failure. At baseline, 63% of patients reported taking four or more antihypertensive medications.

BP reductions compared to placebo based on uAOBP measurements at trough are shown in Table 2. TRYVIO 12.5 mg was statistically superior to placebo in reducing SiSBP at Week 4 (part 1). The treatment effect was consistent for sitting diastolic BP (SiDBP) (Table 2).

Table 2 Reduction in sitting trough BP (mmHg) at Week 4 of DB treatment

				Differe place	
Treatment		Baseline*			
group	N	Mean	LS Mean	LS Mean	p-value
SiSBP			LS Mean	LS Mean	
(primary			(97.5%	(97.5%	

endpoint)			CL)	CL)	
12.5 mg	243	153.2	-15.4 (-17.5, -13.3)	-3.8 (-6.8, -0.8)	0.0043 <sup>†</sup>
Placebo	244	153.3	-11.6 (-13.7, -9.5)	-	-
SiDBP			LS Mean (97.5% CL)	LS Mean (97.5% CL)	
12.5 mg	243	87.9	-10.4 (-11.7, -9.1)	-4.0 (-5.8, -2.1)	_
Placebo	244	87.1	-6.4 (-7.8, -5.1)	-	

BP = blood pressure; CL = confidence limits; DB = double-blind; LS Mean = least squares mean; SiDBP = sitting diastolic blood pressure; SiSBP = sitting systolic blood pressure.

The persistence of the BP-lowering effect of TRYVIO was demonstrated in part 3 of the trial, in which patients on approcitentan were re-randomized to placebo or 25 mg approcitentan following a period during which all patients were treated with 25 mg. In patients re-randomized to placebo, the mean SiSBP increased, whereas in patients re-randomized to 25 mg approcitentan the mean effect on SiSBP was maintained and was statistically superior to placebo at Week 40. The treatment effect was consistent for SiDBP.

Most of the BP-lowering effect occurred within the first two weeks of treatment with TRYVIO.

TRYVIO is not approved for use at a 25 mg dose. The 25 mg dose has not demonstrated a meaningful improvement in blood pressure reduction as compared to the 12.5 mg dose and had an increased risk of edema/fluid retention [see Warnings and Precautions (5.4)].

TRYVIO's BP-lowering effect appeared consistent among subgroups defined by age, sex, race, BMI, baseline eGFR, baseline UACR, medical history of diabetes, and between BP measurement methodologies (uAOBP and ambulatory BP measurements).

#### 16 HOW SUPPLIED/STORAGE AND HANDLING

# 16.1 How Supplied

TRYVIO tablets are available as:

- 12.5 mg: yellow to orange round, film-coated tablet, debossed with "AN" on one side and plain on the other side.
  - NDC 80491-8012-8, each blister contains 10 tablets

<sup>\*</sup> Observed baseline value.

<sup>†</sup> Statistically significant at the 2.5% level as prespecified in the testing strategy.

 NDC 80491-8012-3, each bottle contains 30 tablets and has a child-resistant closure

#### 16.2 Storage and Handling

Store at 20°C to 25°C (68°F to 77°F); excursions permitted from 15°C to 30°C (59°F to 86°F) [see USP Controlled Room Temperature]. Store in the original package. Dispense to patient in original container only. Replace cap securely each time after opening. Do not discard desiccant. Protect from light and moisture.

#### 17 PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Medication Guide).

#### **Embryo-Fetal Toxicity**

Counsel patients who can become pregnant to use acceptable methods of contraception before treatment with TRYVIO, during treatment with TRYVIO, and for one month after treatment discontinuation. Patients who can become pregnant should have pregnancy tests prior to initiation of TRYVIO, monthly during treatment, and one month after TRYVIO discontinuation [see Warnings and Precautions (5.1) and Use in Specific Populations (8.1, 8.3)].

#### **TRYVIO REMS**

Because of the risk of birth defects, TRYVIO is only available through a restricted distribution program called the TRYVIO REMS. Under the TRYVIO REMS, prescribers and pharmacies must enroll in the REMS [see Warnings and Precautions (5.2)].

Acceptable forms of contraception include, but are not limited to, IUD, contraceptive implants, tubal sterilization, or a combination of methods (either one hormone method with a barrier method or two barrier methods). Alternatively, if a partner's vasectomy is the chosen method of contraception, a hormone or barrier method must be used along with this method.

Patients should be instructed to contact their healthcare provider if they suspect they may be pregnant. Patients should seek additional contraceptive advice from a gynecologist or similar expert as needed.

Educate and counsel patients who can become pregnant on the use of emergency contraception in the event of unprotected sex or contraceptive failure.

Advise pre-pubertal females and/or their guardian(s) to report any changes in their reproductive status immediately to their prescriber.

Review the Medication Guide and REMS educational materials with patients.

#### Lactation

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

# <u>Hepatotoxicity</u>

Educate patients on signs of hepatotoxicity. Advise patients that they should contact their healthcare provider if they have unexplained nausea, vomiting, right upper

quadrant pain, fatigue, anorexia, jaundice, dark urine, fever, or itching.

#### Fluid Retention

Educate patients on signs of fluid retention. Advise patients that they should contact their healthcare provider if they have unusual weight increase or swelling of the ankles or legs.

Distributed by:

Idorsia Pharmaceuticals US Inc.

One Radnor Corporate Center, Suite 101 100 Matsonford Rd. Radnor, PA 19087

IDRSTRP104022024

Patent: www.idorsia.com/patents

# MEDICATION GUIDE TRYVIO™ (try-vee-oh) (aprocitentan) tablets, for oral use

Read this Medication Guide before you start taking TRYVIO and each time you get a refill. There may be new information. This Medication Guide does not take the place of talking to your healthcare provider about your medical condition or your treatment.

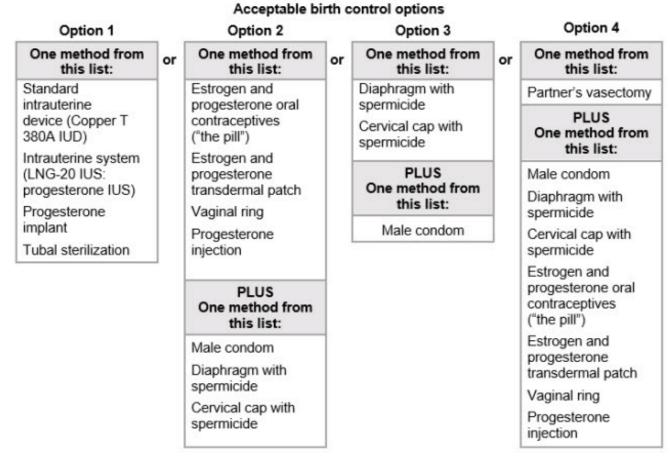
What is the most important information I should know about TRYVIO? TRYVIO may cause serious side effects, including: Serious birth defects.

- TRYVIO may cause serious birth defects if taken during pregnancy.
- People who can become pregnant must not be pregnant when they start taking TRYVIO or become pregnant during treatment with TRYVIO or for 1 month after stopping treatment with TRYVIO.
- People who can become pregnant should have a negative pregnancy test before starting treatment with TRYVIO, each month during treatment with TRYVIO, and 1 month after stopping TRYVIO.
  - People who can become pregnant are people who:
    - have entered puberty, even if they have not started their menstrual period,
       and
    - have a uterus, and
    - have not gone through menopause. Menopause means that you have not had a menstrual period for at least 12 months for natural reasons, or that you have had your ovaries removed.
  - People who cannot become pregnant are people who:
    - have not yet entered puberty, or
    - do not have a uterus, or
    - have gone through menopause. Menopause means that you have not had a menstrual period for at least 12 months for natural reasons, or that you have had your ovaries removed, or
    - are infertile for other medical reasons and this infertility is permanent and cannot be reversed.
- People who can become pregnant should use acceptable birth control

before starting treatment with TRYVIO, during treatment with TRYVIO, and for 1 month after stopping TRYVIO because the medicine may still be in your body.

- If you have had a tubal sterilization, have a progesterone implant, or have an intrauterine device (IUD), these methods can be used alone, and no other form of birth control is needed.
- Talk with your healthcare provider or gynecologist (a healthcare provider who specializes in female reproduction) to find out about options for acceptable birth control that you may use to prevent pregnancy during treatment with TRYVIO.
- If you decide that you want to change the form of birth control that you use, talk with your healthcare provider or gynecologist to be sure that you choose another acceptable form of birth control.

# See the chart below for acceptable birth control options during treatment with TRYVIO.



- **Do not have unprotected sex.** Talk to your healthcare provider or pharmacist right away if you have unprotected sex or if you think your birth control has failed. Your healthcare provider may talk with you about using emergency birth control.
- Tell your healthcare provider right away if you miss a menstrual period or you think you might be pregnant.

People can only receive TRYVIO through a restricted program called the TRYVIO REMS. If you are a person who can become pregnant, your healthcare provider will talk to you about pregnancy testing recommendations and the need to use acceptable birth control, the benefits and risks of TRYVIO, and the need to report suspected pregnancy right away to your healthcare provider.

TRYVIO is only available through certified pharmacies that participate in the TRYVIO REMS program. Your healthcare provider can give you information about how to find a certified pharmacy. For more information, go to www.TRYVIOREMS.com or call 1-866-429-8964.

See "What are the possible side effects of TRYVIO?" for more information about side effects.

#### What is TRYVIO?

TRYVIO is a prescription medicine used to treat high blood pressure (hypertension) in adults who are taking other high blood pressure medicines and whose blood pressure is not well controlled.

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

#### Who should not take TRYVIO?

#### Do not take TRYVIO if you are:

- pregnant or currently trying to become pregnant. See "What is the most important information I should know about TRYVIO?".
- allergic to aprocitentan or any of the ingredients in TRYVIO. See the end of this Medication Guide for a complete list of ingredients in TRYVIO.

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

- have liver problems
- have heart failure
- have anemia
- have kidney problems or get dialysis
- are pregnant or plan to become pregnant during treatment with TRYVIO. TRYVIO can cause serious birth defects. See "What is the most important information I should know about TRYVIO?"
- are breastfeeding or plan to breastfeed. It is not known if TRYVIO passes into your breastmilk. **Do not breastfeed** if you take TRYVIO. Talk to your healthcare provider about the best way to feed your baby if you take TRYVIO.

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

#### How should I take TRYVIO?

- Take TRYVIO exactly how your healthcare provider tells you to take it and do not stop taking TRYVIO unless your healthcare provider tells you to.
- Swallow TRYVIO tablets whole.
- Take TRYVIO with or without food.
- If you take too much TRYVIO, contact your healthcare provider or Poison Control Center at 1-800-222-1222 or www.poison.org, or go to the nearest hospital emergency room right away.
- If you miss a dose of TRYVIO, skip the missed dose and take the next dose at your regularly scheduled time. Do not take 2 doses in the same day to make up for a missed dose.

# What are the possible side effects of TRYVIO? TRYVIO may cause serious side effects, including:

 Serious birth defects. See "What is the most important information I should know about TRYVIO?"

- Liver problems. TRYVIO may cause liver problems. Your healthcare provider should do blood tests to check your liver before starting treatment and as needed during treatment with TRYVIO. Tell your healthcare provider if you have any of the following symptoms of liver problems during treatment with TRYVIO:
  - nausea or vomiting
  - pain in the upper right stomach
  - tiredness
  - loss of appetite

- yellowing of your skin or whites of your eyes
- dark urine
- fever
- itching
- Fluid retention. Fluid retention and swelling are common during treatment with TRYVIO and can be serious. Tell your healthcare provider right away if you have any unusual weight gain, trouble breathing, or swelling of your ankles or legs. Your healthcare provider may treat you with other medicines (diuretics) if you develop fluid retention or swelling.
- Low red blood cell levels (anemia). Anemia is common during treatment with TRYVIO and can be serious. Your healthcare provider will do blood tests to check your red blood cells before starting and as needed during treatment with TRYVIO.
- **Decreased sperm count.** TRYVIO may cause decreased sperm counts in males and may affect the ability to father a child. Tell your healthcare provider if being able to have children is important to you.

Your healthcare provider may stop treatment with TRYVIO if you develop certain side effects. Tell your healthcare provider if you have any side effect that bothers you or that does not go away.

These are not all the possible side effects of TRYVIO. 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 TRYVIO?

- Store TRYVIO tablets at room temperature, between 68°F to 77°F (20°C and 25°C).
- Keep TRYVIO tablets in the original container.
- Tightly close the TRYVIO bottle cap each time after opening.
- The TRYVIO bottle contains a desiccant packet to help keep your tablets dry (protect them from moisture). Do not throw away the desiccant packet and keep it in the bottle.
- Protect TRYVIO from light and moisture.
- Keep TRYVIO and all medicines out of the reach of children.

#### General information about the safe and effective use of TRYVIO.

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use TRYVIO for a condition for which it was not prescribed. Do not give TRYVIO 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 TRYVIO that is written for health professionals.

# What are the ingredients in TRYVIO?

Active ingredient: aprocitentan

Inactive ingredients: croscarmellose sodium, hydroxypropyl cellulose, lactose monohydrate, magnesium stearate, and microcrystalline cellulose. Film coating: hydroxypropyl cellulose, iron oxide black, iron oxide red, iron oxide yellow, polyvinyl

alcohol, silica colloidal hydrated, talc, titanium dioxide, and triethyl citrate.

Distributed by:

Idorsia Pharmaceuticals US Inc.

One Radnor Corporate Center, Suite 101

100 Matsonford Rd.

Radnor, PA 19087

For more information call 1-833-400-9611 or visit www.TRYVIO.com.

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

IDRSTRMG03192024

Issued: 3/2024

# PRINCIPAL DISPLAY PANEL - 30 Tablet Bottle Carton

NDC 80491-8012-3

TRYVIO™ (aprocitentan) tablets

12.5 mg

Attention: Dispense the enclosed Medication Guide to each patient.

Rx only

30 film-coated tablets

idorsia



# **TRYVIO**

aprocitentan tablet, film coated

Product Information					
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:80491-0812		
Route of Administration	ORAL				

# **Active Ingredient/Active Moiety**

Ingredient Name	<b>Basis of Strength</b>	Strength
APROCITENTAN (UNII: MZI81HV01P) (APROCITENTAN - UNII:MZI81HV01P)	APROCITENTAN	12.5 mg

Inactive Ingredients				
Ingredient Name	Strength			
CROSCARMELLOSE SODIUM (UNII: M280L1HH48)				
HYDROXYPROPYL CELLULOSE, UNSPECIFIED (UNII: 9XZ8H6N6OH)				
LACTOSE MONOHYDRATE (UNII: EWQ57Q8I5X)				
MAGNESIUM STEARATE (UNII: 70097M6I30)				
MICROCRYSTALLINE CELLULOSE (UNII: OP1R32D61U)				
FERROSOFERRIC OXIDE (UNII: XM0M87F357)				
FERRIC OXIDE RED (UNII: 1K09F3G675)				
FERRIC OXIDE YELLOW (UNII: EX43802MRT)				
POLYVINYL ALCOHOL, UNSPECIFIED (UNII: 532B59J990)				
HYDRATED SILICA (UNII: Y6O7T4G8P9)				
TALC (UNII: 7SEV7J4R1U)				
TITANIUM DIOXIDE (UNII: 15FIX9V2JP)				
TRIETHYL CITRATE (UNII: 8Z96QXD6UM)				

Product Characteristics				
Color	YELLOW (yellow to orange)	Score	no score	
Shape	ROUND	Size	6mm	
Flavor		Imprint Code	AN	
Contains				

P	Packaging						
#	Item Code	Package Description	Marketing Start Date	Marketing End Date			
1	NDC:80491- 0812-3	1 in 1 CARTON	03/20/2024				
1		30 in 1 BOTTLE; Type 0: Not a Combination Product					
2	NDC:80491- 0812-8	1 in 1 CARTON	03/20/2024				
2	NDC:80491- 0812-7	10 in 1 BLISTER PACK; Type 0: Not a Combination Product					

Marketing Information					
Marketing Application Number or Monograph Marketing Start Marketing End Category Citation Date Date					
NDA	NDA217686	03/20/2024			

Revised: 3/2024 Idorsia Pharmaceuticals Ltd