TYVASO DPI- treprostinil inhalant TYVASO DPI- treprostinil United Therapeutics Corporation

HIGHLIGHTS OF PRESCRIBING INFORMATION These highlights do not include all the information needed to use TYVASO DPI safely and effectively. See full prescribing information for TYVASO DPI.

------ INDICATIONS AND USAGE

TYVASO DPI $^{\mbox{\tiny \ensuremath{\mathbb{R}}}}$ (treprostinil) inhalation powder, for oral inhalation use Initial U.S. Approval: 2002

Tyvaso DPI is a prostacyclin mimetic indicated for the treatment of:
 Pulmonary arterial hypertension (PAH; WHO Group 1) to improve exercise ability. Studies with Tyvaso establishing effectiveness predominately included patients with NYHA Functional Class III symptoms and etiologies of idiopathic or heritable PAH (56%) or PAH associated with connective tissue diseases (33%). (1.1)
 Pulmonary hypertension associated with interstitial lung disease (PH-ILD; WHO Group 3) to improve exercise ability. The study with Tyvaso establishing effectiveness predominately included patients with etiologies of idiopathic interstitial pneumonia (IIP) (45%) inclusive of idiopathic pulmonary fibrosis (IPF), combined pulmonary fibrosis and emphysema (CPFE) (25%), and WHO Group 3 connective tissue disease (22%). (1.2)
DOSAGE AND ADMINISTRATION
Use only with the Tyvaso DPI Inhaler. (2.1)
 Administer using a single inhalation per cartridge. (2.1)
 Administer in 4 separate treatment sessions each day approximately 4 hours apart, during waking hours. (2.1)
Initial dosage: one 16 mcg cartridge per treatment session. (2.2)
 Dosage should be increased by an additional 16 mcg per treatment session at approximately 1- to 2- week intervals, if tolerated. (2.2)
• Titrate to target maintenance doses of 48 mcg to 64 mcg per treatment session, 4 times daily. (2.2)
DOSAGE FORMS AND STRENGTHS
Inhalation powder: Single-dose plastic cartridges containing 16, 32, 48, or 64 mcg of treprostinil as a dry powder formulation. (3)
CONTRAINDICATIONS
None. (4)
 Tyvaso DPI may cause symptomatic hypotension. (5.1) Twvaso DPI inhibits platelet aggregation and increases the rick of blooding. (5.2)
 Tyvaso DPI inhibits platelet aggregation and increases the risk of bleeding. (5.2) Tyvaso DPI dosage adjustments may be necessary if inhibitors or inducers of CYP2C8 are added or
withdrawn. (5.3, 7.3)
 May cause bronchospasm: Patients with a history of hyperreactive airway disease may be more sensitive. (5.4)
ADVERSE REACTIONS
Most common adverse reactions (\geq 4%) are cough, headache, throat irritation/pharyngolaryngeal pain, nausea, flushing, dyspnea, and syncope. (6.1)
To report SUSPECTED ADVERSE REACTIONS contact United Therapoutics Corp. at 1 966

To report SUSPECTED ADVERSE REACTIONS, contact United Therapeutics Corp. at 1-866-458-6479 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch. See 17 for PATIENT COUNSELING INFORMATION.

Revised: 11/2023

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FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

1.1 Pulmonary Arterial Hypertension

Tyvaso DPI is indicated for the treatment of pulmonary arterial hypertension (PAH; WHO Group 1) to improve exercise ability. Studies with Tyvaso establishing effectiveness predominately included patients with NYHA Functional Class III symptoms and etiologies of idiopathic or heritable PAH (56%) or PAH associated with connective tissue diseases (33%).

The effects diminish over the minimum recommended dosing interval of 4 hours; treatment timing can be adjusted for planned activities.

While there are long-term data on use of treprostinil by other routes of administration, nearly all clinical experience with inhaled treprostinil has been on a background of an endothelin receptor antagonist (ERA) and/or a phosphodiesterase type 5 (PDE-5) inhibitor. The controlled clinical experience with Tyvaso was limited to 12 weeks in duration [see Clinical Studies (14)].

1.2 Pulmonary Hypertension Associated with ILD

Tyvaso DPI is indicated for the treatment of pulmonary hypertension associated with interstitial lung disease (PH-ILD; WHO Group 3) to improve exercise ability. The study with Tyvaso establishing effectiveness predominately included patients with etiologies of idiopathic interstitial pneumonia (IIP) (45%) inclusive of idiopathic pulmonary fibrosis (IPF), combined pulmonary fibrosis and emphysema (CPFE) (25%), and WHO Group 3 connective tissue disease (22%) [see Clinical Studies (14.3)].

2 DOSAGE AND ADMINISTRATION

2.1 Administration

Use Tyvaso DPI only with the Tyvaso DPI Inhaler. Tyvaso DPI is administered using a single inhalation per cartridge. Administer Tyvaso DPI in 4 separate, equally spaced treatment sessions per day, during waking hours. The treatment sessions should be approximately 4 hours apart.

If the prescribed dose is higher than 64 mcg per treatment session, more than 1 cartridge will be needed per session. Patients should follow the instructions for use for operation and care of the Tyvaso DPI Inhaler.

Do not use the Tyvaso DPI Inhaler with other medications.

Between each of the 4 daily treatment sessions, store the Tyvaso DPI Inhaler with the mouthpiece attached and empty. Wipe the outside of the inhaler with a clean, dry cloth only, if needed. Do not rinse or wash the Tyvaso DPI Inhaler; always keep the inhaler dry. After 7 days of use, throw away the used Tyvaso DPI Inhaler into regular household trash.

2.2 Usual Dosage in Adults

Initial Dosage:

Tyvaso DPI therapy should begin with one 16 mcg cartridge per treatment session, 4 times daily.

Maintenance Dosage:

Increase dosage by an additional 16 mcg per treatment session at approximately 1- to 2-week intervals. The target maintenance dosage is usually 48 mcg to 64 mcg per session.

If adverse effects preclude titration, continue Tyvaso DPI at the highest tolerated dose.

If a scheduled treatment session is missed, resume therapy as soon as possible at the usual dose.

Dosage for Transition from Tyvaso[®] (treprostinil) Inhalation Solution:

The following regimens of Tyvaso DPI and Tyvaso give similar exposure:

Tyvaso DPI Cartridge Strength	Tyvaso Number of Breaths
16 mcg	≤5 (≤30 mcg)
32 mcg	6 to 7 (36 to 42 mcg)
48 mcg	8 to 10 (48 to 60 mcg)
64 mcg	11 to 12 (66 to 72 mcg)

3 DOSAGE FORMS AND STRENGTHS

Inhalation powder: Single-dose plastic cartridges containing 16, 32, 48, or 64 mcg of treprostinil as a dry powder formulation.

4 CONTRAINDICATIONS

None.

5 WARNINGS AND PRECAUTIONS

5.1 Risk of Symptomatic Hypotension

Treprostinil is a pulmonary and systemic vasodilator. In patients with low systemic arterial pressure, treatment with Tyvaso DPI may produce symptomatic hypotension.

5.2 Risk of Bleeding

Tyvaso DPI inhibits platelet aggregation and increases the risk of bleeding.

5.3 Effect of Other Drugs on Treprostinil

Co-administration of a cytochrome P450 (CYP) 2C8 enzyme inhibitor (e.g., gemfibrozil) may increase exposure (both C_{max} and AUC) to treprostinil. Co-administration of a CYP2C8 enzyme inducer (e.g., rifampin) may decrease exposure to treprostinil.

Increased exposure is likely to increase adverse events associated with treprostinil administration, whereas decreased exposure is likely to reduce clinical effectiveness [see Drug Interactions (7.3) and Clinical Pharmacology (12.3)].

5.4 Bronchospasm

Like other inhaled prostaglandins, Tyvaso DPI may cause acute bronchospasm. Patients with asthma or chronic obstructive pulmonary disease (COPD), or other bronchial hyperreactivity, are at increased risk for bronchospasm. Ensure that such patients are treated optimally for reactive airway disease prior to and during treatment with Tyvaso DPI.

6 ADVERSE REACTIONS

The following potential adverse reactions are described in Warnings and Precautions (5):

- Decrease in systemic blood pressure [see Warnings and Precautions (5.1)].
- Bleeding [see Warnings and Precautions (5.2)].

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.

Pulmonary Arterial Hypertension

Tyvaso DPI

In a 3-week, open-label, single-sequence, safety and tolerability study (BREEZE) conducted in 51 patients on stable doses of Tyvaso Inhalation Solution who switched to a corresponding dose of Tyvaso DPI, the most commonly reported adverse events on Tyvaso DPI during the 3-week treatment phase included cough, headache, dyspnea, and nausea. Patient tolerability, as assessed by incidence of new adverse events following transition to Tyvaso DPI, was consistent with the expected known safety profile of Tyvaso Inhalation Solution. Table 1 lists the adverse events that occurred at a rate of at least 4%.

Table 1: Adverse Events in ≥4% of PAH Patients Receiving Tyvaso DPI in BREEZE (Treatment Phase)

Adverse Event	Tyvaso DPI (n=51) n (%)
Cough	18 (35.3)
Headache	8 (15.7)
Dyspnea	4 (7.8)
Nausea	3 (5.9)

The safety of Tyvaso DPI was also studied in an extension phase of the study in which 49 patients were dosed for a duration of 43 patient-years. Fifty-nine percent (59%) of patients achieved a dose of 64 mcg, 4 times daily or higher. The adverse events during

this long-term, extension phase were similar to those observed in the 3-week treatment phase.

Tyvaso Inhalation Solution

In a 12-week, placebo-controlled study (TRIUMPH I) of 235 patients with PAH (WHO Group 1 and nearly all NYHA Functional Class III), the most commonly reported adverse reactions on Tyvaso Inhalation Solution included cough and throat irritation, headache, gastrointestinal effects, muscle, jaw or bone pain, dizziness, flushing, and syncope. Table 2 lists the adverse reactions that occurred at a rate of at least 4% and were more frequent in patients treated with Tyvaso Inhalation Solution than with placebo.

	Treatment n (%)				
Adverse Event	Tyvaso Inhalation Solution n=115	Placebo n=120			
Cough	62 (54)	35 (29)			
Headache	47 (41)	27 (23)			
Throat Irritation / Pharyngolaryngeal Pain	29 (25)	17 (14)			
Nausea	22 (19)	13 (11)			
Flushing	17 (15)	1 (<1)			
Syncope	7 (6)	1 (<1)			

Table 2: Adverse Events in ≥4% of PAH Patients Receiving Tyvaso Inhalation Solution and More Frequent^{*} than Placebo in TRIUMPH I

* More than 3% greater than placebo

Pulmonary Hypertension Associated with ILD

In a 16-week, placebo-controlled study (INCREASE) of 326 patients with PH-ILD (WHO Group 3), adverse reactions on Tyvaso Inhalation Solution were similar to the experience in studies of PAH.

7 DRUG INTERACTIONS

7.1 Bosentan

In a human pharmacokinetic study conducted with bosentan (250 mg/day) and an oral formulation of treprostinil (treprostinil diolamine), no pharmacokinetic interactions between treprostinil and bosentan were observed.

7.2 Sildenafil

In a human pharmacokinetic study conducted with sildenafil (60 mg/day) and an oral formulation of treprostinil (treprostinil diolamine), no pharmacokinetic interactions between treprostinil and sildenafil were observed.

7.3 Effect of Cytochrome P450 Inhibitors and Inducers

In vitro studies of human hepatic microsomes showed that treprostinil does not inhibit cytochrome P450 (CYP) isoenzymes CYP1A2, CYP2A6, CYP2C8, CYP2C9, CYP2C19, CYP2D6, CYP2E1, and CYP3A. Additionally, treprostinil does not induce cytochrome P450 isoenzymes CYP1A2, CYP2B6, CYP2C9, CYP2C19, and CYP3A.

Human pharmacokinetic studies with an oral formulation of treprostinil (treprostinil diolamine) indicated that co-administration of the cytochrome P450 (CYP) 2C8 enzyme inhibitor, gemfibrozil, increases exposure (both C_{max} and AUC) to treprostinil. Co-administration of the CYP2C8 enzyme inducer, rifampin, decreases exposure to treprostinil. It is unclear if the safety and efficacy of treprostinil by the inhalation route are altered by inhibitors or inducers of CYP2C8 [see Warnings and Precautions (5.3)].

7.4 Effect of Other Drugs on Treprostinil

Drug interaction studies have been carried out with treprostinil (oral or subcutaneous) co-administered with acetaminophen (4 g/day), warfarin (25 mg/day), and fluconazole (200 mg/day), respectively, in healthy volunteers. These studies did not show a clinically significant effect on the pharmacokinetics of treprostinil. Treprostinil does not affect the pharmacokinetics or pharmacodynamics of warfarin. The pharmacokinetics of R- and S-warfarin and the international normalized ratio (INR) in healthy subjects given a single 25 mg dose of warfarin were unaffected by continuous subcutaneous infusion of treprostinil at an infusion rate of 10 ng/kg/min.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

Limited case reports of treprostinil use in pregnant women are insufficient to inform a drug-associated risk of adverse developmental outcomes. However, there are risks to the mother and the fetus associated with pulmonary arterial hypertension (*see Clinical Considerations*). In animal studies, no adverse reproductive and developmental effects were seen for treprostinil at \geq 8 and \geq 134 times the human exposure when based on C_{max} and AUC, respectively, following a single, inhaled 64 mcg dose of treprostinil inhalation powder.

The estimated background risk of major birth defects and miscarriage for the indicated populations 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.

Clinical Considerations

Disease-associated maternal and embryo-fetal risk

Pulmonary arterial hypertension is associated with an increased risk of maternal and fetal mortality.

Animal reproduction studies have been conducted with treprostinil via continuous subcutaneous administration and with treprostinil diolamine administered orally. In studies with orally administered treprostinil diolamine, no adverse effect doses for fetal viability/growth, fetal development (teratogenicity), and postnatal development were determined in rats. In pregnant rats, no evidence of harm to the fetus was observed following oral administration of treprostinil diolamine at the highest dose tested (20 mg/kg/day), which represents about 129 and 1366 times the human exposure, when based on C_{max} and AUC, respectively, following a single, inhaled 64 mcg dose of treprostinil inhalation powder. In pregnant rabbits, external fetal and soft tissue malformations and fetal skeletal malformation occurred. The dose at which no adverse effects were seen (0.5 mg/kg/day) represents about 8 and 134 times the human exposure, when based on C_{max} and AUC, respectively, following a single, inhaled 64 mcg dose of treprostinil inhalation powder. No treprostinil treatment-related effects on labor and delivery were seen in animal studies. Animal reproduction studies are not always predictive of human response.

8.2 Lactation

<u>Risk Summary</u>

There are no data on the presence of treprostinil in human milk, the effects on the breastfed infant, or the effects on milk production.

8.4 Pediatric Use

Safety and effectiveness in pediatric patients have not been established. Clinical studies of inhaled treprostinil did not include patients younger than 18 years to determine whether they respond differently from older patients.

8.5 Geriatric Use

Across clinical studies used to establish the effectiveness of Tyvaso Inhalation Solution in patients with PAH and PH-ILD, 268 (47.8%) patients aged 65 years and over were enrolled. The treatment effects and safety profile observed in geriatric patients were similar to younger patients. In general, dose selection for an elderly patient should be cautious, reflecting the greater frequency of hepatic, renal, or cardiac dysfunction, and of concomitant diseases or other drug therapy.

8.6 Patients with Hepatic Insufficiency

Plasma clearance of treprostinil, delivered subcutaneously, was reduced up to 80% in subjects with mild-to-moderate hepatic insufficiency. Uptitrate slowly when treating patients with hepatic insufficiency because of the risk of an increase in systemic exposure which may lead to an increase in dose-dependent adverse effects. Treprostinil has not been studied in patients with severe hepatic insufficiency *[see Clinical Pharmacology (12.3)]*.

8.7 Patients with Renal Impairment

No dose adjustments are required in patients with renal impairment. Treprostinil is not cleared by dialysis [see Clinical Pharmacology (12.3)].

10 OVERDOSAGE

In general, symptoms of overdose with inhaled treprostinil include flushing, headache, hypotension, nausea, vomiting, and diarrhea. Provide general supportive care until the symptoms of overdose have resolved.

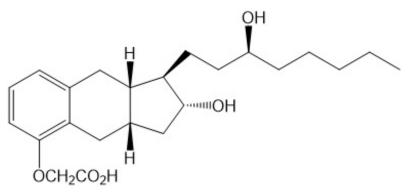
11 DESCRIPTION

11.1 Tyvaso DPI Cartridges

Tyvaso DPI consists of single-dose plastic cartridges filled with a white powder containing 1% of treprostinil, a prostacyclin mimetic, which is intended for administration by oral inhalation using the Tyvaso DPI Inhaler only. Treprostinil is adsorbed onto carrier particles consisting of fumaryl diketopiperazine (FDKP). Each cartridge contains 16, 32, 48, or 64 mcg of treprostinil with approximate fill weights of 1.6, 3.2, 4.8, or 6.4 mg of Tyvaso DPI, respectively.

Treprostinil is (1R,2R,3aS,9aS)-[[2,3,3a,4,9,9a-hexahydro-2-hydroxy-1-[(3S)-3-hydroxyoctyl]-1H-benz[f]inden-5-yl]oxy]acetic acid. Treprostinil has a molecular weight of 390.52 and a molecular formula of C₂₃H₃₄O₅.

The structural formula of treprostinil is:



12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Treprostinil is a prostacyclin analogue. The major pharmacologic actions of treprostinil are direct vasodilation of pulmonary and systemic arterial vascular beds and inhibition of platelet aggregation.

12.2 Pharmacodynamics

In a clinical trial of 240 healthy volunteers, single doses of Tyvaso Inhalation Solution 54 mcg (the target maintenance dose per session) and 84 mcg (supratherapeutic inhalation dose) prolonged the corrected QTc interval by approximately 10 ms. The QTc effect dissipated as the concentration of treprostinil decreased.

12.3 Pharmacokinetics

Absorption

Treprostinil plasma exposure data were obtained from a 6-treatment, 6-period, 6sequence, crossover study of Tyvaso DPI and Tyvaso Inhalation Solution in healthy volunteers. The mean C_{max} for the 16, 48, and 64 mcg doses of Tyvaso DPI were 0.39, 1.11, and 1.33 ng/mL, respectively, with corresponding median T_{max} of 0.17 hr. The mean AUC_{0-5hr} for the 16, 48, and 64 mcg doses of Tyvaso DPI were 0.275, 0.774, and 0.964 hr•ng/mL, respectively.

Treprostinil systemic exposure (AUC_{0-5hr} and C_{max}) of Tyvaso DPI post-inhalation was approximately proportional to the doses administered (16 to 64 mcg).

Distribution

Following parenteral infusion, the steady state volume of distribution (V_{ss}) of treprostinil is approximately 14 L/70 kg ideal body weight.

In vitro treprostinil is 91% bound to human plasma proteins over the 330 to 10,000 mcg/L concentration range.

Elimination

With a single dose of Tyvaso DPI, the mean terminal half-life of treprostinil ranged from 27 to 50 minutes.

Metabolism: Treprostinil is substantially metabolized by the liver, primarily by CYP2C8. Metabolites are excreted in urine (79%) and feces (13%) over 10 days. Five apparently inactive metabolites were detected in the urine, each accounting for 10 to 15% of the dose administered. Four of the metabolites are products of oxidation of the 3hydroxyloctyl side chain and one is a glucuroconjugated derivative (treprostinil glucuronide).

Excretion: Of subcutaneously administered treprostinil, only 4% is excreted unchanged in urine.

Specific Populations

Hepatic Insufficiency

Plasma clearance of treprostinil, delivered subcutaneously, was reduced up to 80% in subjects presenting with mild-to-moderate hepatic insufficiency. Treprostinil has not been studied in patients with severe hepatic insufficiency [see Use in Specific Populations (8.6)].

Renal Impairment

In patients with severe renal impairment requiring dialysis (n=8), administration of a single 1 mg dose of orally administered treprostinil pre- and post-dialysis resulted in AUC_{0-inf} that was not significantly altered compared to healthy subjects [see Use in Specific Populations (8.7)].

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

A 2-year rat carcinogenicity study was performed with treprostinil inhalation at target doses of 5.26, 10.6, and 34.1 mcg/kg/day. There was no evidence for carcinogenic potential associated with treprostinil inhalation in rats at systemic exposure levels up to

36 times the clinical exposure at the 64 mcg dose of treprostinil inhalation powder. *In vitro* and *in vivo* genetic toxicology studies did not demonstrate any mutagenic or clastogenic effects of treprostinil. Treprostinil sodium did not affect fertility or mating performance of male or female rats given continuous subcutaneous infusions at rates of up to 450 ng treprostinil/kg/min. In this study, males were dosed from 10 weeks prior to mating and through the 2-week mating period. Females were dosed from 2 weeks prior to mating until gestational day 6.

Oral administration of treprostinil diolamine to Tg.rasH2 mice at 0, 5, 10, and 20 mg/kg/day in males and 0, 3, 7.5, and 15 mg/kg/day in females daily for 26 weeks did not significantly increase the incidence of tumors.

Treprostinil diolamine was tested *in vivo* in a rat micronucleus assay and did not induce an increased incidence of micronucleated polychromatic erythrocytes.

13.2 Animal Toxicology and/or Pharmacology

In a 2-year rat study with treprostinil inhalation solution at target doses of 5.26, 10.6, and 34.1 mcg/kg/day, there were more deaths (11) in the mid- and high-dose treprostinil groups during the first 9 weeks of the study, compared to 1 in control groups. At the high-dose level, males showed a higher incidence of inflammation in teeth and preputial gland, and females showed higher incidences of inflammation and urothelial hyperplasia in the urinary bladder. The exposures in rats at mid- and high-dose levels were about 14 and 36 times, respectively, the clinical exposure at the 64 mcg dose of treprostinil inhalation powder.

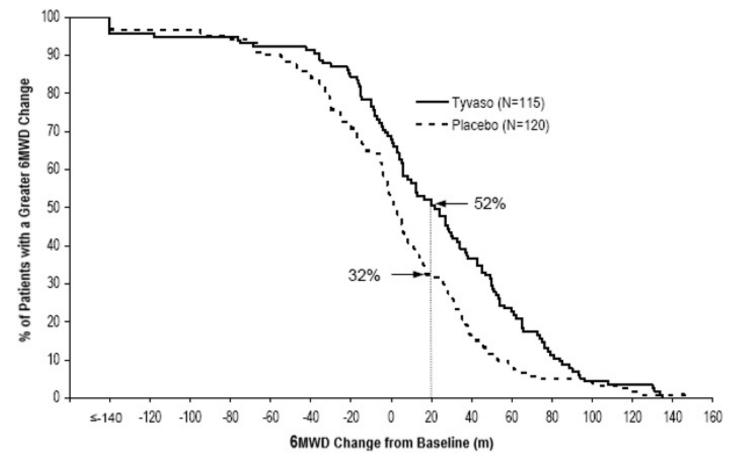
14 CLINICAL STUDIES

14.1 Pulmonary Arterial Hypertension (WHO Group 1) (TRIUMPH I)

TRIUMPH I, was a 12-week, randomized, double-blind, placebo-controlled, multicenter study of patients with PAH (NCT00147199). The study population included 235 clinically stable subjects with PAH (WHO Group 1), nearly all with NYHA Class III (98%) symptoms who were receiving either bosentan (an endothelin receptor antagonist) or sildenafil (a phosphodiesterase-5 inhibitor) for at least 3 months prior to study initiation. Concomitant therapy also could have included anticoagulants, other vasodilators (e.g., calcium channel blockers), diuretics, oxygen, and digitalis, but not a prostacyclin. These patients were administered either placebo or Tyvaso Inhalation Solution in 4 daily treatment sessions with a target dose of 9 breaths (54 mcg) per session over the course of the 12-week study. Patients were predominately female (82%), had the origin of PAH as idiopathic/heritable (56%), secondary to connective tissue diseases (33%) or secondary to HIV or previous use of anorexigens (12%); bosentan was the concomitant oral medication in 70% of those enrolled, sildenafil in 30%.

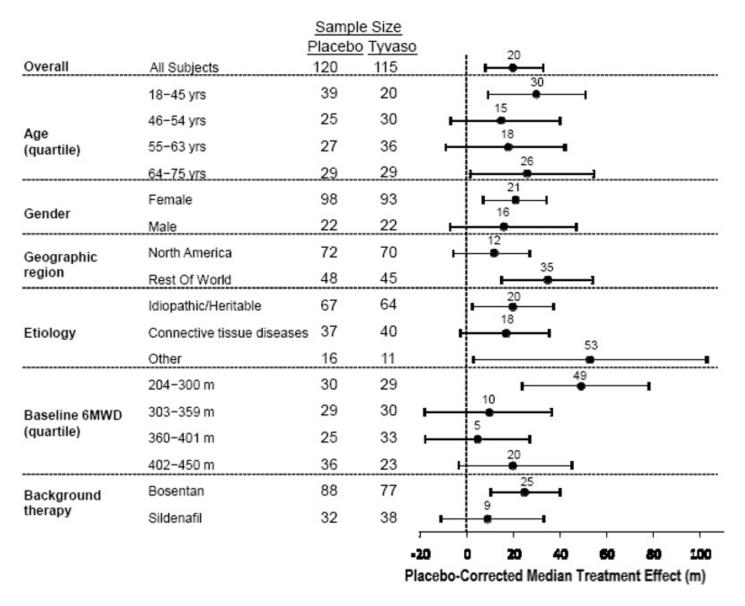
The primary efficacy endpoint of the trial was the change in 6MWD relative to baseline at 12 weeks. 6MWD was measured at peak exposure (between 10 and 60 minutes after dosing), and 3 to 5 hours after bosentan or 0.5 to 2 hours after sildenafil. Patients receiving Tyvaso Inhalation Solution had a placebo-corrected median change from baseline in peak 6MWD of 20 meters at Week 12 (p<0.001). The distribution of these 6MWD changes from baseline at Week 12 were plotted across the range of observed values (Figure 1). 6MWD measured at trough exposure (defined as measurement of 6MWD at least 4 hours after dosing) improved by 14 meters. There were no placebo-





The placebo-corrected median treatment effect on 6MWD was estimated (using the Hodges-Lehmann estimator) within various subpopulations defined by age quartile, gender, geographic region of the study site, disease etiology, baseline 6MWD quartile, and type of background therapy (Figure 2).

Figure 2: Placebo-Corrected Median Treatment Effect (Hodges-Lehmann Estimate with 95% CI) on 6MWD Change from Baseline at Week 12 During Peak Plasma Concentration of Tyvaso Inhalation Solution for Various Subgroups



14.2 Long-term Treatment of PAH

In long-term follow-up of patients who were treated with Tyvaso Inhalation Solution in the pivotal study and the open-label extension (N=206) (NCT00147199), Kaplan-Meier estimates of survival at 1, 2, and 3 years were 97%, 91%, and 82%, respectively. These uncontrolled observations do not allow comparison with a control group not given Tyvaso Inhalation Solution and cannot be used to determine the long-term effect of Tyvaso Inhalation Solution on mortality.

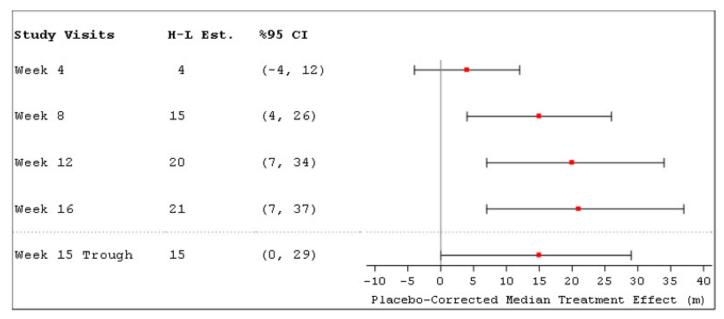
14.3 Pulmonary Hypertension Associated with ILD (WHO Group 3)

INCREASE was a 16-week, randomized, double-blind, placebo-controlled, multicenter study that enrolled 326 patients with PH-ILD (NCT02630316). Enrolled study patients predominately had etiologies of idiopathic interstitial pneumonia (45%) inclusive of idiopathic pulmonary fibrosis, combined pulmonary fibrosis and emphysema (25%), and WHO Group 3 connective tissue disease (22%). The mean baseline 6MWD was 260 meters.

Patients in the INCREASE study were randomized (1:1) to either placebo or Tyvaso Inhalation Solution in 4 daily treatment sessions with a target dose of 9 breaths (54 mcg) per session and a maximum dose of 12 breaths (72 mcg) per session over the course of the 16-week study. Approximately 75% of patients randomized to Tyvaso Inhalation Solution titrated up to a dose of 9 breaths, 4 times daily or greater, with 48% of patients randomized to Tyvaso Inhalation Solution reaching a dose of 12 breaths, 4 times daily during the study.

The primary efficacy endpoint was the change in 6MWD measured at peak exposure (between 10 and 60 minutes after dosing) from baseline to Week 16. Patients receiving Tyvaso Inhalation Solution had a placebo-corrected median change from baseline in peak 6MWD of 21 meters at Week 16 (p=0.004) using Hodges-Lehmann estimate (Figure 3).

Figure 3: Hodges-Lehmann Estimate of Treatment Effect by Visit for 6MWD
at Peak Exposure of Tyvaso Inhalation Solution (PH-ILD)



The treatment effect on 6MWD at Week 16 was consistent for various subgroups, including etiology of PH-ILD, disease severity, age, sex, baseline hemodynamics, and dose (Figure 4).

Figure 4: Forest Plot on Subgroup Analyses of Peak 6MWD (Meter) at Week 16 (PH-ILD)

Subgroup	Tyvaso	Placebo	H-L Estimate (95% CI)		p-value
	# of]	Patients			
Overall	163	163		21.0(7.0, 37.0)	0.0043
Age Group					
<65 years old	64	48		11.0(-11.0, 46.0)	0.3203
65 - <80 years old	83	100	· · · · · · · · · · · · · · · · · · ·	27.0(7.0, 46.0)	0.0111
>=80 years old	16	15		19.5(-38.0, 74.0)	0.9457
Sex					
Male	78	95	<u> </u>	8.0(-12.0, 30.0)	0.4877
Female	85	68		34.0(12.0, 57.0)	0.0010
Baseline 6MWD Category				,	
<=350 meters	136	133		24.0(6.0, 41.0)	0.0084
>350 meters	27	30		16.0(-16.0, 47.0)	0.2697
PH-ILD Etiology			1997		
IIP	65	81		32.0(12.0, 55.0)	0.0030
CPFE	42	40		2.0(-28.0, 32.0)	0.8742
CTD	40	32		39.0(3.0, 78.0)	0.0317
Other	16	10		0.0(-89.0, 54.0)	0.3607
Baseline PVR Category					
<4 WU	32	34		-3.0(-26.0, 26.0)	0.7345
>=4 UU	131	129		28.0(11.0, 46.0)	0.0019
Maximum Study Drug Dose			10 dia 10		
4-6 breaths	6	2		-16.5(-62.0, 29.0)	0.8481
7-9 breaths	37	24	i phaning	18.0(-8.0, 43.0)	0.2875
>=10 breaths	78	94		30.0(14.0, 48.0)	0.0006
		-100	0 -50 0 50	100	
			<-Placebo Better Tyvaso Better->		

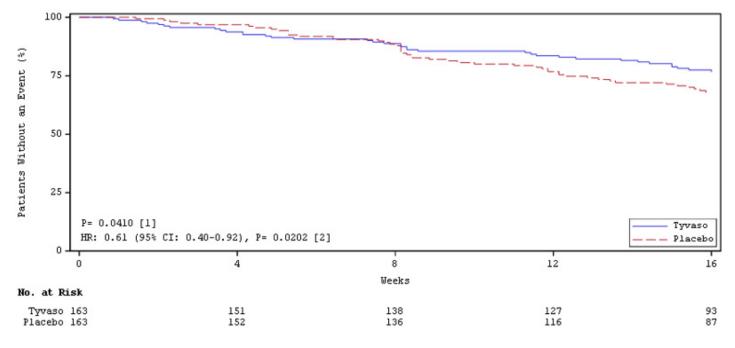
Time to clinical worsening in the INCREASE study was defined as the time of randomization until 1 of the following criteria were met: hospitalization due to a cardiopulmonary indication, decrease in 6MWD >15% from baseline directly related to PH-ILD at 2 consecutive visits and at least 24 hours apart, death (all causes), or lung transplantation. Treatment with Tyvaso Inhalation Solution in patients with PH-ILD resulted in numerically fewer hospitalizations. The numbers of reported deaths were the same for both treatment groups (Table 3). Overall, treatment with Tyvaso Inhalation Solution demonstrated a statistically significant increase in the time to first clinical worsening event (log-rank test p=0.041; Figure 5), and a 39% overall reduction in the risk of a clinical worsening event (HR=0.61 [95% CI; 0.40, 0.92]; Figure 5).

		Tyvaso Inhalation Solution n=163 n (%)	Placebo n=163 n (%)	HR (95% CI)
Clinical wors	ening	37 (22.7%)	54 (33.1%)	0.61 (0.40, 0.92)
	Hospitalization due to a cardiopulmonary indication	18 (11.0%)	24 (14.7%)	
	Decrease in 6MWD >15% from baseline directly related to PH- ILD	13 (8.0%)	26 (16.0%)	
	Death (all causes)	4 (2.5%)	4 (2.5%)	
	Lung transplantation	2 (1.2%)	0	
	Hospitalization due to		20	

Table 3: Clinical Worsening Events (PH-ILD)

First of	a cardiopulmonary indication	21 (12.9%)	(18.4%)
	Decrease in 6MWD >15% from baseline directly related to PH- ILD	16 (9.8%)	31 (19.0%)
	Death (all causes)	8 (4.9%)	10 (6.1%)
	Lung transplantation	2 (1.2%)	1 (0.6%)

Figure 5: Kaplan-Meier Plot of Time to Clinical Worsening Events (PH-ILD)



16 HOW SUPPLIED/STORAGE AND HANDLING

Tyvaso DPI (treprostinil) inhalation powder is available as 16 mcg, 32 mcg, 48 mcg, or 64 mcg of treprostinil in single-dose plastic cartridges with approximate fill weights of 1.6 mg, 3.2 mg, 4.8 mg, or 6.4 mg of Tyvaso DPI, respectively. Four cartridges are contained in a single cavity of a blister strip. A card contains 7 blister strips separated by perforations for a total of 28 cartridges of each labeled strength in Titration and Maintenance Kits. For convenience, the perforation allows users to remove a single blister strip containing 4 cartridges. The Institutional Kits contain 4 blister strips for a total of 16 cartridges of each labeled strength.

The cartridges are color-coded, purple for 16 mcg, dark blue for 32 mcg, light blue for 48 mcg, and light green for 64 mcg. Each cartridge is marked with "Tyvaso DPI" and the corresponding dosage strength of "16 mcg", "32 mcg", "48 mcg", or "64 mcg".

The Tyvaso DPI Inhaler is individually packaged in a clear overwrap. The inhaler is fully assembled with a removable mouthpiece cover. The Tyvaso DPI Inhaler can be used for up to 7 days from the date of first use. After 7 days of use, the inhaler must be discarded and replaced with a new inhaler.

Tyvaso DPI is available in the following configurations:

		Kit Contents	
Description	NDC	Number of Cartridges and Strength	Number of Inhalers
Tyvaso DPI	66302- 600-02	 112 cartridges, each containing 16 mcg per cartridge 84 cartridges, each containing 32 mcg per cartridge 	5
(treprostinil) Inhalation Powder Titration Kit	66302- 610-02	 112 cartridges, each containing 16 mcg per cartridge 112 cartridges, each containing 32 mcg per cartridge 28 cartridges, each containing 48 mcg per cartridge 	5
	66302- 616-03	112 cartridges, each containing 16 mcg per cartridge	5
	66302- 632-03	112 cartridges, each containing 32 mcg per cartridge	5
	66302- 648-03	112 cartridges, each containing 48 mcg per cartridge	5
	66302- 664-03	112 cartridges, each containing 64 mcg per cartridge	5
Tyvaso DPI (treprostinil) Inhalation Powder Maintenance Kit	66302- 620-03	112 cartridges, each containing 32 mcg per cartridge 112 cartridges, each containing 48 mcg per cartridge	5
	66302- 630-03	112 cartridges, each containing 32 mcg per cartridge 112 cartridges, each containing 64 mcg per cartridge	5
	66302- 640-03	112 cartridges, each containing 48 mcg per cartridge 112 cartridges, each containing 64 mcg per cartridge	5
	66302- 650-03	 112 cartridges, each containing 16 mcg per cartridge 112 cartridges, each containing 48 mcg per cartridge 112 cartridges, each containing 64 mcg per cartridge 	5
	66302- 716-04	16 cartridges, each containing 16 mcg per cartridge	2
Tyvaso DPI	66302- 732-04	16 cartridges, each containing 32 mcg per cartridge	2
(treprostinil)	66302- 748-04	16 cartridges, each containing 48 mcg per cartridge	2
Powder	66302-	16 cartridges, each containing 64	С

Institutional	764-04	mcg per cartridge	۷
Kit	66302- 720-04	16 cartridges, each containing 32 mcg per cartridge 16 cartridges, each containing 48 mcg per cartridge	2

Blister Storage:

Storage		
Tyvaso DPI Presentation	storage 2°C to	Room temperature storage 20°C to 25°C (68°F to 77°F), excursions permitted 15°C to 30°C (59°F to 86°F)
(Unopened)	May be stored until the expiration date printed on the blisters.	Must be used within 8 weeks.
Opened Blister Strips	Do not put a blister card or strip back into the refrigerator after being opened or stored at room temperature.	Must be used within 3 days.

Inhaler Storage:

Store at 2°C to 25°C (36°F to 77°F); excursions permitted. The Tyvaso DPI Inhaler may be stored refrigerated but should be at room temperature for 10 minutes before use. The inhaler can be used for up to 7 days from the date of first use. After 7 days of use, the inhaler must be discarded and replaced with a new inhaler.

Handling:

If refrigerated, cartridges and inhaler should be at room temperature for 10 minutes before use.

17 PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Instructions for Use).

Train patients in the administration process for Tyvaso DPI, including dosing, Tyvaso DPI Inhaler setup, operation, cleaning, and maintenance, according to the instructions for use [see Dosage and Administration (2.1, 2.2)].

Advise patients that after 7 days of use, the inhaler must be discarded and replaced with a new inhaler [see Dosage and Administration (2.1)].

Instruct patients to use Tyvaso DPI only with the Tyvaso DPI Inhaler [see Dosage and Administration (2.1)].

If a scheduled treatment session is missed, resume therapy as soon as possible [see Dosage and Administration (2.2)].

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Tyvaso DPI manufactured by:

MannKind Corporation Danbury, CT 06810

Tyvaso DPI manufactured for and distributed by:

United Therapeutics Corp. Research Triangle Park, NC 27709

Instructions for Use

TYVASO [tī-vā'-sō] DPI[®] (treprostinil) Inhalation Powder For oral inhalation only

Table of Contents

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Read Before Starting

	Parts of the TYVASO DPI Inhaler (see Figure A)	Your Starter Kit includes a Carrying Case (see Figure B)	TYVASO DPI Blister Cards (see Figure C)
This Instructions		The TYVASO DPI	
for Use contains		inhaler and blister	
information on how		strips can be	
to inhale TYVASO		stored in the	
DPI (treprostinil)		carrying case wher	1
Inhalation Powder.		using outside of	
Read this		vour home or	

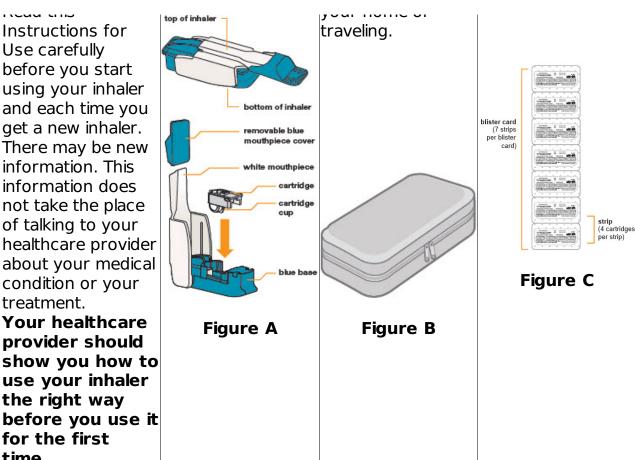
Instructions for Use carefully before you start using your inhaler and each time you get a new inhaler. There may be new information. This information does not take the place of talking to your healthcare provider about your medical condition or your treatment. Your healthcare

provider should

use your inhaler the right way

for the first

time.



Important Information

Important information you need to • Take TYVASO DPI exactly as know before inhaling TYVASO DPI Inhalation Powder using the **TYVASO DPI Inhaler TYVASO DPI cartridges come in 4** strengths (see Figure D).

Important: Always make sure you have the right number of TYVASO DPI cartridges for your dose before you start. Only use TYVASO DPI cartridges with the TYVASO DPI Inhaler.



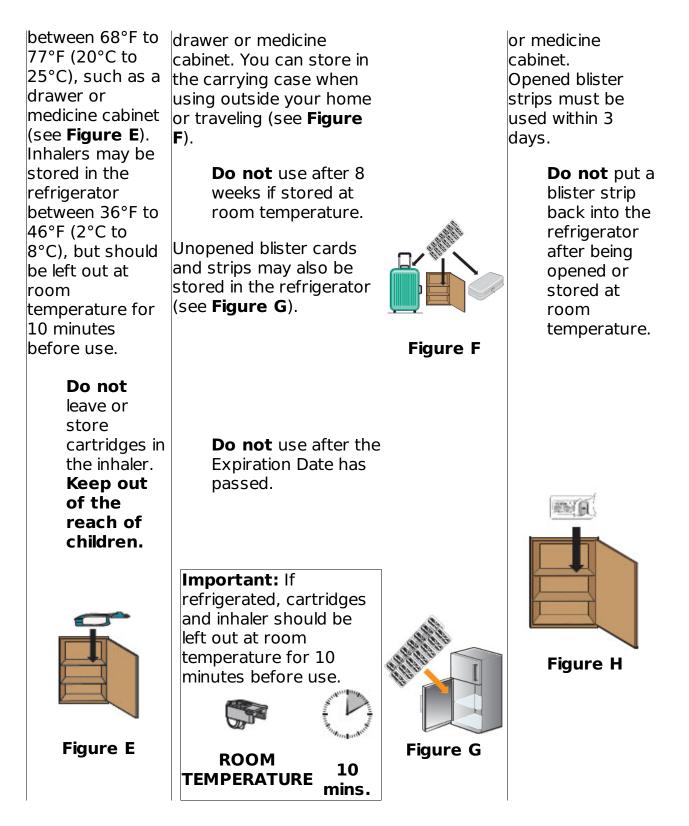
Figure D

- prescribed by your healthcare provider.
- Take TYVASO DPI 4 times per day while you are awake, about 4 hours apart.
- If you miss a dose, take it as soon as possible at your usual dose.
- If your prescribed dose is higher than 64 mcg per treatment session, you will need to use more than 1 cartridge. If using more than 1 cartridge, the cartridges can be used in any order, regardless of cartridge strength.
- If you need to use more than 1 cartridge for your dose, remove the used cartridge from the inhaler before getting a new one. You can tell a cartridge has been used when the cartridge cup has moved from the front to the middle position in the cartridge base.

If you are having problems with your TYVASO DPI Inhaler, have any side effects, or if your TYVASO DPI Inhaler breaks and you need a new one, please call 1- 877-UNITHER (1-877-864-8437).	 Only TYVASO DPI cartridges should be used with the TYVASO DPI Inhaler. Each cartridge is for 1 time (single use) only. Use a new cartridge for each treatment session. After each treatment session, throw away the used cartridge right away. Do not open the cartridges. The inhaler opens the cartridge automatically during use. Warning: If any powder from the cartridge spills on your hands, throw away the cartridge right away into regular household trash and wash your hands. Then start with a new cartridge. Do not breathe in the TYVASO DPI treprostinil powder in any other way. Do not put cartridges in your mouth. Do not swallow cartridges. Use only 1 inhaler at a time. The same inhaler should be used even when needing to use more than 1 cartridge for your dose. Inhale 1 cartridge at a time. The inhaler lasts for 7 days. After 7 days of use, throw away your used inhaler and get a new one. Store the inhaler in a clean, dry place with the mouthpiece cover on until your next dose.
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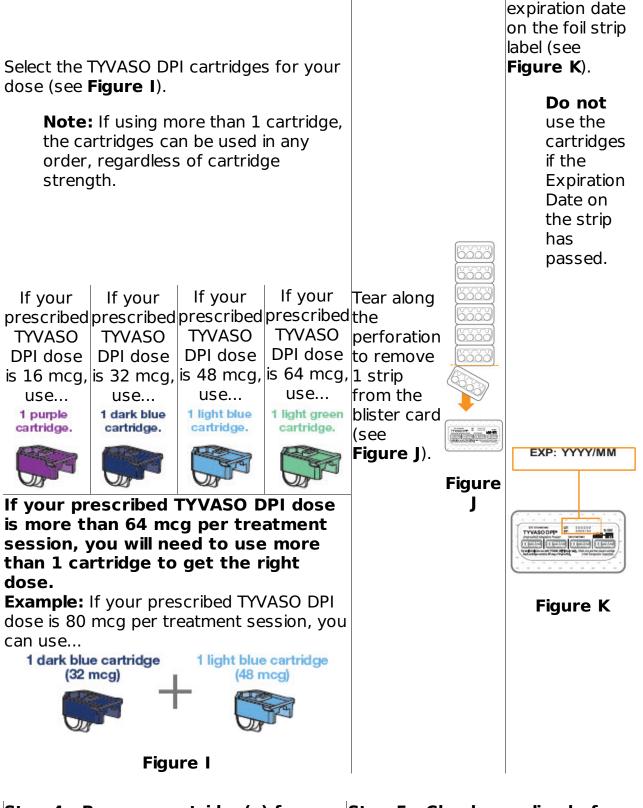
Storing TYVASO DPI Inhalers and Cartridges

Storing TYVASO DPI Inhalers	Storing Unopened Blister Cards and Strips	Storing Opened Blister Strips
on, in a clean, dry	Store unopened blister cards and strips in a clean, dry place at room temperature, such as a	Store opened blister strips in a clean, dry place at room temperature (see Figure H), such as a drawer



Preparing to Inhale TYVASO DPI

Step 1 : Select the TYVASO DPI
cartridges for your dose (see Figure I)Step 2 : Tear off
1 stripStep 3 :
Check the
expiration
date on the
strip
Check the



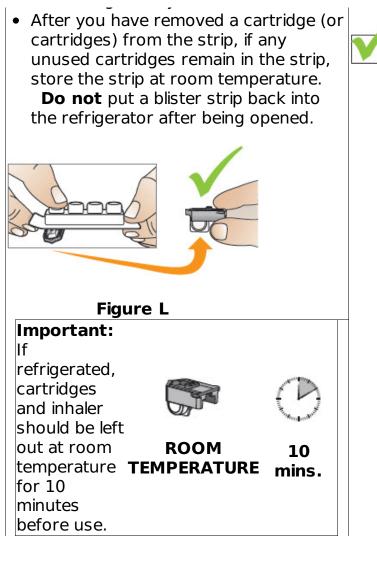
Step 4 : Remove cartridge(s) from strip

- Remove cartridge(s) from the strip by pushing on the white plastic to push the cartridge out (see Figure L).
 Note: Pushing on the cup will not damage the cartridge.
- Make sure to remove the right number of cartridges for your dose.

Step 5 : Check supplies before continuing



Check that you have the right cartridge(s) for your dose.

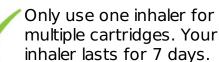


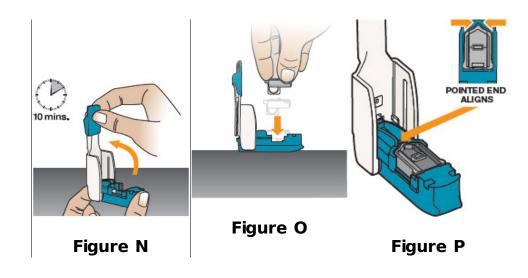
Step 6: Load a cartridge

Place Inhaler on Flat Surface Place the inhaler on a flat surface (see Figure M). Figure M	mouthpiece to an upright (vertical) position (see Figure N). Important: If the cartridge came from a strip stored in the refrigerator (or if you stored the inhaler in the refrigerator), leave the cartridge and inhaler at room temperature for 10	Plac • H fa • L o T s in • P s

Place Cartridge in Inhaler

- Hold the cartridge with the cup facing down (see **Figure O**).
- Line up the cartridge with the opening in the inhaler.
 The pointed end of the cartridge should line up with the pointed end in the inhaler (see Figure P).
- Place the cartridge into the inhaler so that it lies flat.





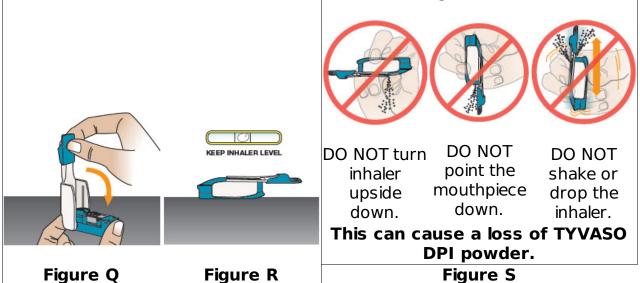
Close Inhaler

Close the inhaler (this will open the cartridge). You should feel a snap when the inhaler is closed (see **Figure Q**). **Important:** Now that the cartridge is loaded, keep the inhaler level to avoid loss of the TYVASO DPI powder, until it is in your mouth (see **Figure R**).

Not keeping the inhaler level could cause a loss of TYVASO DPI powder (see Figure S)

If any powder from the cartridge spills:

- Wash your hands right away if the powder comes into contact with your hands,
- Throw away the cartridge into household trash, and
- Repeat Steps 4, 5, and 6 to load a new cartridge



Inhaling TYVASO DPI

Before inhaling TYVASO DPI, fully review all parts of Step 7 <u>before</u> you take your dose.

Step 7: Inhale Your Dose Remove the

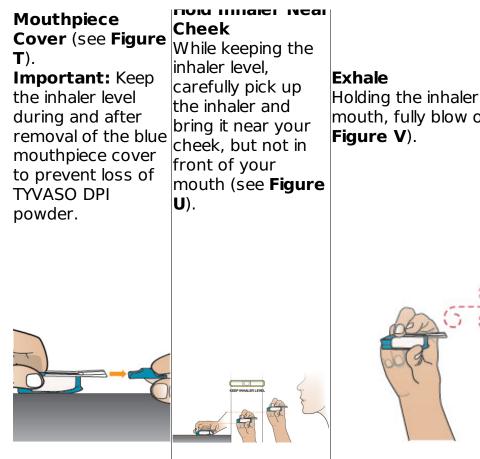


Figure T

Figure U

Holding the inhaler away from your mouth, fully blow out (exhale) (see

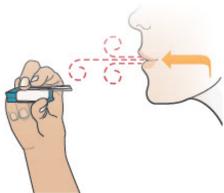


Figure V

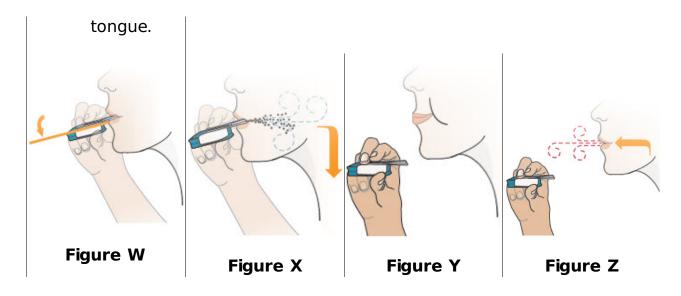
Position Inhaler in Mouth

- Keeping your head level, place the mouthpiece in your mouth and close your lips around the mouthpiece to form a seal.
- Tilt the inhaler slightly downward while keeping your head level (see Figure W).

Note: This helps prevent the powder from being blocked by your

Inhale Deeply, Hold Breath, then Exhale

- With your mouth closed around the mouthpiece, inhale deeply through the inhaler (see **Figure X**).
- Then remove the inhaler from your mouth and hold **your breath** for as long as you comfortably can (see Figure Y).
- Then **blow out** (exhale) and continue to breathe normally (see Figure Z).



Removing the Used Cartridge

Step 8 : Remove Replace Mouthpiece Cover Place the mouthpiece cover back onto the inhaler (see Figure AA). Note: This keeps your fingers off the exposed mouthpiece.	Open Inhaler Open the inhaler by lifting up the mouthpiece to an upright (vertical) position (see Figure AB).	 Remove Cartridge Remove the used blue base (see Find the cup should range of the used cartre AD). Warning: In the cartridge 	d cartridge from the
Figure AA	Figure AB	Figure AC	VIEW TO CONT VIEW TO CONT VIEW TO CONT The cup moves to the middle of the cartridge when it has been used. Figure AD

Step 9 : Throw away used cartridge

Disposing of TYVASO DPI Cartridges

Throw away the used cartridge in your regular household trash (see **Figure** AE).



Inhaling Multiple Cartridges of TYVASO DPI

Step 10 : Inhaling multiple cartridges (skip if not needed)

If your dose requires you to inhale multiple cartridges, repeat steps 6 through 9 for each cartridge.

> **Example:** If your prescribed TYVASO DPI dose is 80 mcg per treatment session, you can use one 32 mcg cartridge and one 48 mcg cartridge (see Figure AF):

Warning: Be careful not to mix NEW cartridges with used cartridges (see Figure AG).

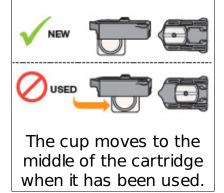












Figure AG

Figure AF

Caring for Your TYVASO DPI Inhaler

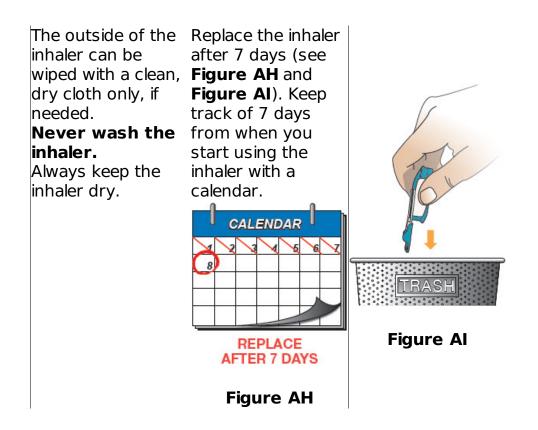
Inhaler Care Instructions

Cleaning

Use Time Only use 1 inhaler After taking your at a time. dose, powder The same inhaler residue in the can be used to mouthpiece is normal; this will not take 16 mcg, 32 mcg, 48 mcg, or affect your dose. 64 mcg cartridges.

Disposing of Your TYVASO DPI Inhaler Throw away used inhaler after 7 days of use

After 7 days of use, throw away the used inhaler in your regular household trash (see Figure AH and Figure AI).



For further questions and information, or to report a problem with your device or any side effects with your TYVASO DPI, please call 1-877-UNITHER (1-877-864-8437).

This Instructions for Use has been approved by the U.S. Food and Drug Administration. Revised: November 2023

TYVASO DPI[®] is a registered trademark of United Therapeutics Corporation.

Patents: www.tyvasodpi.com/patent

Distributed by: United Therapeutics Corporation Research Triangle Park, NC 27709 USA

Manufactured by: MannKind Corporation Danbury, CT 06810 USA

11/2023 30-1311-006-02

PRINCIPAL DISPLAY PANEL - 16 mcg Maintenance Kit

NDC 66302-616-03 Rx ONLY

Maintenance Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing16 mcg per cartridge+ 5Inhalers

This MAINTENANCE KIT is NOT intended for initial titration.

TYVASO DPI[®] (treprostinil) INHALATION POWDER

16 mcg per cartridge

BLISTER STORAGE

Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

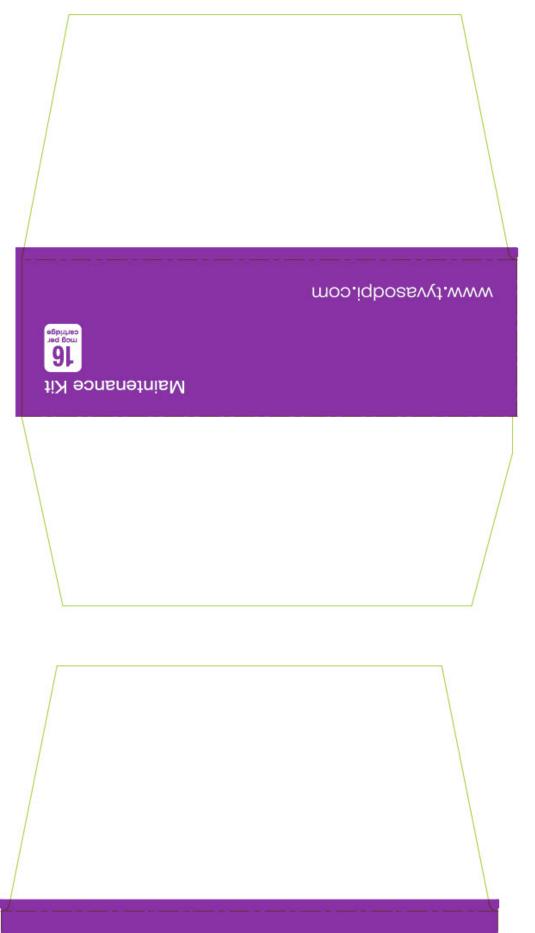
INHALER STORAGE

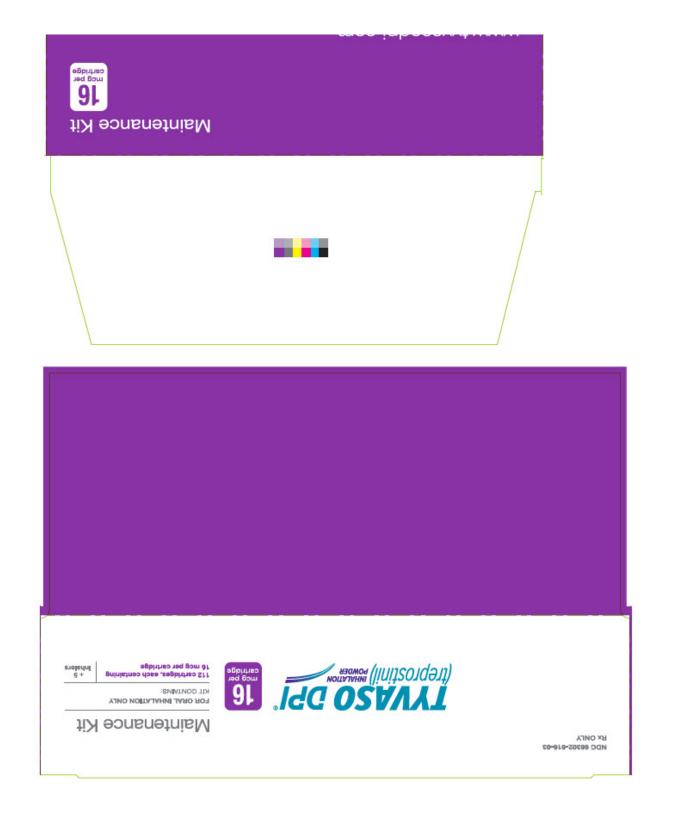
Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.

The inhaler can be used for up to 7 days from the date of first use. After 7 days of use, discard the used inhaler and replace with a new inhaler.









PRINCIPAL DISPLAY PANEL - 16 mcg Institutional Kit

NDC 66302-716-04 Rx ONLY

Institutional Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

16 cartridges, each containing 16 mcg per cartridge + 2 Inhalers

This INSTITUTIONAL KIT is NOT intended for initial titration.

TYVASO DPI™ (treprostinil) INHALATION POWDER

16 mcg per cartridge

BLISTER STORAGE

Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 5 weeks.

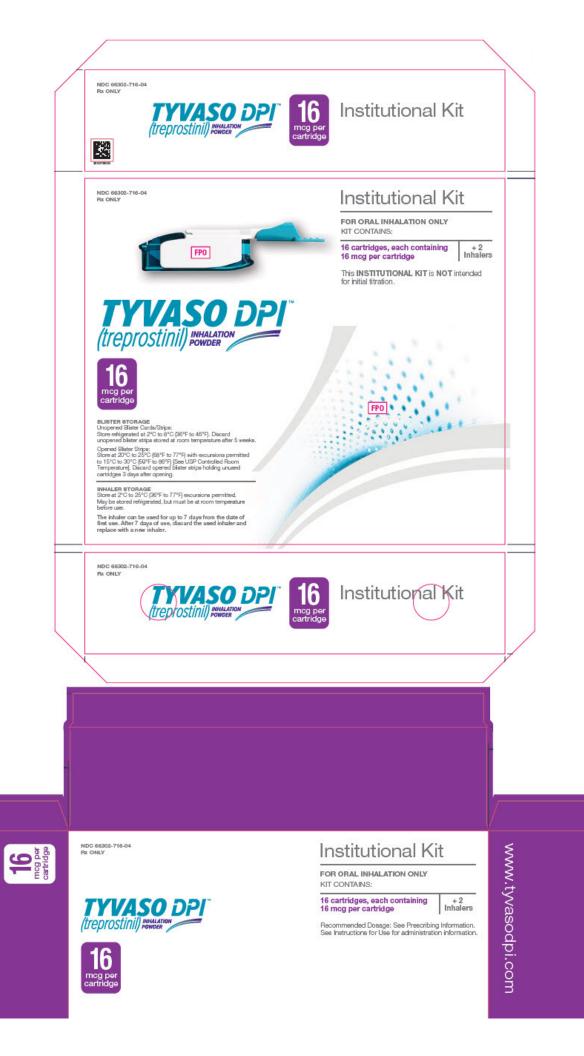
Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE

Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.

The inhaler can be used for up to 7 days from the date of first use. After 7 days of use, discard the used inhaler and replace with a new inhaler.



Institutional Kit



PRINCIPAL DISPLAY PANEL - 32 mcg Maintenance Kit

NDC 66302-632-03 Rx ONLY

Maintenance Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing32 mcg per cartridge+ 5Inhalers

This MAINTENANCE KIT is NOT intended for initial titration.

TYVASO DPI[®] (treprostinil) INHALATION POWDER

32 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

Opened Blister Strips: Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

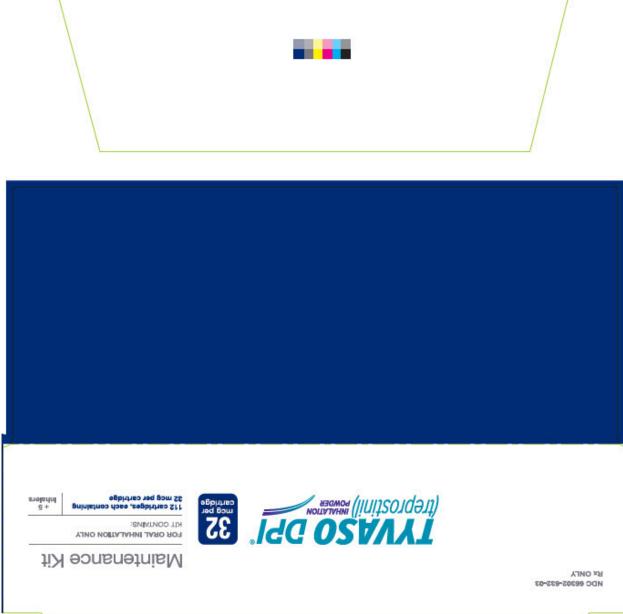
INHALER STORAGE Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.







NDC 66302-732-04 Rx ONLY





Institutional Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

16 cartridges, each containing 32 mcg per cartridge + 2 Inhalers

This INSTITUTIONAL KIT is NOT intended for initial titration.

TYVASO DPI™ (treprostinil) INHALATION POWDER

32

mcg per cartridge

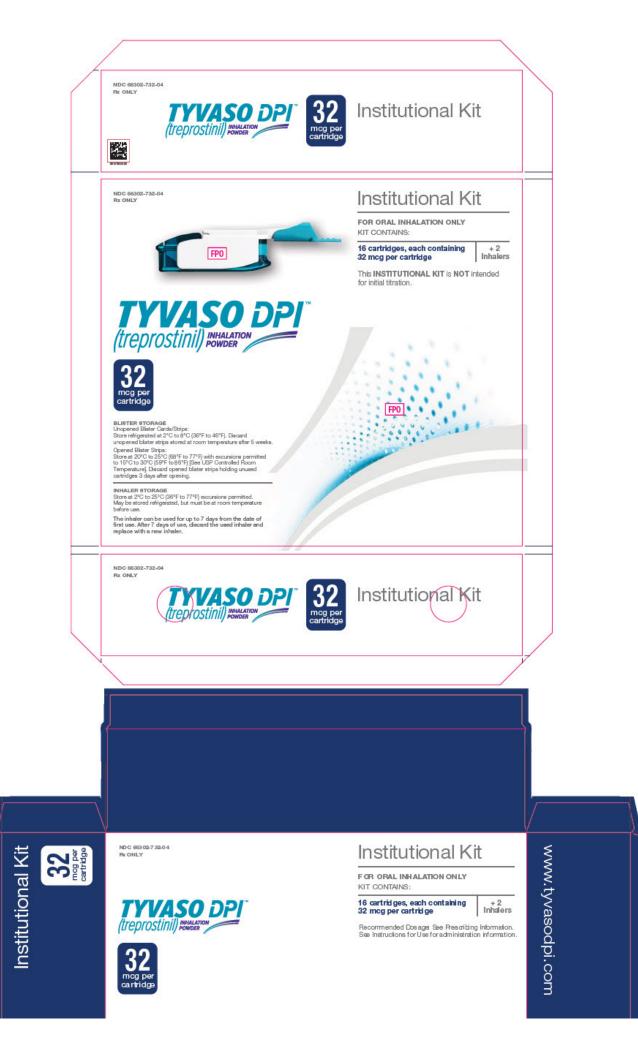
BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 5 weeks.

Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE

Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.





PRINCIPAL DISPLAY PANEL - 48 mcg Maintenance Kit

NDC 66302-648-03 Rx ONLY

Maintenance Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing48 mcg per cartridge+ 5Inhalers

This MAINTENANCE KIT is NOT intended for initial titration.

TYVASO DPI[®] (treprostinil) INHALATION POWDER

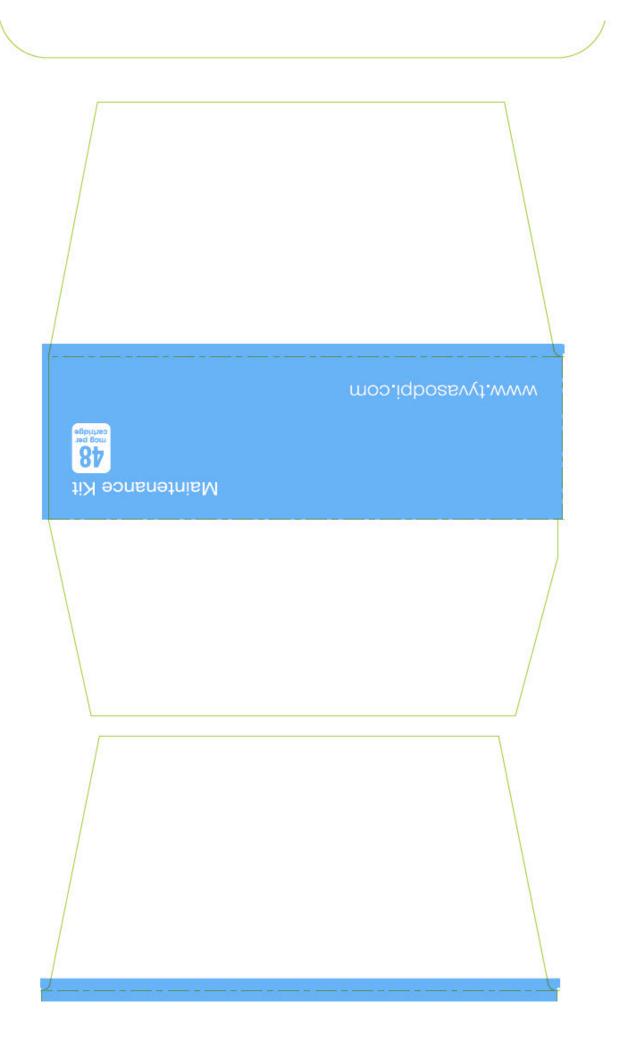
48 mcg per cartridge

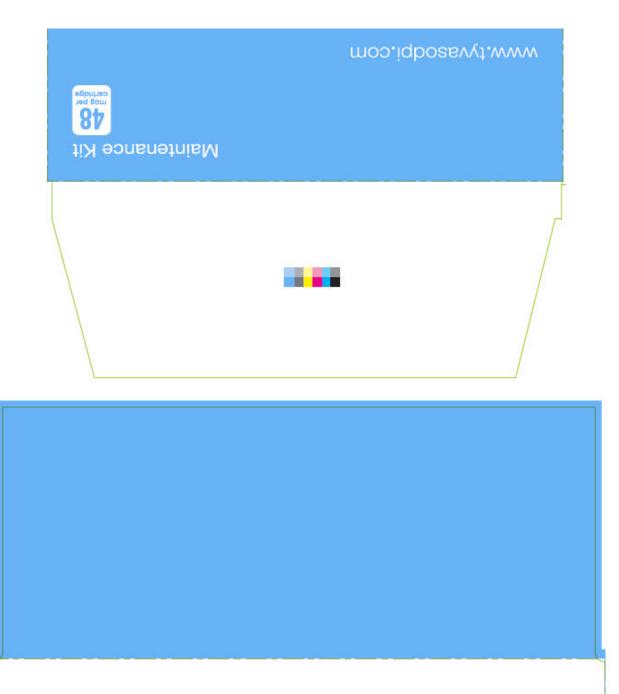
BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

Opened Blister Strips: Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.







"IGC OSAVYT MIRITION (IIIII) MARATION (IIIII)

> 6× ONFA NDC 99305-948-03

PRINCIPAL DISPLAY PANEL - 48 mcg Institutional Kit

10d Eou

NDC 66302-748-04 Rx ONLY Institutional Kit

stoletini

112 carbidges, each cr 48 mog per carbidge

YJNO NOITAJAHNI JARO RO3

Maintenance Kit

KIT CONTAINS:

FOR ORAL INHALATION ONLY KIT CONTAINS:

16 cartridges, each containing 48 mcg per cartridge + 2 Inhalers

This INSTITUTIONAL KIT is NOT intended for initial titration.

TYVASO DPI™ (treprostinil) INHALATION POWDER

48 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 5 weeks.

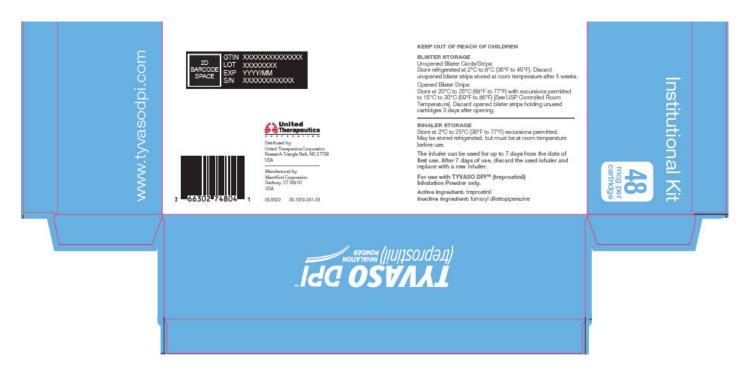
Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE

Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.





PRINCIPAL DISPLAY PANEL - 64 mcg Maintenance Kit

NDC 66302-664-03 Rx ONLY

Maintenance Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing64 mcg per cartridge+ 5Inhalers

This MAINTENANCE KIT is NOT intended for initial titration.

TYVASO DPI[®] (treprostinil) INHALATION POWDER

64 mcg per cartridge

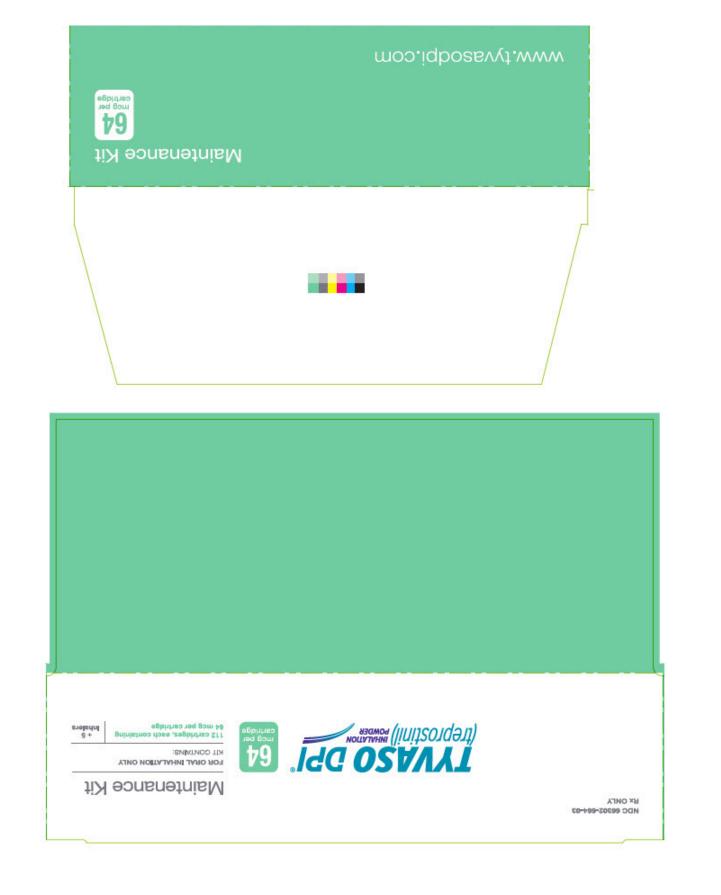
BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

Opened Blister Strips: Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.







PRINCIPAL DISPLAY PANEL - 64 mcg Institutional Kit

NDC 66302-764-04 Rx ONLY

Institutional Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

16 cartridges, each containing 64 mcg per cartridge + 2 Inhalers

This INSTITUTIONAL KIT is NOT intended for initial titration.

TYVASO DPI™ (treprostinil) INHALATION POWDER

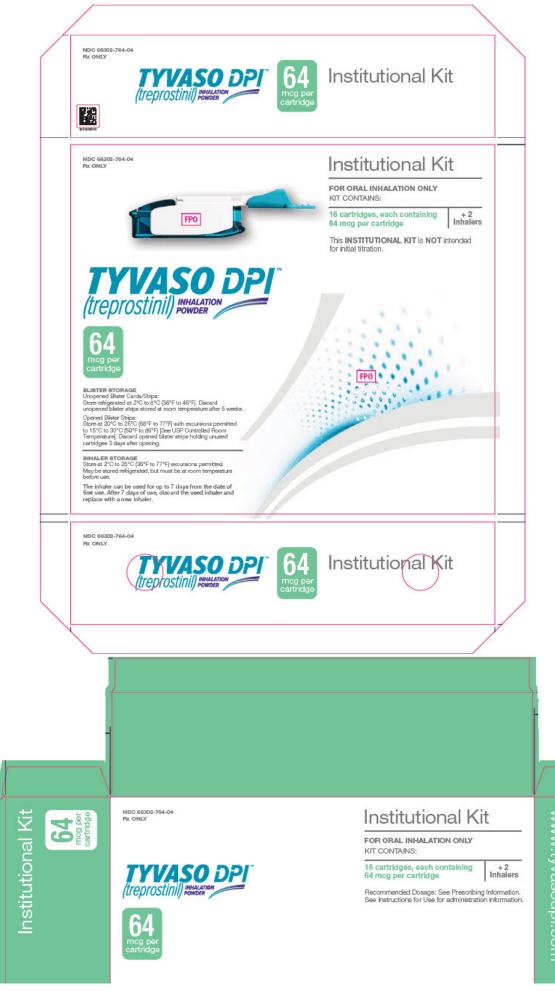
64 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 5 weeks.

Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.



www.twasodpi.com



PRINCIPAL DISPLAY PANEL - 16 mcg 32 mcg Titration Kit

NDC 66302-600-02 Rx ONLY

Titration Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing
16 mcg per cartridge
84 cartridges, each containing
32 mcg per cartridge
+ 5
Inhalers

TYVASO DPI™ (treprostinil) INHALATION POWDER

16

mcg per cartridge 32 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 5 weeks.

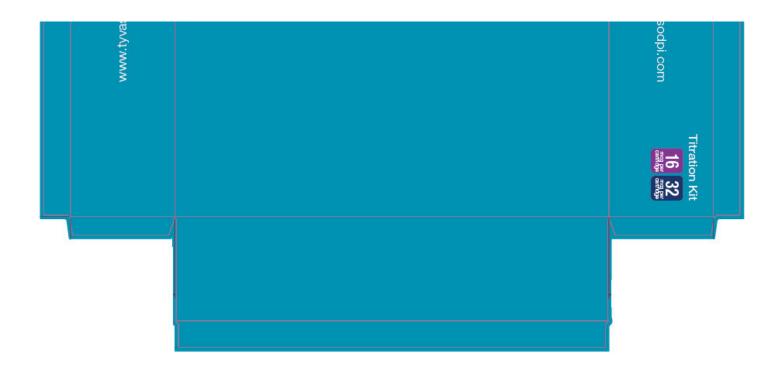
Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE

Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.





PRINCIPAL DISPLAY PANEL - 32 mcg 48 mcg Maintenance Kit

NDC 66302-620-03 Rx ONLY

Maintenance Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing
32 mcg per cartridge
112 cartridges, each containing
48 mcg per cartridge
+ 5
Inhalers

This MAINTENANCE KIT is NOT intended for initial titration.

TYVASO DPI[®] (treprostinil) INHALATION POWDER

32

mcg per cartridge 48 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

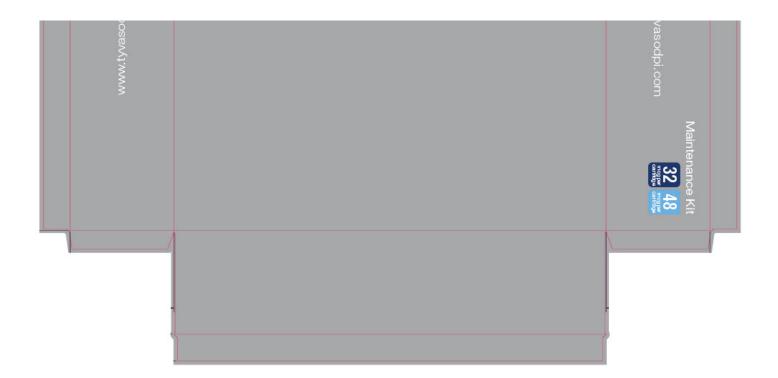
Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE

Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.





PRINCIPAL DISPLAY PANEL - 32 mcg 64 mcg Maintenance Kit

NDC 66302-630-03 Rx ONLY

Maintenance Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing
32 mcg per cartridge
112 cartridges, each containing
64 mcg per cartridge
+ 5
Inhalers

This MAINTENANCE KIT is NOT intended for initial titration.

TYVASO DPI[®] (treprostinil) INHALATION POWDER

32

mcg per cartridge 64 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE

Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.





PRINCIPAL DISPLAY PANEL - 48 mcg 64 mcg Maintenance Kit

NDC 66302-640-03 Rx ONLY

Maintenance Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing
48 mcg per cartridge
112 cartridges, each containing
64 mcg per cartridge
+ 5
Inhalers

This MAINTENANCE KIT is NOT intended for initial titration.

TYVASO DPI[®] (treprostinil) INHALATION POWDER

48

mcg per cartridge 64 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE

Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.





PRINCIPAL DISPLAY PANEL - 32 mcg 48 mcg Institutional Kit

NDC 66302-720-04 Rx ONLY

Institutional Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

16 cartridges, each containing
32 mcg per cartridge
16 cartridges, each containing
48 mcg per cartridge
+ 2
Inhalers

This INSTITUTIONAL KIT is NOT intended for initial titration.

TYVASO DPI™ (treprostinil) INHALATION POWDER

32

mcg per cartridge 48 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE

Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.





PRINCIPAL DISPLAY PANEL - 16 mcg 32 mcg 48 mcg Titration Kit

NDC 66302-610-02 Rx ONLY

Titration Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing 16 mcg per cartridge 112 cartridges, each containing 32 mcg per cartridge 28 cartridges, each containing 48 mcg per cartridge + 5 Inhalers

TYVASO DPI[®] (treprostinil) INHALATION POWDER

16

mcg per cartridge 32 mcg per cartridge 48 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

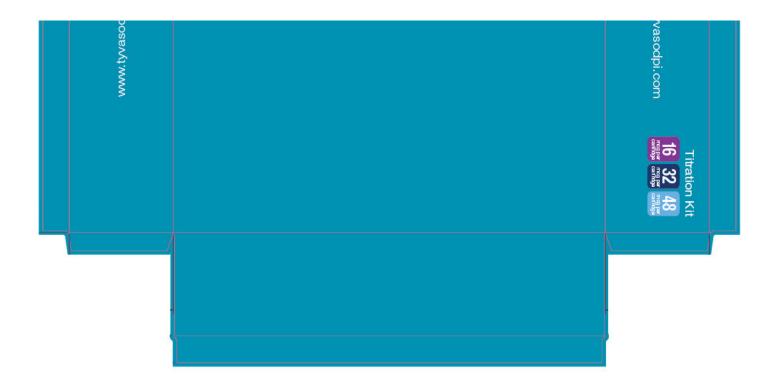
Opened Blister Strips:

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

INHALER STORAGE Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.

The inhaler can be used for up to 7 days from the date of first use. After 7 days of use, discard the used inhaler and replace with a new inhaler.





PRINCIPAL DISPLAY PANEL - 16 mcg 48 mcg 64 mcg Maintenance Kit

NDC 66302-650-03 Rx ONLY

Maintenance Kit

FOR ORAL INHALATION ONLY KIT CONTAINS:

112 cartridges, each containing
16 mcg per cartridge
112 cartridges, each containing
48 mcg per cartridge
112 cartridges, each containing
64 mcg per cartridge
+ 5
Inhalers

This MAINTENANCE KIT is NOT intended for initial titration.

TYVASO DPI[®] (treprostinil) INHALATION POWDER

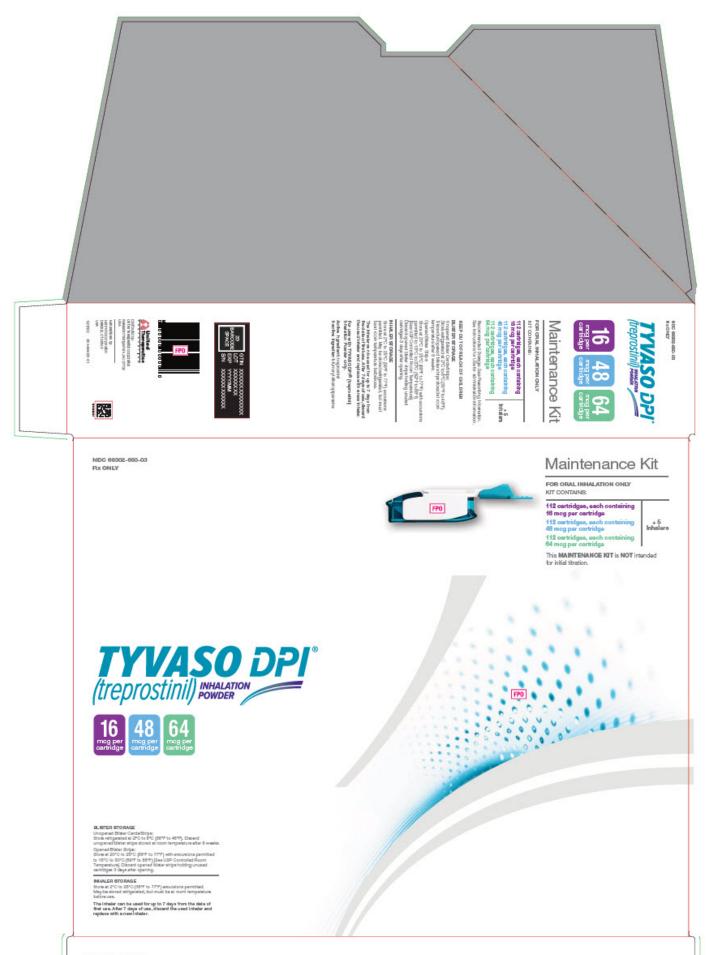
16 mcg per cartridge 48 mcg per cartridge 64 mcg per cartridge

BLISTER STORAGE Unopened Blister Cards/Strips: Store refrigerated at 2°C to 8°C (36°F to 46°F). Discard unopened blister strips stored at room temperature after 8 weeks.

Opened Blister Strips: Store at 20°C to 25°C (68°F to 77°F) with excursions permitted to 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature]. Discard opened blister strips holding unused cartridges 3 days after opening.

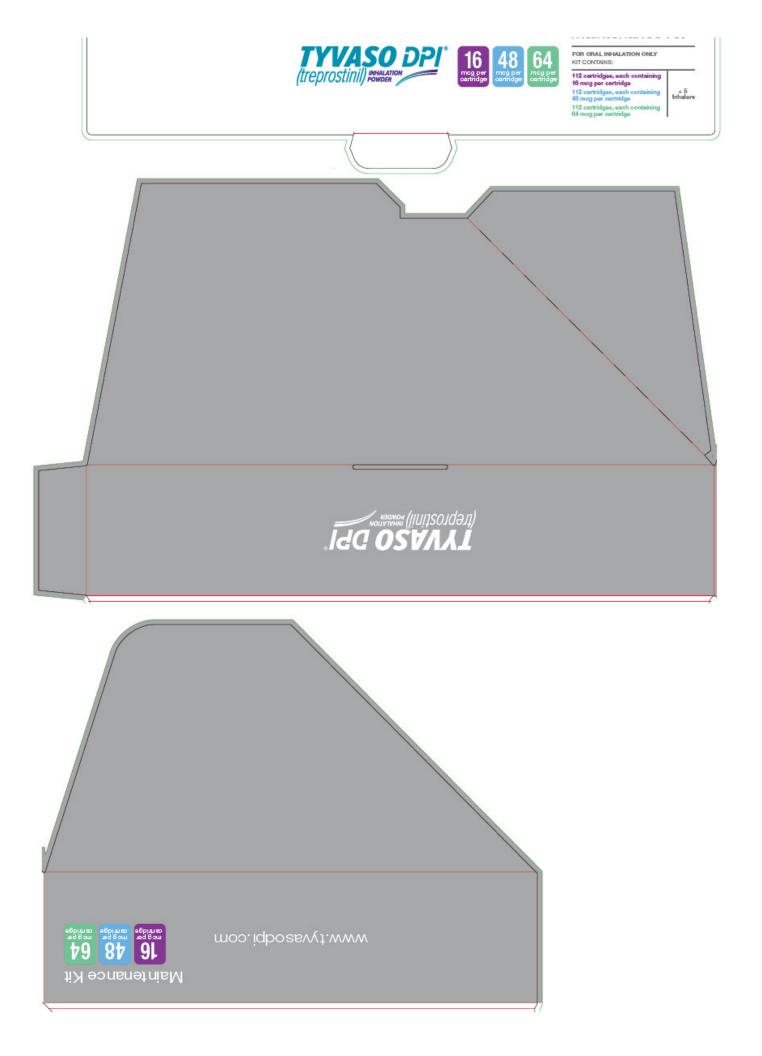
INHALER STORAGE Store at 2°C to 25°C (36°F to 77°F) excursions permitted. May be stored refrigerated, but must be at room temperature before use.

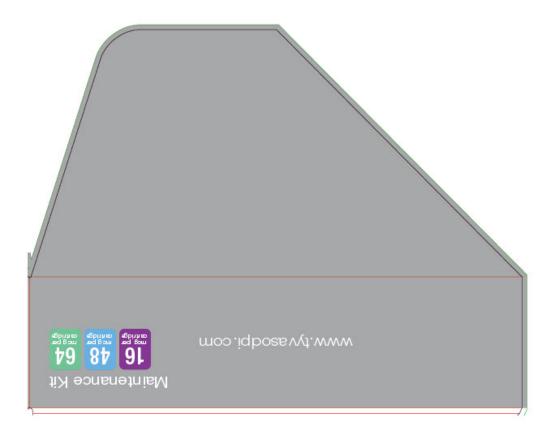
The inhaler can be used for up to 7 days from the date of first use. After 7 days of use, discard the used inhaler and replace with a new inhaler.



NDC 66302-650-03 Rx ONLY

Maintenance Kit





TY\	VASO	DPI					
trepi	rostinil in	halant					
Pro	oduct In	formation					
Pro	duct Typ	e	HUMAN PRESCRIPTION DRUG	ltem C	Code (Source)	ND	C:66302-616
Rou	ite of Adı	ministration	ORAL				
A			Maioha				
Αςτ	live Ingr	redient/Active	•				
		-	dient Name		Basis of Str	ength	Strength
treprostinil (UNII: RUM6K67ESG) (treprostinil - UNII:RUM6K67ESG)treprostinil							16 ug
Ina	ctive In	gredients					
		9.00.00	Ingredient Name			S	trength
fuma	aryl dikete	opiperazine (UNII:	-				5
Pac	ckaging						
#	ltem Code		Package Description		Marke Start D	-	Marketing End Date
	DC:66302- 16-03	4 in 1 KIT			05/23/202	2	
1		7 in 1 BLISTER PAC	к				
			K; Type 9: Other Type of Part 3 Co				

- F	Product (e.g., Drug/Device/Biological Product)		
Marketin	g Information		
Marketing Category		Marketing Start Date	Marketing End Date
NDA	NDA214324	05/23/2022	

	ASO	DPI					
trepr							
	rostinil in	halant					
Pro	duct In	formation					
Pro	duct Typ	e	HUMAN PRESCRIPTION DRUG	ltem Code	(Source)	ND	C:66302-716
Rou	ite of Ad	ministration	ORAL				
Act	ive Ingr	edient/Active	Moiety				
			dient Name		sis of Stre	ngth	Strength
trep	rostinil (U	NII: RUM6K67ESG) (treprostinil - UNII:RUM6K67ESG)	trepr	ostinil		16 ug
Ina	ctivo In	gredients					
ma		grealents	Ingredient Name			5	trength
			•			3	uengui
	any: and a	opiperazine (UNII:	XB09609XSL)				
		opiperazine (UNII:	XB09609XSL)				
Pac	kaging	opiperazine (UNII:	XB09609XSL)				
#	kaging Item Code		XB09609XSL) Package Description		Market Start Da		Marketing End Date
#	kaging Item					ate	
#	kaging Item Code DC:66302-		Package Description		Start Da	ate	
# 1 NI	kaging Item Code DC:66302-	1 in 1 KIT 4 in 1 BLISTER PAC 4 in 1 BLISTER PAC	Package Description	mbination	Start Da	ate	
 # 1 NI 71 1 	kaging Item Code DC:66302-	1 in 1 KIT 4 in 1 BLISTER PAC 4 in 1 BLISTER PAC	Package Description K K; Type 9: Other Type of Part 3 Co	mbination	Start Da	ate	
 # 1 NI 71 1 	kaging Item Code DC:66302-	1 in 1 KIT 4 in 1 BLISTER PAC 4 in 1 BLISTER PAC	Package Description K K; Type 9: Other Type of Part 3 Co	mbination	Start Da	ate	
# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Item Code DC:66302- 16-04	1 in 1 KIT 4 in 1 BLISTER PAC 4 in 1 BLISTER PAC	Package Description K K; Type 9: Other Type of Part 3 Co /Device/Biological Product)	mbination	Start Da	ate	
# 11 771 11 11	Item Code DC:66302- 16-04	1 in 1 KIT 4 in 1 BLISTER PAC 4 in 1 BLISTER PAC Product (e.g., Drug Ig Informat g Applica	Package Description K K; Type 9: Other Type of Part 3 Co /Device/Biological Product)	Marketi	Start Da	ate	
# 1 1 1	kaging Item Code DC:66302- 16-04	1 in 1 KIT 4 in 1 BLISTER PAC 4 in 1 BLISTER PAC Product (e.g., Drug Ig Informat g Applica	Package Description K K; Type 9: Other Type of Part 3 Co /Device/Biological Product) ion	Marketi	Start Da 05/23/2022	ate	End Date

Anno 1999 - Alfred Markov Landa	TYVASO DPI		
treprostinii innaiant	treprostinil inhalant		

Product In	form	ation					
Product Typ	e		HUMAN PRESCRIPTION DRUG	ltem Code	(Source)	NDC	:66302-632
Route of Ad	minist	ration	ORAL				
Active Ing	redier		-				
		-	dient Name		is of Stre	ngth	Strength
(C	JNII: KUN	16K67ESG) (1	treprostinil - UNII:RUM6K67ESG)	trepro	stinii		32 ug
Inactive In	gredi	ents					
			Ingredient Name			St	rength
fumaryl diket	opipera	azine (UNII:)	XB09609XSL)				
Packaging							
# Item Code			Package Description		Marketi Start Da		Marketing End Date
1 NDC:66302- 632-03	4 in 1 I	<it< td=""><td></td><td></td><td>05/23/2022</td><td></td><td></td></it<>			05/23/2022		
1	7 in 1 l	BLISTER PAC	К				
1			K; Type 9: Other Type of Part 3 Cor /Device/Biological Product)	nbination			
Marketir	ng In	format	ion				
Marketiı Categoı	-	Applicat	tion Number or Monograph Citation	Marketir Da	•	Marl	keting End Date
NDA		NDA214324		05/23/2022			
TYVASO	DPI						
reprostinil in	halant						
Product In	form	ation					
Product Typ	e		HUMAN PRESCRIPTION DRUG	Item Code	(Source)	NDC	:66302-732
21-							

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:66302-732
Route of Administration	ORAL		
Active Ingredient/Active	Moiety		
Ingred	dient Name	Basis of Str	rength Strength
treprostinil (UNII: RUM6K67ESG) (1	treprostinil - UNII:RUM6K67ESG)	treprostinil	32 ug
Inactive Ingredients			
	Ingredient Name		Strength

1 132-04 1 1						
Item Code Image: Second stress start						
Code NDC:66302- 732-04 NDA Marketin Marketin Category NDA FYVASO E reprostinil inf Product Inf Product Inf Product Type Route of Adm Active Ingra Koute of Adm Active Ingra Route of Adm Route of Adm Active Ingra Route of Adm Route of Adm Route of Adm Route of Adm Route Ingra Route Ingr	ging					
732-04 1 1 Marketin Category Marketin Category NDA FYVASO E reprostinil inf Product Inf Product Type Route of Adm Active Ingra Active Ingra treprostinil (Uf Inactive Ingra fumaryl diketo Packaging # Item Code 1 NDC:66302-		Package Description		Marketi Start Da		Marketing End Date
1 Marketin Marketin Category Marketin Category NDA FYVASO I reprostinil inf Product Inf Product Type Route of Adm Active Ingra Route of Adm Active Ingra fumaryl diketo Inactive Ingra fumaryl diketo Packaging # Item Code 1 NDC:66302-				05/23/2022		
Marketin Marketin Category NDA	4 in 1 BLISTER PACE	<				
Marketin Category NDA		<; Type 9: Other Type of Part 3 Cor /Device/Biological Product)	mbination			
Marketin Category NDA						
Category NDA	eting Informati	ion				
FYVASO E reprostinil inh Product Inf Product Type Route of Adm Active Ingra treprostinil (Uf Inactive Ing fumaryl diketo Packaging # Item Code		tion Number or Monograph Citation	Marketiı Da		Mar	keting End Date
reprostinil inh Product Inf Product Type Route of Adm Active Ingra treprostinil (Uf Inactive Ing fumaryl diketo Packaging # Item Code 1 NDC:66302-	NDA214324		05/23/2022			
reprostinil inh Product Inf Product Type Route of Adm Active Ingra treprostinil (Uf Inactive Ing fumaryl diketo Packaging Hem Code NDC:66302-						
Product Inf Product Type Route of Adm Active Ingra treprostinil (Uf Inactive Ing fumaryl diketo Packaging H Item Code NDC:66302-	SO DPI					
Product Type Route of Adm Active Ingra treprostinil (UI Inactive Ing fumaryl diketo Packaging Hem Code NDC:66302-	inil inhalant					
Product Type Route of Adm Active Ingra treprostinil (UI Inactive Ing fumaryl diketo Packaging Hem Code NDC:66302-	ct Information					
Route of Adm Active Ingra treprostinil (Uf Inactive Ing fumaryl diketo Packaging # Item Code		HUMAN PRESCRIPTION DRUG	ltem Code	(Source)		C:66302-648
Active Ingra treprostinil (Uf Inactive Ing fumaryl diketo Packaging # Item Code		ORAL	item coue	(Source)		0.00502-040
treprostinil (Uf Inactive Ing fumaryl diketo Packaging # Item Code 1 NDC:66302-		UNAL				
Inactive Ing fumaryl diketo Packaging # Item Code 1 NDC:66302-	Ingredient/Active	Moiety				
Inactive Ing fumaryl diketo Packaging # Item Code	Ingred	lient Name	Bas	sis of Stre	ngth	Strength
fumaryl diketo Packaging # Item Code 1 NDC:66302-	•	reprostinil - UNII:RUM6K67ESG)	trepro		-	48 ug
fumaryl diketo Packaging # Item Code 1 NDC:66302-						
Packaging # Item Code	ve Ingredients					
Packaging # Item Code		Ingredient Name			S	trength
# Item Code 1 NDC:66302-	diketopiperazine (UNII:)	XB09609XSL)				
 Code NDC:66302- 	ging					
		Package Description		Marketi Start Da		Marketing End Date
648-03	em			05/23/2022		
	em de 66302- 4 in 1 KIT					
	em de 66302- 4 in 1 KIT	<				
	de 66302- 3 7 in 1 KIT 7 in 1 BLISTER PACH 4 in 1 BLISTER PACH	K K; Type 9: Other Type of Part 3 Cor Device/Biological Product)	mbination			

Marketi	•	plication Number or Monogra Citation		ing Start ate	Marl	ceting End Date
Catego:	-	14324	05/23/2022			Date
		- 1321	03,23,2022			
TYVASO	DPI					
reprostinil in						
Product Ir	formatio	n				
Product Typ	е	HUMAN PRESCRIPTION DRUG	ltem Code	(Source)	NDC	:66302-748
Route of Ad		n ORAL				
Active Ing	redient/Ac	tive Moiety				
	I	ngredient Name	Ba	sis of Stre	ngth	Strength
t reprostinil (U	INII: RUM6K67	ESG) (treprostinil - UNII:RUM6K67ESC	6) trepr	ostinil		48 ug
Inactive In	gredients	1				
		Ingredient Name (UNII: XB09609XSL)			St	rength
-						
Packaging						
ltem		Package Description		Marketi Start Da	-	Marketing End Date
# Item Code NDC:66302-	1 in 1 KIT	Package Description			-	
Item Code NDC:66302- 748-04				Start Da	-	
<pre># Code 1 NDC:66302-</pre>	1 in 1 KIT 4 in 1 BLISTI 4 in 1 BLISTI		3 Combination	Start Da	-	
Item Code 1 NDC:66302- 748-04 1	1 in 1 KIT 4 in 1 BLISTI 4 in 1 BLISTI	ER PACK ER PACK; Type 9: Other Type of Part	3 Combination	Start Da	-	
Item Code 1 NDC:66302- 748-04 1	1 in 1 KIT 4 in 1 BLISTI 4 in 1 BLISTI Product (e.g.	ER PACK ER PACK; Type 9: Other Type of Part , Drug/Device/Biological Product)	3 Combination	Start Da	-	
Item Code NDC:66302- 748-04 1 1	1 in 1 KIT 4 in 1 BLISTR 4 in 1 BLISTR Product (e.g. ng Infor	ER PACK ER PACK; Type 9: Other Type of Part , Drug/Device/Biological Product)	ph Market	Start Da	ite	Marketing End Date ceting End Date

TYVASO DPI			
treprostinil inhalant			
Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:66302-664
Route of Administration	ORAL		

Tumaryl diketopiperazine (UNII: XB09609XSL) Marketing Start Date # Item Code Package Description Marketing Start Date 1 NDC:66302- 664-03 4 in 1 KIT 05/23/2022 0 1 7 in 1 BLISTER PACK 0 0 0 0 1 4 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) 0 0 0 Marketing Category Application Number or Monograph Citation Marketing Start Date Marketing Start Marketing Start NDA NDA214324 05/23/2022 0 0 0 0	Strengt 64 ug rength Marketing End Date
Ingredients Ingredient Name St fumaryl diketopiperazine (UNII: XB09609XSL) Packaging # Item Package Description Marketing Start Date 1 NDC:66302- 664-03 4 in 1 KIT 05/23/2022 0 1 7 in 1 BLISTER PACK 05/23/2022 0 1 4 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) 0 0 0 Marketing Information Marketing Category Application Number or Monograph Citation Marketing Start Marketing Marketing Start NDA NDA214324 05/23/2022 0 0 FYVASO DPI reprostinil inhalant	rength Marketing
Ingredient Name St Furmary diketopiperazine (UNII: XB09609XSL) Package Description Marketing Start Date # Item Code Package Description Marketing Start Date 1 NDC:66302 G64-03 4 in 1 KIT 05/23/2022 05/23/2022 1 7 in 1 BLISTER PACK 05/23/2022 1 1 7 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) Marketing Start Date Marketing Start Date Marketing Information Marketing Category Application Number or Monograph Citation Marketing Start Date Marketing Start Pate NDA NDA214324 05/23/2022 Marketing Start Pate Marketing Start Pate	Marketing
Ingredient Name St Furmary diketopiperazine (UNII: XB09609XSL) Marketing Code Marketing Start Date # Item Code Package Description Marketing Start Date 1 NDC:66302- 664-03 4 in 1 KIT 05/23/2022 05/23/2022 1 7 in 1 BLISTER PACK 05/23/2022 0 1 7 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) 0 0 Marketing Information Marketing Category Application Number or Monograph NDA Marketing Start Date Marketing Start NDA	Marketing
Tumaryl diketopiperazine (UNII: XB09609XSL) Marketing Start Date # Item Code Package Description Marketing Start Date 1 NDC:66302- 664-03 4 in 1 KIT 05/23/2022 0 1 7 in 1 BLISTER PACK 0 0 0 0 1 7 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) 0 0 0 Marketing Category Application Number or Monograph Citation Marketing Start Date Marketing Start Marketing Start NDA NDA214324 05/23/2022 0 0 0 0	Marketing
# Code Start Date 1 NDC:66302- 664-03 4 in 1 KIT 05/23/2022 1 7 in 1 BLISTER PACK 05/23/2022 1 4 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) Image: Combination of the type of Part 3 Combination of the type of Part 3 Combination Marketing Information Marketing Start of the type of Part 3 Combination of the type of the type of Part 3 Combination of the type of type of type of the type of t	
Item Code Package Description Marketing Start Date 1 NDC:66302- 664-03 4 in 1 KIT 05/23/2022 1 7 in 1 BLISTER PACK 05/23/2022 1 4 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) 1 Marketing Information Marketing Start Marketing Start Marketing Category Application Number or Monograph Citation Marketing Start Marketing Start NDA NDA214324 05/23/2022 1	
marketing Category Application Number or Monograph Citation Marketing Start 05/23/2022 Marketing Start 05/23/2022 Marketing Category Application Number or Monograph Citation Marketing Start Date Marketing Start Date	
Image:	
1 4 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) Marketing Information Marketing Category Application Number or Monograph Citation Marketing Start Date Marketing Start NDA NDA214324 05/23/2022 Marketing reprostinil inhalant Fryvaso DPI Fryvaso DPI Fryvaso DPI	
Product (e.g., Drug/Device/Biological Product) Marketing Information Marketing Category Application Number or Monograph Citation NDA NDA214324 NDA	
Marketing Category Application Number or Monograph Citation Marketing Start Date Marketing Start NDA NDA214324 05/23/2022	
NDA NDA214324 05/23/2022 TYVASO DPI reprostinil inhalant	keting End
FYVASO DPI reprostinil inhalant	Date
reprostinil inhalant	
reprostinil inhalant	
Product Information	
Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC	:66302-764
Route of Administration ORAL	
Active Ingredient/Active Moiety	
Ingredient NameBasis of Strengthtreprostinil (UNII: RUM6K67ESG) (treprostinil - UNII:RUM6K67ESG)treprostinil	Strengt

Inactive Ingredients Ingredient Name Strength fumaryl diketopiperazine (UNII: XB09609XSL)

Pack	caging								
++	ltem Code			Package Descr	iption		Market Start Da		Marketing End Date
1 NDC 764	C:66302- I-04	1 in 1 KI	т				05/23/2022		
1		4 in 1 B	LISTER PAC	K					
1				<; Type 9: Other Type /Device/Biological Pro		bination			
		-	format						
	larketin Categor		Applicat	tion Number or M Citation	onograph	Marketin Dat		Ма	rketing End Date
NDA		-	NDA214324			05/23/2022			2010
						1		1	
ΤΥΥ	ASO I	DPI							
trepro	stinil kit								
Prod	luct In	forma	tion						
Prod	uct Typ	e	HUMAN PRE	SCRIPTION DRUG	ltem C	Code (Sour	ce)	NDC:	66302-600
		-					,		
Pack	caging								
	Item C		Packa	ge Description	Marketing	g Start Dat	e Mar	ketin	g End Date
1 NDC	C:66302-6	500-02	1 in 1 PAC	KAGE	05/23/2022		03/31/2	2024	
Ouar	ntity o	f Parts	S						
Part	-		- ackage Q	Juantity		Total Pro	oduct Qu	antity	1
Part 1		STER PA	-	, ,	112		-		,
Part 2	21 BLI	STER PA	CK		84				
Par	t 1 of	2							
TYV	ASO	DPI							
trepro	ostinil in	halant							
Prod	duct In	forma	tion						
	<mark>luct In</mark> Code (S			NDC:66302-616					
ltem		ource)	I	NDC:66302-616 ORAL					
ltem	Code (S	ource)	I						

			-			<u> </u>
	0			sis of Stre	ngth	Strength
treprostinii (UNII: RUI	M6K67ESG) (1	reprostinil - UNII:RUM6K67ESG)	trepr	ostinil		16 ug
Inactive Ingredi	ents					
		Ingredient Name			St	rength
fumaryl diketopipera	azine (UNII:)	-				-
Packaging						
# Item	F	Package Description		Marketir		Marketing
Code				Start Da	te	End Date
		ype 9: Other Type of Part 3 Combin vice/Biological Product)	ation			
	3, 3,					
Marketing In	format	ion				
Marketing		tion Number or Monograph	Marketi	ing Start	Mar	keting End
Category		Citation		ate		Date
NDA	NDA214324		05/23/2022			
Part 2 of 2						
TYVASO DPI						
treprostinil inhalan	t					
	-					
Product Inform	otion					
Item Code (Source		NDC:66302-632				
Route of Administ	ration	ORAL				
Active Increalized		Maiaty				
Active Ingredier		•	D-	ala of Chuo		Ctue a ath
traprostinil (UNII: PUI	-	tient Name Treprostinil - UNII:RUM6K67ESG)		sis of Stre ostinil	ngtn	Strength 32 ug
treprostinii (olvii: Rol	MOKO7E5G) (I		uepi	US LITII		52 ug
Inactive Ingredi	ents					
		Ingredient Name			St	rength
fumaryl diketopipera	azine (UNII:)	-				-
Packaging						
# Item		Package Description		Marketir		Marketing
[#] Code		ackage Description		Start Da		End Date

		ype 9: Other Type of vice/Biological Produc		ation		
Marketing In	format	ion				
Marketing Category		tion Number or M Citation	onograph		ng Start Ite	Marketing End Date
NDA	NDA214324	Citation		05/23/2022	ite	Date
Marketing In	format	ion				
Marketing Category	Applicat	tion Number or M Citation	onograph		ng Start Ite	Marketing End Date
NDA	NDA214324			05/23/2022		03/31/2024
TYVASO DPI treprostinil kit						
Product Informa	ation					
Product Type	HUMAN PR	ESCRIPTION DRUG	ltem C	Code (Sour	ce)	NDC:66302-620
Packaging						
# Item Code		ge Description	Marketing	J Start Da	te Mar	keting End Date
1 NDC:66302-620-03	1 in 1 PAC	KAGE	05/23/2022			
Quantity of David	h					
Quantity of Part Part # P	ls Package Q	Juantity		Total P	roduct Qu	antity
Part 1 28 BLISTER P	-	futility	112	Totarri	ouuce qu	
Part 2 28 BLISTER P	ACK		112			
Part 1 of 2						
TYVASO DPI						
treprostinil inhalant	t					
Product Informa	ation					
Item Code (Source)	NDC:66302-632				
Route of Administ	ration	ORAL				

Active Ingredient	Active	Moiety				
		lient Name	Ba	sis of Stre	ngth	Strength
treprostinil (UNII: RUM6	-	reprostinil - UNII:RUM6K67ESG)	trepro		5	32 ug
Inactive Ingredie	nts					
		Ingredient Name			St	rength
fumaryl diketopiperaz	ine (UNII:)	XB09609XSL)				
Packaging						
# Item Code	P	ackage Description		Marketi Start Da		Marketing End Date
		ype 9: Other Type of Part 3 Combin /ice/Biological Product)	ation			
Marketing Inf						
Marketing Category	Applicat	tion Number or Monograph Citation		ng Start Ite	Marl	keting End Date
NDA N	IDA214324		05/23/2022			
Part 2 of 2						
TYVASO DPI						
treprostinil inhalant						
Product Informa	tion					
Item Code (Source)		NDC:66302-648				
Route of Administra	ation	ORAL				
Active Ingredient	Active	Moiety				
	Ingred	lient Name	Ba	sis of Stre	ngth	Strength
treprostinil (UNII: RUM6	667ESG) (t	reprostinil - UNII:RUM6K67ESG)	trepro	ostinil		48 ug
Inactive Ingredie	nte					
mactive myreule	iits	Ingredient Name			St	rength
fumaryl diketopiperaz	ine (UNII:)	•				
Packaging						
" Item	P	Deckage Decorintion		Marketi	ng	Marketing

[#] Code	•	аскаде резспр	lion		Start Dat	te End Date
		ype 9: Other Type of vice/Biological Produc		ation		
Marketing In	format	ion				
Marketing		tion Number or M	lonograph	Marketi	ng Start	Marketing End
Category	Applica	Citation	lonograph		ite	Date
NDA	NDA214324			05/23/2022		
Marketing In	format	ion				
Marketing Category	Applicat	tion Number or M Citation	lonograph		ng Start Ite	Marketing End Date
NDA	NDA214324	Citation		05/23/2022		Date
TYVASO DPI						
treprostinil kit						
Product Inform	ation					
Product Type		ESCRIPTION DRUG	ltem (Code (Sour	ce)	NDC:66302-630
					,	
Packaging						
# Item Code 1 NDC:66302-630-03	Packa	ge Description	Marketing 06/27/2023	j Start Da	te Mark	eting End Date
I NDC:06302-630-03	I IN I PAC	NAGE	06/27/2023			
Quantity of Par						
Part # I Part 1 28 BLISTER F	Package C	luantity	112	Total Pi	roduct Qua	intity
Part 2 28 BLISTER F			112			
Part 1 of 2						
TYVASO DPI						
treprostinil inhalan	t					
Product Inform	ation					
Item Code (Source		NDC:66302-632				
Route of Administ	ration	ORAL				

treprostini		,	Moiety				
treprostini		Ingre	dient Name	Ba	sis of Stre	ngth	Strength
	il (UNII: RU	JM6K67ESG)	(treprostinil - UNII:RUM6K67ESG)	trepr	ostinil		32 ug
nactive	Ingred	lients					
			Ingredient Name			St	rength
fumaryl di	ketopipe	razine (UNII:	XB09609XSL)				
Packagi	ng						
# Item Code			Package Description		Marketir Start Da		Marketing End Date
1			Type 9: Other Type of Part 3 Combir evice/Biological Product)	nation			
Marke	ting lı	nformat	tion				
Marke Cate		Applica	ition Number or Monograph Citation		ing Start ate	Mark	ceting End Date
NDA		NDA214324	l	06/27/2023			
Part 2 TYVAS	O DPI						
treprostir	nil inhalar	nt					
Product	Inform	nation					
			NDC:66302-664				
Item Cod	e (Sourc	e)	NDC:66302-664 ORAL				
Item Cod Route of	e (Sourc Adminis	e) tration	ORAL				
Item Cod Route of	e (Sourc Adminis	e)	ORAL				
Item Code Route of Active II	e (Sourc Adminis ngredie	re) tration nt/Active Ingre	ORAL Moiety dient Name		sis of Stre	ngth	Strength
	e (Sourc Adminis ngredie	re) tration nt/Active Ingre	ORAL Moiety		sis of Stre ostinil	ngth	Strength 64 ug
Item Code Route of Active II treprostini	e (Sourc Adminis ngredie il (UNII: RU	tration mt/Active Ingre	ORAL Moiety dient Name			ngth	-
Item Code Route of Active II treprostini Inactive	e (Sourc Adminis ngredie il (UNII: RL e Ingred	re) tration Ingre JM6K67ESG)	ORAL Moiety dient Name (treprostinil - UNII:RUM6K67ESG) Ingredient Name				-
Item Code Route of Active II treprostini Inactive	e (Sourc Adminis ngredie il (UNII: RL e Ingred	ie) tration int/Active Ingre JM6K67ESG)	ORAL Moiety dient Name (treprostinil - UNII:RUM6K67ESG)				64 ug

# code	F	Package Descrip	tion		Marketin Start Dat	
		ype 9: Other Type of vice/Biological Produced		ation		
		-				
Markating In	format	ion				
Marketing In					n n Chaut	Maulaatin o Fud
Marketing Category	Арриса	tion Number or M Citation	ionograph		ng Start ate	Marketing End Date
NDA	NDA214324			06/27/2023		
Marketing In	format	ion				
Marketing		tion Number or M	lonograph		ng Start	Marketing End
Category NDA	NDA214324	Citation		Da 06/27/2023	ate	Date
	110/12 14324			5672772025		
TYVASO DPI						
treprostinil kit						
Product Inform	ation					
Product Type	HUMAN PR	ESCRIPTION DRUG	ltem (Code (Soui	rce)	NDC:66302-640
Packaging						
# Item Code	Packa	ge Description	Marketing	ı Start Da	te Mark	ceting End Date
1 NDC:66302-640-03	1 in 1 PAC		06/27/2023	, otare ba		
Quantity of Par	ts					
Part # F	Package (Quantity		Total P	roduct Qua	ntity
Part 1 28 BLISTER P	ACK		112			
Part 2 28 BLISTER P	ACK		112			
Part 1 of 2						
TYVASO DPI						
treprostinil inhalan	t					
Product Inform						
Item Code (Source		NDC:66302-648				
Route of Administ	ration	ORAL				

Active Ir	ngredie	nt/Active	Moiety				
		Ingre	dient Name	Ba	sis of Stre	ength	Strength
treprostini	i l (UNII: RU	M6K67ESG)	treprostinil - UNII:RUM6K67ESG)	trepr	ostinil		48 ug
Inactive	Ingred	ients					
			Ingredient Name			St	rength
fumaryl di	ketopipeı	r azine (UNII:	XB09609XSL)				
Packagi	ng						
# Item Code			Package Description		Marketi Start Da		Marketing End Date
1			Fype 9: Other Type of Part 3 Combir vice/Biological Product)	nation			
		nformat					
Marke Categ		Applica	tion Number or Monograph Citation		ing Start ate	Marl	ceting End Date
NDA		NDA214324		06/27/2023	1		
TYVAS treprostin		nt					
Product	Inform	ation					
Item Cod	e (Sourc	e)	NDC:66302-664				
Route of	Administ	tration	ORAL				
Active P	naredie	nt/Active	Moiety				
	.g. cule		dient Name	Ra	sis of Stre	nath	Strength
treprostini	i l (UNII: RU	-	treprostinil - UNII:RUM6K67ESG)		ostinil	ngth	64 ug
Inactive	Ingred	ients					
						St	rength
tumaryl dil	ketopipeı	razine (UNII:	XB09609XSL)				
Packagi	ng						
14					N/ - ulse L!		N#=-: -=±!

1 4 in 1 BLISTER PACK: Type 9: Other Type of Part 3 Combination Product (e.g., Drug/Device/Biological Product) Marketing Information Marketing Category Application Number or Monograph Citation Marketing Start Date Marketing E Date NDA NDA214324 06/27/2023 Marketing Start Marketing E Date Marketing Category Application Number or Monograph Citation Marketing Start Marketing E Date NDA NDA214324 06/27/2023 Marketing E Date Marketing E Date VUAN NDA214324 06/27/2023 NDC:66302-720 Product Information Image: Start Date Marketing End Date Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 Packaging Image: Start Date Marketing End Date Marketing End Date Quantity of Parts <td< th=""><th></th></td<>	
Marketing Information Marketing Citation Number or Monograph Citation Marketing Start Date Marketing EDate NDA NDA214324 06/27/2023 Marketing Start Date Marketing EDAte Marketing Information Marketing Category Application Number or Monograph Citation Marketing Start Date Marketing EDAte NDA NDA214324 06/27/2023 Marketing Start Date Marketing EDAte NDA NDA214324 06/27/2023 Marketing EDAte Marketing EDAte NDA NDA214324 06/27/2023 Marketing EDAte Marketing EDAte NDA NDA214324 06/27/2023 Marketing EDAte Marketing EDAte TYVASO DPI treprostinil kit Marketing EDAte Marketing EDAte Marketing EDAte Product Information HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 NDC:66302-720 Packaging # Item Code Package Description Marketing Start Date Marketing End Date 1 NDC:66302-720-04 1 in 1 PACKAGE 05/23/2022 Votal Product Quantity Quantity of Parts Package Quantity Total Product Quantity Total Product Quantity <t< td=""><td></td></t<>	
Marketing CategoryApplication Number or Monograph CitationMarketing Start DateMarketing E DateNDANDA21432406/27/2023Marketing Start DateMarketing E DateMarketing CategoryApplication Number or Monograph CitationMarketing Start DateMarketing E DateNDAApplication Number or Monograph CitationMarketing Start DateMarketing E DateNDANDA21432406/27/2023Marketing E DateNDANDA21432406/27/2023Marketing E DateTYVASO DPI treprostinil kitNDA21432406/27/2023NDC:66302-720Product InformationProduct TypeHUMAN PRESCRIPTION DRUGItem Code (Source)NDC:66302-720Packaging# Item CodePackage Description DateMarketing Start Date DateMarketing End Date# Uauntity of PartsPackage Quantity Part 1Total Product QuantityTotal Product QuantityPart 1 4 BLISTER PACK16	
Marketing CategoryApplication Number or Monograph CitationMarketing Start DateMarketing E DateNDANDA21432406/27/2023Marketing Start DateMarketing E DateMarketing Information CategoryApplication Number or Monograph CitationMarketing Start DateMarketing E DateNDAApplication Number or Monograph CitationMarketing Start DateMarketing E DateNDANDA21432406/27/2023Marketing E DateNDANDA21432406/27/2023Marketing E DateTYVASO DPI treprostinil kitHUMAN PRESCRIPTION DRUGItem Code (Source)NDC:66302-720Product InformationProduct InformationProduct TypeHUMAN PRESCRIPTION DRUGItem Code (Source)NDC:66302-720Packaging#Item CodePackage DescriptionMarketing Start DateMarketing End DateNDC:66302-720-041 in 1 PACKAGE05/23/2022VQuantity of PartsPart #Package QuantityTotal Product QuantityPart 14 BLISTER PACK16	
Category Citation Date Date NDA NDA214324 06/27/2023 06/27/2023 Marketing Information Application Number or Monograph Category Marketing Start Date Marketing Start NDA NDA214324 06/27/2023 Marketing E Date NDA NDA214324 06/27/2023 Marketing E Date VDA NDA214324 06/27/2023 Marketing E Date VTVASO DPI treprostinil kit ND214324 06/27/2023 ND2:66302-720 Product Information Item Code (Source) ND2:66302-720 Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) ND2:66302-720 Packaging # Item Code Package Description Marketing Start Date Marketing End Date Quantity of Parts Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	
Marketing Information Marketing Start Date Marketing E Date Marketing or Monograph Citation Marketing Start Date Marketing E Date NDA NDA214324 06/27/2023 Marketing E Date TYVASO DPI treprostinil kit Product Information Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 Packaging # Item Code Package Description Marketing Start Date Marketing End Date Quantity of Parts Uantity of Parts Total Product Quantity Pat 1 4 BLISTER PACK 16	
Marketing Category CategoryApplication Number or Monograph CitationMarketing Start DateMarketing E DateNDANDA21432406/27/202306/27/2023TYVASO DPI treprostinil kitProduct InformationProduct InformationProduct TypeHUMAN PRESCRIPTION DRUGItem Code (Source)NDC:66302-720Package Description#Item CodePackage DescriptionMarketing Start DateMarketing End Date1NDC:66302-720-041 in 1 PACKAGE05/23/2022Item Code (Quantity of PartsPart #Package QuantityTotal Product QuantityPart 14 BLISTER PACK16	IDA
Marketing Category Application Number or Monograph Citation Marketing Etat Date Marketing Etat Date NDA NDA214324 06/27/2023 06/27/2023 TYVASO DPI Treprostinil kit Product Information Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 Packaging # Item Code Package Description Marketing Start Date Marketing End Date 1 NDC:66302-720-04 1 in 1 PACKAGE 05/23/2022 Of Of Quantity of Parts Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	
Marketing Category Application Number or Monograph Citation Marketing Etat Date Marketing Etat Date NDA NDA214324 06/27/2023 06/27/2023 TYVASO DPI treprostinil kit Image: Start Date NDC:66302-720 Product Information Item Code (Source) NDC:66302-720 Packaging Image: Start Date Marketing Etat Date # Item Code Package Description Marketing Start Date Marketing Etat Date 1 NDC:66302-720-04 1 in 1 PACKAGE 05/23/2022 Image: Start Date Marketing Etat Date Quantity of Parts Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	Marketing Ir
Category Citation Date Date NDA NDA214324 06/27/2023 TYVASO DPI Type INDAN PRESCRIPTION DRUG INDAN PRESCRIPTIO	_
Notice of the second state of the second st	Category
treprostinil kit Product Information Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 Package Description Marketing Start Date Marketing End Date 1 NDC:66302-720-04 1 in 1 Part # Package Quantity Part 1 4 BLISTER PACK 1	IDA
treprostinil kit Product Information Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 Package Description Marketing Start Date Marketing End Date 1 NDC:66302-720-04 1 in 1 Part # Package Quantity Part 1 4 BLISTER PACK 1	
Total Product Information Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 NDC:66302-720 Package Description Marketing Start Date Marketing End Date I NDC:6302-720-04 1 in 1 PACKAGE 05/23/2022 Total Product Quantity Total Product Quantity Part 1 4 BLISTER PACK	YVASO DPI
Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 Package Description Marketing Start Date Marketing End Date 1 NDC:66302-720-04 1 in 1 PACKAGE 05/23/2022 Item Code Marketing End Date Marketing End	eprostinil kit
Product Type HUMAN PRESCRIPTION DRUG Item Code (Source) NDC:66302-720 Package Description Marketing Start Date Marketing End Date 1 NDC:66302-720-04 1 in 1 PACKAGE 05/23/2022 Item Code Marketing End Date Marketing End	
Packaging Marketing Start Date Marketing End Date # Item Code Package Description Marketing Start Date Marketing End Date 1 NDC:6302-720-04 1 in 1 PACKAGE 05/23/2022 05/23/2022 Quartity Of Parts Total Product Quantity Part # Package Quantity 16	Product Inform
# Item Code Package Description Marketing Start Date Marketing End Date 1 NDC:66302-720-04 1 in 1 PACKAGE 05/23/2022 Quantity of Parts Total Product Quantity Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	Product Type
# Item Code Package Description Marketing Start Date Marketing End Date 1 NDC:66302-720-04 1 in 1 PACKAGE 05/23/2022 Quantity of Parts Total Product Quantity Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	
# Item Code Package Description Marketing Start Date Marketing End Date 1 NDC:6302-720-04 1 in 1 PACKAGE 05/23/2022 Quantity of Parts Total Product Quantity Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	Packaging
1 NDC:66302-720-04 1 in 1 PACKAGE 05/23/2022 Quantity of Parts Total Product Quantity Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	
Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	NDC:66302-720-04
Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16	
Part # Package Quantity Total Product Quantity Part 1 4 BLISTER PACK 16)uantity of Par
Part 24 BLISTER PACK16	
	art 2 4 BLISTER PA
Part 1 of 2	Part 1 of 2
TYVASO DPI treprostinil inhalant	
Product Information	
Item Code (Source) NDC:66302-632	Product Inform
Route of Administration ORAL	
	tem Code (Source

Active In	gredient/Activ	ve Moiety				
	Ing	redient Name	Ва	sis of Stre	ngth	Strength
treprostinil	(UNII: RUM6K67ES)	G) (treprostinil - UNII:RUM6K67ESG)	trepr	ostinil		32 ug
Inactive I	ngredients					
		Ingredient Name			St	rength
fumaryl dike	e topiperazine (UI	NII: XB09609XSL)				
Packagin	g					
# Item Code		Package Description		Marketir Start Da		Marketing End Date
		K; Type 9: Other Type of Part 3 Combir /Device/Biological Product)	nation			
	ing Inform					
Market Catego		ication Number or Monograph Citation		ng Start ate	Marl	ceting End Date
NDA	NDA2143	324	05/23/2022			
TYVASC treprostinil						
Product	Information					
ltem Code	(Source)	NDC:66302-648				
Route of A	dministration	ORAL				
Active Ind	gredient/Activ	ve Moiety				
		redient Name	Ba	sis of Stre	ngth	Strength
treprostinil	-	G) (treprostinil - UNII:RUM6K67ESG)		ostinil		48 ug
Inactive I	ngredients					
		Ingredient Name			St	rength
fumaryl dike	e topiperazine (UI	-				
Packagin	a					

# Code	Р	ackage Descrip	tion		Marketin Start Dat	
		ype 9: Other Type of ice/Biological Produc		ation		
	.9., 29,201		,			
Marketing In				1		
Marketing Category	Applicat	ion Number or M Citation	lonograph		ing Start ate	Marketing End Date
NDA	NDA214324			05/23/2022		
Marketing In	formati	on				
Marketing		ion Number or M	lonograph	Marketi	ing Start	Marketing End
Category		Citation		Da	ate	Date
NDA	NDA214324			05/23/2022		
TYVASO DPI						
treprostinil kit						
Product Inform	ation					
Product Type	HUMAN PRE	SCRIPTION DRUG	ltem (Code (Sou	rce)	NDC:66302-610
Packaging						
# Item Code	Packar	ge Description	Marketing	n Start Da	to Mark	eting End Date
1 NDC:66302-610-02	1 in 1 PAC		05/23/2022			
Quantity of Par	ts					
-		uantity		Total P	roduct Qua	ntity
Part 1 28 BLISTER P	-	,	112		.	····· ·
Part 2 28 BLISTER P			112			
Part 3 7 BLISTER PA	CK		28			
Part 1 of 3						
TYVASO DPI	+					
treprostinil inhalan	L					
Product Inform	ation					
Item Code (Source		NDC:66302-616				
Route of Administ		ORAL				
Noute of Administ						

Ac	tive l	ngredier	nt/Active	Moiety				
			Ingred	lient Name		Basis of Stre	ength	Strength
tre	prostin	il (UNII: RUI	M6K67ESG) (1	reprostinil - UNII:RUM6K67ESG)	t	reprostinil		16 ug
In	active	Ingredi	ents				_	
£	ma mul di	kataninar		Ingredient Name XB09609XSL)			5	trength
Tu	naryi ui	ketopipen		AB09009A3L)				
Pa	ackagi	ng						
#	ltem Code		F	Package Description		Marketi Start Da		Marketing End Date
1				ype 9: Other Type of Part 3 Combir vice/Biological Product)	ation			
R/	o riko		format	lan				
IVI	Marke	-	format	ION tion Number or Monograph	Mar	keting Start	Mar	keting End
	Cate		Аррпса	Citation	Mar	Date	Mar	Date
ND	A		NDA214324		05/23/2	2022		
P	art 2	of 3						
Т	YVAS	O DPI						
tre	eprostir	nil inhalan	t					
P	roduct	Inform	ation					
		e (Source		NDC:66302-632				
		Administ		ORAL				
Δc	tive l	naredier	nt/Active	Moiety				
		.g. cale		lient Name		Basis of Stre	enath	Strength
tre	prostin	il (UNII: RUI	-	reprostinil - UNII:RUM6K67ESG)	t	reprostinil		32 ug
In	active	Ingredi	ients					
				Ingredient Name			S	trength
fui	maryl di	ketopiper	azine (UNII:)	XB09609XSL)				

Packag	ing							
# Item Code		F	ackage Description			Marketi Start Da		Marketing End Date
1	4 in 1 BLI		ype 9: Other Type of Part 3 (vice/Biological Product)	Combina	ation			
	Product (e	e.g., Drug/De						
	-	nformat						
	eting egory	Applicat	tion Number or Monogr Citation	aph		ng Start Ite	Ма	rketing End Date
NDA		NDA214324			05/23/2022			
Part 3	of 3							
TYVAS	50 DPI							
treprosti	nil inhalar	nt						
Produc	t Inform	ation						
	le (Source		NDC:66302-648					
Route of	Administ	tration	ORAL					
Active I	ngredie	nt/Active	Moiety					
		Ingrea	lient Name		Ba	sis of Stre	ngth	Strength
treprostir	nil (UNII: RU	M6K67ESG) (1	reprostinil - UNII:RUM6K67ES	5G)	trepro	ostinil		48 ug
Inactive	e Ingred	ients						
		• /	Ingredient Name				9	Strength
fumaryl d	iketopiper	razine (UNII:	XB09609XSL)					
Packag	ing							
# Item Code		F	ackage Description			Marketi Start Da		Marketing End Date
1			ype 9: Other Type of Part 3 (<i>v</i> ice/Biological Product)	Combina	ation			
Mayles								
	-	nformat						
	eting egory	Applica	tion Number or Monogr Citation	aph		ng Start Ite	Ма	rketing End Date
NDA		NDA214324			05/23/2022			

Marketing	Applica	tion Number or M	onograph	Marketing S	Start Mar	keting End
Category		Citation		Date		Date
IDA I	NDA214324			05/23/2022		
YVASO DPI						
reprostinil kit						
Product Informa	tion					
Product Type	HUMAN PR	ESCRIPTION DRUG	Item C	Code (Source)	NDC:6	6302-650
Packaging						
# Item Code	Packa	ge Description	-	Start Date	Marketing	g End Date
1 NDC:66302-650-03	1 in 1 PAC	CKAGE	06/27/2023			
Quantity of Parts	S					
. ,						
-	ackage (Quantity		Total Produ	ict Quantity	
Part # Part Part 1 28 BLISTER PA	CK	Quantity	112	Total Produ	ıct Quantity	
Part # Part Part 1 28 BLISTER PA	ACK ACK	Quantity	112 112 112 112	Total Produ	ict Quantity	
Part #PartPart 128 BLISTER PAPart 228 BLISTER PAPart 328 BLISTER PA	ACK ACK	Quantity	112	Total Produ	ıct Quantity	
Part # Part Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 TYVASO DPI		Quantity	112	Total Produ	ıct Quantity	
Part # Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 TYVASO DPI		Quantity	112	Total Produ	ıct Quantity	
Part # Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 Part 1 of 3 TYVASO DPI treprostinil inhalant	ACK ACK ACK	Quantity	112	Total Produ	ıct Quantity	
Part # Part Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 TYVASO DPI treprostinil inhalant		Quantity NDC:66302-616	112	Total Produ	ıct Quantity	
Part #PartPart 128 BLISTER PAPart 228 BLISTER PAPart 328 BLISTER PAPart 470 F 3	ACK ACK ACK		112	Total Produ	ıct Quantity	
Part # Part Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 TYVASO DPI treprostinil inhalant	ACK ACK ACK	NDC:66302-616	112	Total Produ	ict Quantity	
Part # Part Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 TYVASO DPI treprostinil inhalant Product Informa Item Code (Source) Route of Administra	ACK ACK ACK ACK ACK ACK ACK ACK ACK ACK	NDC:66302-616 ORAL Moiety	112			
Part # Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 Part 1 of 3 TYVASO DPI treprostinil inhalant Product Informa Item Code (Source) Route of Administra	ACK ACK ACK ACK ACK ACK ACK ACK ACK ACK	NDC:66302-616 ORAL Moiety dient Name		Basis (of Strength	Strengt
Part # Part Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 TYVASO DPI treprostinil inhalant Product Informa Item Code (Source)	ACK ACK ACK ACK ACK ACK ACK ACK ACK ACK	NDC:66302-616 ORAL Moiety dient Name			of Strength	
Part # Part Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 TYVASO DPI treprostinil inhalant Product Informa Item Code (Source) Route of Administra Active Ingredient	ACK ACK ACK ACK ACK ACK ACK ACK ACK ACK	NDC:66302-616 ORAL Moiety dient Name		Basis (of Strength	Strengt
Part # Part 1 28 BLISTER PA Part 2 28 BLISTER PA Part 2 28 BLISTER PA Part 3 28 BLISTER PA Part 1 of 3 TYVASO DPI treprostinil inhalant Product Informa Item Code (Source) Route of Administra Active Ingredient	ACK ACK ACK ACK ACK ACK ACK ACK ACK ACK	NDC:66302-616 ORAL Moiety dient Name	112 112	Basis (of Strength	Strengt

Packaging								
# Item Code		F	Package Description		Marketi Start Da		Marketing End Date	
1	4 in 1 BLI Product (e	4 in 1 BLISTER PACK; Type 9: Other Type of Part 3 Combinat Product (e.g., Drug/Device/Biological Product)			ation			
Marketing Information								
Marketing Applic Category			tion Number or Monograph Ma Citation		Marketing Start Date		Marketing End Date	
NDA			06/27/2023		3			
Part 2	of 3							
	SO DPI							
treprosti	nil inhalan	nt						
Produc	t Inform	ation						
ltem Coo	le (Source	e)	NDC:66302-648					
Route of	f Administ	tration	ORAL					
Active I	ngredie	nt/Active	Moiety					
		Ingred	lient Name	Ba	sis of Stre	ength	Strength	
treprostir	il (UNII: RU	M6K67ESG) (1	reprostinil - UNII:RUM6K67ESG)	trep	rostinil		48 ug	
Inactive	e Ingred	ients						
			Ingredient Name			St	rength	
fumaryl d	iketopiper	azine (UNII:)	(B09609XSL)					
Packag	ing							
# Item Code		F	ackage Description		Marketi Start Da		Marketing End Date	
1			ype 9: Other Type of Part 3 Coml /ice/Biological Product)	pination				
Marke	Marketing Information							
Marketing Application Number or Monograph Marketing Start Marketing						eting End Date		
NDA		NDA214324		06/27/2023				

Part 3	of 3						
TYVAS	50 DPI						
treprosti	nil inhalan	t					
Product	t Inform	ation					
ltem Cod	tem Code (Source) NDC:66302-664						
Route of	Administ						
Active I	ngredier	nt/Active	Moiety				
		Ingred	lient Name	В	asis of Stre	ength	Strength
reprostin	il (UNII: RUN	46K67ESG) (1	reprostinil - UNII:RUM6K67ESG)	trep	prostinil		64 ug
inactive	e Ingredi	ents					
			Ingredient Name			S	Strength
			Ingredient Name XB09609XSL)			S	Strength
			-			S	Strength
	iketopipera		-			S	Strength
fumaryl di	iketopipera	azine (UNII:)	-		Marketi Start Da	ing	Strength Marketing End Date
fumaryl di Packag # Item	iketopipera ing 4 in 1 BLIS	azine (UNII:) F STER PACK; T	XB09609XSL) Package Description ype 9: Other Type of Part 3 Coml	Dination		ing	Marketing
fumaryl di Packag # Item Code	iketopipera ing 4 in 1 BLIS	azine (UNII:) F STER PACK; T	AB09609XSL)	pination		ing	Marketing
fumaryl di Packag # Item Code	iketopipera ing 4 in 1 BLIS	azine (UNII:) F STER PACK; T	XB09609XSL) Package Description ype 9: Other Type of Part 3 Coml	pination		ing	Marketing
fumaryl di Packag # Item Code 1	iketopipera ing 4 in 1 BLIS Product (e	azine (UNII:) F STER PACK; T	XB09609XSL) Package Description ype 9: Other Type of Part 3 Coml <i>v</i> ice/Biological Product)	pination		ing	Marketing
fumaryl di Packag # Item Code 1 Marke Mark	iketopipera ing 4 in 1 BLIS Product (e sting In seting	F TER PACK; T .g., Drug/Dev	XB09609XSL) Package Description ype 9: Other Type of Part 3 Coml <i>v</i> ice/Biological Product)	Marke		ing ate	Marketing
fumaryl di Packag # Item Code 1 Marke Mark	iketopipera ing 4 in 1 BLIS Product (e	F TER PACK; T .g., Drug/Dev	AB09609XSL) Package Description ype 9: Other Type of Part 3 Coml vice/Biological Product)	Marke	Start Da ting Start Date	ing ate	Marketing End Date rketing End
fumaryl di Packag # Item Code 1 Marke Cate	iketopipera ing 4 in 1 BLIS Product (e sting In seting	F TER PACK; T .g., Drug/Dev format Applicat	AB09609XSL) Package Description ype 9: Other Type of Part 3 Coml vice/Biological Product)	Marke	Start Da ting Start Date	ing ate	Marketing End Date rketing End
fumaryl di Packag # Item Code 1 Marke Mark Cate	iketopipera ing 4 in 1 BLIS Product (e	TER PACK; T .g., Drug/Dev format Applicat	ARB09609XSL) Package Description ype 9: Other Type of Part 3 Coml vice/Biological Product) ion tion Number or Monograph Citation	Marke	Start Da ting Start Date	ing ate	Marketing End Date rketing End
fumaryl di Packag # Item Code 1 Marke NDA Marke Marke	iketopipera ing 4 in 1 BLIS Product (e ting In eting gory	F STER PACK; T .g., Drug/Dev format Applicat NDA214324	ARB09609XSL) Package Description ype 9: Other Type of Part 3 Coml vice/Biological Product) ion tion Number or Monograph Citation tion tion Number or Monograph	Marke 06/27/202 Marke	Start Da ting Start Date	ing ate Ma	Marketing End Date rketing End Date
fumaryl di Packag # Item Code 1 Marke Mark Cate	iketopipera ing 4 in 1 BLIS Product (e ting In eting gory	F STER PACK; T .g., Drug/Dev format Applicat NDA214324	AB09609XSL) Package Description ype 9: Other Type of Part 3 Comb vice/Biological Product) ion tion Number or Monograph Citation	Marke 06/27/202 Marke	ting Start Date	ing ate Ma	Marketing End Date

Labeler - United Therapeutics Corporation (965460025)

Establishment						
Name	Address	ID/FEI	Business Operations			
			API MANUFACTURE(66302-616, 66302-632, 66302-648, 66302-664, 66302-600,			

66302-610, 66302-620, 66302-630, 66302-640, 66302-650, 66302-716, 66302-965460025 732, 66302-748, 66302-764, 66302-720) , ANALYSIS(66302-616, 66302-632, 66302-648, 66302-664, 66302-600, 66302-610, 66302-620, 66302-630, 66302-640, 66302-650, 66302-716, 66302-732, 66302-748, 66302-764, 66302-720)

Establishment

Name	Address	ID/FEI	Business Operations		
United Therapeutics Corporation			LABEL(66302-616, 66302-632, 66302-648, 66302-664, 66302-610, 66302-620) , PACK(66302-616, 66302-632, 66302-648, 66302-664, 66302-610, 66302- 620)		

Revised: 1/2024

United Therapeutics Corporation