

METHYLPHENIDATE HYDROCHLORIDE- methylphenidate hydrochloride tablet Lupin Pharmaceuticals, Inc.

HIGHLIGHTS OF PRESCRIBING INFORMATION

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

METHYLPHENIDATE HYDROCHLORIDE tablets, for oral use, CII
Initial U.S. Approval: 1955

WARNING: ABUSE, MISUSE, AND ADDICTION

See full prescribing information for complete boxed warning.

Methylphenidate hydrochloride tablets has a high potential for abuse and misuse, which can lead to the development of a substance use disorder, including addiction. Misuse and abuse of CNS stimulants, including methylphenidate hydrochloride tablets, can result in overdose and death (5.1, 9.2, 10):

- Before prescribing methylphenidate hydrochloride tablets, assess each patient's risk for abuse, misuse, and addiction.
- Educate patients and their families about these risks, proper storage of the drug, and proper disposal of any unused drug.
- Throughout treatment, reassess each patient's risk and frequently monitor for signs and symptoms of abuse, misuse, and addiction.

RECENT MAJOR CHANGES

Boxed Warning

10/2023

Dosage and Administration (2.1)

10/2023

Warnings and Precautions (5.1, 5.2, 5.8, 5.9, 5.10)

10/2023

INDICATIONS AND USAGE

Methylphenidate Hydrochloride is a central nervous system (CNS) stimulant indicated for the treatment of Attention Deficit Hyperactivity Disorders (ADHD) and Narcolepsy (1).

DOSAGE AND ADMINISTRATION

Methylphenidate Hydrochloride Tablets (2.2): (2)

- Pediatric Patients 6 Years and Older: Start with 5 mg twice daily (before breakfast and lunch), titrating the dose weekly in 5- to 10 - mg increments. Dosages above 60 mg/day are not recommended.
- Adults: Average daily dosage is 20 mg to 30 mg, administered 2 or 3 times daily, preferably 30 to 45 minutes before meals. Maximum total daily dosage is 60 mg.

DOSAGE FORMS AND STRENGTHS

- Tablets: 5 mg, 10 mg, and 20 mg (3)

CONTRAINDICATIONS

- Known hypersensitivity to methylphenidate or other product components of methylphenidate hydrochloride tablets (4).
- Concurrent treatment with a monoamine oxidase inhibitor (MAOI), or use of an MAOI within the preceding 14 days (4).

WARNINGS AND PRECAUTIONS

- *Risks to Patients with Serious Cardiac Disease:* Avoid use in patients with known structural cardiac abnormalities, cardiomyopathy, serious cardiac arrhythmias, coronary artery disease, or other serious cardiac disease (5.2).
- *Increased Blood Pressure and Heart Rate:* Monitor blood pressure and pulse (5.3).
- *Psychiatric Adverse Reactions:* Prior to initiating methylphenidate hydrochloride tablets, screen patients for risk factors for developing a manic episode. If new psychotic or manic symptoms occur, consider discontinuing methylphenidate hydrochloride tablets (5.4).
- *Priapism:* If abnormally sustained or frequent and painful erections occur, patients should seek immediate medical attention (5.5).
- *Peripheral Vasculopathy, Including Raynaud's Phenomenon:* Careful observation for digital changes is necessary during methylphenidate hydrochloride tablets treatment. Further clinical evaluation (e.g., rheumatology referral) may be appropriate for patients who develop signs or symptoms of peripheral vasculopathy (5.6).
- *Long-Term Suppression of Growth in Pediatric Patients:* Closely monitor growth (height and weight) in pediatric patients. Pediatric patients not growing or gaining height or weight as expected may need to have their treatment interrupted (5.7).
- *Acute Angle Closure Glaucoma:* methylphenidate hydrochloride tablets -treated patients considered at risk for acute angle closure glaucoma (e.g., patients with significant hyperopia) should be evaluated by an ophthalmologist (5.8).
- *Increased Intraocular Pressure (IOP) and Glaucoma:* Prescribe methylphenidate hydrochloride tablets to patients with open-angle glaucoma or abnormally increased IOP only if the benefit of treatment is considered to outweigh the risk. Closely monitor patients with a history of increased IOP or open angle glaucoma (5.9).
- *Motor and Verbal Tics, and Worsening of Tourette's Syndrome:* Before initiating methylphenidate hydrochloride tablets, assess the family history and clinically evaluate patients for tics or Tourette's syndrome. Regularly monitor patients for the emergence or worsening of tics or Tourette's syndrome. Discontinue

ADVERSE REACTIONS

Common adverse reactions: tachycardia, palpitations, headache, insomnia, anxiety, hyperhidrosis, weight loss, decreased appetite, dry mouth, nausea, and abdominal pain. (6)

To report SUSPECTED ADVERSE REACTIONS, contact Lupin Pharmaceuticals, Inc. at 866-403-7592 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch. (6)

DRUG INTERACTIONS

- *Antihypertensive Drugs:* Monitor blood pressure. Adjust dosage of antihypertensive drug as needed (7.1).

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.

See 17 for Medication Guide.

Revised: 3/2024

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FULL PRESCRIBING INFORMATION

WARNING: ABUSE AND DEPENDENCE

WARNING: ABUSE, MISUSE, AND ADDICTION

Methylphenidate hydrochloride tablets has a high potential for abuse and misuse, which can lead to the development of a substance use disorder, including addiction. Misuse and abuse of CNS stimulants, including methylphenidate hydrochloride tablets, can result in overdose and death [see *Overdosage (10)*], and this risk is increased with higher doses or unapproved methods of administration, such as snorting or injection.

Before prescribing methylphenidate hydrochloride tablets, assess each patient's risk for abuse, misuse, and addiction. Educate patients and their families about these risks, proper storage of the drug, and proper disposal of any unused drug. Throughout methylphenidate hydrochloride tablets treatment, reassess each patient's risk of abuse, misuse, and addiction and frequently monitor for signs and symptoms of abuse, misuse, and addiction [see *Warnings and Precautions (5.1)* and *Drug Abuse and Dependence (9.2)*].

1 INDICATIONS AND USAGE

Methylphenidate hydrochloride are indicated for the treatment of:

- Attention Deficit Hyperactivity Disorders (ADHD) in pediatric patients 6 years and older and adults
- Narcolepsy

2 DOSAGE AND ADMINISTRATION

2.1 Pretreatment Screening

- for the presence of cardiac disease (i.e., perform a careful history, family history of sudden death or ventricular arrhythmia, and physical exam) [see *Warnings and Precautions (5.2)*].
- the family history and clinically evaluate patients for motor or verbal tics or Tourette's syndrome before initiating methylphenidate hydrochloride tablets [see *Warnings and Precautions (5.10)*].

2.2 General Dosing Information

Methylphenidate Hydrochloride Tablets

Pediatric Patients 6 years and Older: Start with 5 mg orally twice daily (before breakfast and lunch). Increase dosage gradually, in increments of 5-to10- mg weekly. Daily dosage above 60 mg is not recommended.

Adults: Average dosage is 20 to 30 mg daily. Administer orally in divided doses 2 or 3 times daily, preferably 30 to 45 minutes before meals. Maximum total daily dosage is 60 mg. Patients who are unable to sleep if medication is taken late in the day should take the last dose before 6 p.m.

2.3 Dose Reduction and Discontinuation

If paradoxical worsening of symptoms or other adverse reactions occur, reduce the dosage, or, if necessary, discontinue methylphenidate hydrochloride. If improvement is not observed after appropriate dosage adjustment over a one-month period, the drug should be discontinued.

3 DOSAGE FORMS AND STRENGTHS

Tablets

- 5 mg, light yellow colored, round, flat face tablets with "n above 573" debossed on one side and plain on the other side.
- 10 mg, white to off white colored, round, flat face tablets with "n above 574" debossed on one side and bisected line debossed on the other side

- 20 mg, light yellow colored, round biconvex tablets with "n above 575" debossed on one side and bisect line debossed on the other side

4 CONTRAINDICATIONS

- Hypersensitivity to methylphenidate or other components of methylphenidate hydrochloride tablets. Hypersensitivity reactions, such as angioedema and anaphylactic reactions, have been reported in patients treated with methylphenidate [see *Adverse Reactions (6.1)*].
- Concomitant treatment with monoamine oxidase inhibitors (MAOIs), or within 14 days following discontinuation of treatment with an MAOI, because of the risk of hypertensive crises [see *Drug Interactions (7.1)*].

5 WARNINGS AND PRECAUTIONS

5.1 Abuse, Misuse, and Addiction

Methylphenidate hydrochloride tablets have a high potential for abuse and misuse. The use of methylphenidate hydrochloride tablets exposes individuals to the risks of abuse and misuse, which can lead to the development of a substance use disorder, including addiction. Methylphenidate hydrochloride tablets can be diverted for non-medical use into illicit channels or distribution [see *Drug Abuse and Dependence (9.2)*]. Misuse and abuse of CNS stimulants, including methylphenidate hydrochloride tablets, can result in overdose and death [see *Overdosage (10)*], and this risk is increased with higher doses or unapproved methods of administration, such as snorting or injection.

Before prescribing methylphenidate hydrochloride tablets, assess each patient's risk for abuse, misuse, and addiction. Educate patients and their families about these risks and proper disposal of any unused drug. Advise patients to store methylphenidate hydrochloride tablets in a safe place, preferably locked, and instruct patients to not give methylphenidate hydrochloride tablets to anyone else. Throughout methylphenidate hydrochloride tablets treatment, reassess each patient's risk of abuse, misuse, and addiction and frequently monitor for signs and symptoms of abuse, misuse, and addiction.

5.2 Risks to Patients with Serious Cardiac Disease

Sudden death has been reported in patients with structural cardiac abnormalities or other serious cardiac disease who are treated with CNS stimulants at the recommended ADHD dosage.

Avoid methylphenidate hydrochloride tablets use in patients with known serious structural cardiac abnormalities, cardiomyopathy, serious cardiac arrhythmia, coronary artery disease, or other serious cardiac disease.

5.3 Increased Blood Pressure and Heart Rate

CNS stimulants cause an increase in blood pressure (mean increase approximately 2 to 4 mmHg) and heart rate (mean increase approximately 3 to 6 beats per minute). Individuals may have larger increases. Monitor all patients for hypertension and tachycardia.

5.4 Psychiatric Adverse Reactions

Exacerbation of Preexisting Psychosis

CNS stimulants may exacerbate symptoms of behavior disturbance and thought disorder in patients with a preexisting psychotic disorder.

Induction of a Manic Episode in Patients with Bipolar Disorder

CNS stimulants may induce a manic or mixed mood episode in patients. Prior to initiating treatment, screen patients for risk factors for developing a manic episode (e.g., comorbid or history of depressive symptoms or a family history of suicide, bipolar disorder, or depression).

New Psychotic or Manic Symptoms

CNS stimulants, at recommended doses, may cause psychotic or manic symptoms (e.g., hallucinations, delusional thinking, or mania) in patients without a prior history of psychotic illness or mania. If such symptoms occur, consider discontinuing

methylphenidate hydrochloride. In a pooled analysis of multiple short-term, placebo-controlled studies of CNS stimulants, psychotic or manic symptoms occurred in approximately 0.1% of CNS stimulant-treated patients, compared to 0 in placebo-treated patients. In a pooled analysis of multiple short-term, placebo-controlled studies of CNS stimulants, psychotic or manic symptoms occurred in approximately 0.1% of CNS stimulant-treated patients, compared to 0% of placebo-treated patients. If such symptoms occur, consider discontinuing methylphenidate hydrochloride tablets

5.5 Priapism

Prolonged and painful erections, sometimes requiring surgical intervention, have been reported with methylphenidate use in both adult and pediatric male patients. Although priapism was not reported with methylphenidate initiation, it developed after some time on methylphenidate, often subsequent to an increase in dosage. Priapism has also occurred during methylphenidate withdrawal (drug holidays or during discontinuation). Methylphenidate hydrochloride tablets-treated patients who develop abnormally sustained or frequent and painful erections should seek immediate medical attention.

5.6 Peripheral Vasculopathy, Including Raynaud's Phenomenon

CNS stimulants, including methylphenidate hydrochloride, used to treat ADHD are associated with peripheral vasculopathy, including Raynaud's phenomenon. Signs and symptoms are usually intermittent and mild; however, very rare sequelae include digital ulceration and/or soft tissue breakdown. Effects of peripheral vasculopathy, including Raynaud's phenomenon, were observed in postmarketing reports at different times and at therapeutic doses in all age groups throughout the course of treatment. Signs and symptoms generally improve after reduction in dose or discontinuation of drug. Careful observation for digital changes is necessary during treatment with ADHD stimulants. Further clinical evaluation (e.g., rheumatology referral) may be appropriate for certain patients.

5.7 Long-Term Suppression of Growth in Pediatric Patients

CNS stimulants have been associated with weight loss and slowing of growth rate in pediatric patients.

Careful follow-up of weight and height in pediatric patients ages 7 to 10 years who were randomized to either methylphenidate or non-medication treatment groups over 14 months, as well as in naturalistic subgroups of newly methylphenidate-treated and non-medication treated patients over 36 months (to the ages of 10 to 13 years), suggests that consistently medicated pediatric patients (i.e., treatment for 7 days per week throughout the year) have a temporary slowing in growth rate (on average, a total of about 2 cm less growth in height and 2.7 kg less growth in weight over 3 years), without evidence of growth rebound during this development period.

Closely monitor growth (weight and height) in pediatric patients treated with CNS stimulants, including methylphenidate hydrochloride. Patients who are not growing or gaining height or weight as expected may need to have their treatment interrupted.

5.8 Acute Angle Closure Glaucoma

There have been reports of angle closure glaucoma associated with methylphenidate treatment.

Although the mechanism is not clear, methylphenidate hydrochloride tablets -treated patients considered at risk for acute angle closure glaucoma (e.g., patients with significant hyperopia) should be evaluated by an ophthalmologist.

5.9 Increased Intraocular Pressure and Glaucoma

There have been reports of an elevation of intraocular pressure (IOP) associated with methylphenidate treatment [see *Adverse Reactions (6.2)*].

Prescribe methylphenidate hydrochloride tablets and methylphenidate to patients with open-angle glaucoma or abnormally increased IOP only if the benefit of treatment is considered to outweigh the risk. Closely monitor methylphenidate hydrochloride tablets -treated patients with a history of abnormally increased IOP or open angle glaucoma.

5.10 Motor and Verbal Tics, and Worsening of Tourette's Syndrome

CNS stimulants, including methylphenidate, have been associated with the onset or

exacerbation of motor and verbal tics. Worsening of Tourette's syndrome has also been reported [see *Adverse Reactions (6.2)*].

Before initiating methylphenidate hydrochloride tablets, assess the family history and clinically evaluate patients for tics or Tourette's syndrome. Regularly monitor methylphenidate hydrochloride tablets-treated patients for the emergence or worsening of tics or Tourette's syndrome, and discontinue treatment if clinically appropriate.

6 ADVERSE REACTIONS

The following are discussed in more detail in other sections of the labeling:

- Abuse, Misuse, and Addiction [see *Boxed Warning, Warnings and Precautions (5.1), Drug Abuse and Dependence (9.2, 9.3)*]
- Known hypersensitivity to methylphenidate or other ingredients of methylphenidate hydrochloride tablets [see *Contraindications (4)*]
- Hypertensive crisis with Concomitant Use of Monoamine Oxidase Inhibitors [see *Contraindications (4), Drug Interactions (7.1)*]
- Risks to Patients with Serious Cardiac Disease [see *Warnings and Precautions (5.2)*]
- Increased Blood Pressure and Heart Rate [see *Warnings and Precautions (5.3)*]
- Psychiatric Adverse Reactions [see *Warnings and Precautions (5.4)*]
- Priapism [see *Warnings and Precautions (5.5)*]
- Peripheral Vasculopathy, Including Raynaud's Phenomenon [see *Warnings and Precautions (5.6)*]
- Long-Term Suppression of Growth in Pediatric Patients [see *Warnings and Precautions (5.7)*]
- Acute Angle Closure Glaucoma [see *Warnings and Precautions (5.8)*]
- Increased Intraocular Pressure and Glaucoma [see *Warnings and Precautions (5.9)*]
- Motor and Verbal Tics, and Worsening of Tourette's Syndrome [see *Warnings and Precautions (5.10)*]

The following adverse reactions associated with the use of all methylphenidate hydrochloride tablets, and other methylphenidate products were identified in clinical trials, spontaneous reports, and literature. Because these reactions were reported voluntarily from a population of uncertain size, it is not always possible to estimate their frequency reliably or to establish a causal relationship to drug exposure.

Adverse Reactions Reported with Methylphenidate Hydrochloride

Infections and Infestations: nasopharyngitis

Blood and the Lymphatic System Disorders: leukopenia, thrombocytopenia, anemia

Immune System Disorders: hypersensitivity reactions, including angioedema, and anaphylaxis

Metabolism and Nutrition Disorders: decreased appetite, reduced weight gain, and suppression of growth during prolonged use in pediatric patients

Psychiatric Disorders: insomnia, anxiety, restlessness, agitation, psychosis (sometimes with visual and tactile hallucinations), depressed mood, depression

Nervous System Disorders: headache, dizziness, tremor, dyskinesia, including choreoathetoid movements, drowsiness, convulsions, cerebrovascular disorders (including vasculitis, cerebral hemorrhages and cerebrovascular accidents), serotonin syndrome in combination with serotonergic drugs

Eye Disorders: blurred vision, difficulties in visual accommodation

Cardiac Disorders: tachycardia, palpitations, increased blood pressure, arrhythmias, angina pectoris

Respiratory, Thoracic, and Mediastinal Disorders: cough

Gastrointestinal Disorders: dry mouth, nausea, vomiting, abdominal pain, dyspepsia

Hepatobiliary Disorders: abnormal liver function, ranging from transaminase elevation to severe hepatic injury

Skin and Subcutaneous Tissue Disorders: hyperhidrosis, pruritus, urticaria, exfoliative dermatitis, scalp hair loss, erythema multiforme rash, thrombocytopenic purpura

Musculoskeletal and Connective Tissue Disorders: arthralgia, muscle cramps, rhabdomyolysis

Investigations: weight loss (adult ADHD patients)

Vascular Disorders: peripheral coldness, Raynaud's phenomenon

Additional Adverse Reactions Reported with Other Methylphenidate-Containing Products

The list below shows adverse reactions not listed for methylphenidate hydrochloride tablets that have been reported with other methylphenidate-containing products.

Blood and Lymphatic Disorders: pancytopenia

Immune System Disorders: hypersensitivity reactions, such as auricular swelling, bullous conditions, eruptions, exanthemas

Psychiatric Disorders: affect lability, mania, disorientation, and libido changes

Nervous System Disorders: migraine, motor and verbal tics

Eye Disorders: diplopia, increased intraocular pressure mydriasis

Cardiac Disorders: sudden cardiac death, myocardial infarction, bradycardia, extrasystole

Respiratory, Thoracic, and Mediastinal Disorders: pharyngolaryngeal pain, dyspnea

Gastrointestinal Disorders: diarrhea, constipation

Skin and Subcutaneous Tissue Disorders: angioneurotic edema, erythema, fixed drug eruption

Musculoskeletal, Connective Tissue, and Bone Disorders: myalgia, muscle twitching

Renal and Urinary Disorders: hematuria

Reproductive System and Breast Disorders: gynecomastia

General Disorders: fatigue, hyperpyrexia

Urogenital Disorders: priapism

7 DRUG INTERACTIONS

7.1 Clinically Important Drug Interactions with Methylphenidate Hydrochloride tablets

Table 1 presents clinically important drug interactions with methylphenidate hydrochloride tablets.

Table 1: Clinically Important Drug Interactions with Methylphenidate Hydrochloride tablets

Monoamine Oxidase Inhibitors (MAOI)	
<i>Clinical Impact</i>	Concomitant use of MAOIs and CNS stimulants, including methylphenidate hydrochloride tablets can cause hypertensive crisis. Potential outcomes include death, stroke, myocardial infarction, aortic dissection, ophthalmological complications, eclampsia, pulmonary edema, and renal failure [see <i>Contraindications</i> (4)].
<i>Intervention</i>	Concomitant use of methylphenidate hydrochloride tablets with MAOIs or within 14 days after discontinuing MAOI treatment is contraindicated.
Antihypertensive Drugs	
<i>Clinical Impact</i>	Methylphenidate hydrochloride tablets may decrease the effectiveness of drugs used to treat hypertension [see <i>Warnings and Precautions</i> (5.3)].
<i>Intervention</i>	Monitor blood pressure and adjust the dosage of the antihypertensive drug as needed.

Halogenated Anesthetics

<i>Clinical Impact</i>	Concomitant use of halogenated anesthetics and methylphenidate hydrochloride tablets may increase the risk of sudden blood pressure and heart rate increase during surgery.
<i>Intervention</i>	Avoid use of methylphenidate hydrochloride tablets in patients being treated with anesthetics on the day of surgery.

Risperidone

<i>Clinical Impact</i>	Combined use of methylphenidate with risperidone when there is a change, whether an increase or decrease, in dosage of either or both medications, may increase the risk of extrapyramidal symptoms (EPS)
<i>Intervention</i>	Monitor for signs of EPS

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

Published studies and postmarketing reports on methylphenidate use during pregnancy have not identified a drug-associated risk of major birth defects, miscarriage or adverse maternal or fetal outcomes. There may be risks to the fetus associated with the use of CNS stimulants use during pregnancy (see *Clinical Considerations*).

No effects on morphological development were observed in embryo-fetal development studies with oral administration of methylphenidate to pregnant rats and rabbits during organogenesis at doses up to 10 and 15 times, respectively, the maximum recommended human dose (MRHD) of 60 mg/day given to adolescents on a mg/m² basis. However, spina bifida was observed in rabbits at a dose 52 times the MRHD given to adolescents. A decrease in pup body weight was observed in a pre- and post-natal development study with oral administration of methylphenidate to rats throughout pregnancy and lactation at doses 6 times the MRHD given to adolescents (see *Data*).

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

Clinical Considerations

Fetal/Neonatal Adverse Reactions

CNS stimulants, such as methylphenidate hydrochloride tablets, can cause vasoconstriction and thereby decrease placental perfusion. No fetal and/or neonatal adverse reactions have been reported with the use of therapeutic doses of methylphenidate during pregnancy; however, premature delivery and low birth weight infants have been reported in amphetamine-dependent mothers.

Data

Animal Data

In embryo-fetal development studies conducted in rats and rabbits, methylphenidate was administered orally at doses of up to 75 and 200 mg/kg/day, respectively, during the period of organogenesis. Malformations (increased incidence of fetal spina bifida) were observed in rabbits at the highest dose, which is approximately 52 times the MRHD of 60 mg/day given to adolescents on a mg/m² basis. The no effect level for embryo-fetal development in rabbits was 60 mg/kg/day (15times the MRHD given to adolescents on a mg/m² basis). There was no evidence of morphological development effects in rats, although increased incidences of fetal skeletal variations were seen at the highest dose level (10 times the MRHD of 60 mg/day given to adolescents on a mg/m² basis), which was also maternally toxic. The no effect level for embryo-fetal development in rats was 25 mg/kg/day (3 times the MRHD on a mg/m² basis). When methylphenidate was

administered to rats throughout pregnancy and lactation at doses of up to 45 mg/kg/day, offspring body weight gain was decreased at the highest dose (6 times the MRHD of 60 mg/day given to adolescents on a mg/m² basis), but no other effects on postnatal development were observed. The no effect level for pre- and postnatal development in rats was 15 mg/kg/day (~2 times the MRHD given to adolescents on a mg/m² basis).

8.2 Lactation

Risk Summary

Limited published literature, based on milk sampling from seven mothers reports that methylphenidate is present in human milk, which resulted in infant doses of 0.16% to 0.7% of the maternal weight-adjusted dosage and a milk/plasma ratio ranging between 1.1 and 2.7. There are no reports of adverse effects on the breastfed infant and no effects on milk production. Long-term neurodevelopmental effects on infants from stimulant exposure are unknown. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for methylphenidate hydrochloride tablets and any potential adverse effects on the breastfed infant from methylphenidate hydrochloride tablets or from the underlying maternal condition.

Clinical Considerations

Monitor breastfeeding infants for adverse reactions, such as agitation, insomnia, anorexia, and reduced weight gain.

8.4 Pediatric Use

The safety and effectiveness of methylphenidate hydrochloride tablets for the treatment of ADHD have been established in pediatric patients 6 to 17 years.

The safety and effectiveness of methylphenidate hydrochloride tablets in pediatric patients less than 6 years have not been established. The long-term efficacy of methylphenidate hydrochloride tablets in pediatric patients has not been established.

Long-Term Suppression of Growth

Growth should be monitored during treatment with stimulants, including methylphenidate hydrochloride tablets. Pediatric patients who are not growing or gaining weight as expected may need to have their treatment interrupted [*see Warnings and Precautions (5.7)*].

Juvenile Animal Toxicity Data

Rats treated with methylphenidate early in the postnatal period through sexual maturation demonstrated a decrease in spontaneous locomotor activity in adulthood. A deficit in acquisition of a specific learning task was observed in females only. The doses at which these findings were observed are at least 4 times the MRHD of 60 mg/day given to children on a mg/m² basis.

In a study conducted in young rats, methylphenidate was administered orally at doses of up to 100 mg/kg/day for 9 weeks, starting early in the postnatal period (postnatal Day 7) and continuing through sexual maturity (postnatal Week 10). When these animals were tested as adults (postnatal Weeks 13 to 14), decreased spontaneous locomotor activity was observed in males and females previously treated with 50 mg/kg/day (approximately 4 times the MRHD of 60 mg/day given to children on a mg/m² basis) or greater, and a deficit in the acquisition of a specific learning task was seen in females exposed to the highest dose (8 times the MRHD given to children on a mg/m² basis). The no effect level for juvenile neurobehavioral development in rats was 5 mg/kg/day (approximately 0.5 times the MRHD given to children on a mg/m² basis). The clinical significance of the long-term behavioral effects observed in rats is unknown.

8.5 Geriatric Use

Methylphenidate hydrochloride tablets has not been studied in the geriatric population.

9 DRUG ABUSE AND DEPENDENCE

9.1 Controlled Substance

Methylphenidate hydrochloride tablets contain methylphenidate hydrochloride, a

Schedule II controlled substance.

9.2 Abuse

Methylphenidate hydrochloride tablets has a high potential for abuse and misuse which can lead to the development of a substance use disorder, including addiction [see *Warnings and Precautions (5.1)*]. Methylphenidate hydrochloride tablets can be diverted for non-medical use into illicit channels or distribution.

Abuse is the intentional non-therapeutic use of a drug, even once, to achieve a desired psychological or physiological effect. Misuse is the intentional use, for therapeutic purposes, of a drug by an individual in a way other than prescribed by a health care provider or for whom it was not prescribed. Drug addiction is a cluster of behavioral, cognitive, and physiological phenomena that may include a strong desire to take the drug, difficulties in controlling drug use (e.g., continuing drug use despite harmful consequences, giving a higher priority to drug use than other activities and obligations), and possible tolerance or physical dependence.

Misuse and abuse of methylphenidate hydrochloride may cause increased heart rate, respiratory rate, or blood pressure; sweating; dilated pupils; hyperactivity; restlessness; insomnia; decreased appetite; loss of coordination; tremors; flushed skin; vomiting; and/or abdominal pain. Anxiety, psychosis, hostility, aggression, and suicidal or homicidal ideation have also been observed with CNS stimulants abuse and/or misuse. Misuse and abuse of CNS stimulants, including methylphenidate hydrochloride tablets, can result in overdose and death [see *Overdosage (10)*], and this risk is increased with higher doses or unapproved methods of administration, such as snorting or injection.

9.3 Dependence

Physical Dependence

Methylphenidate hydrochloride tablets may produce physical dependence. Physical dependence is a state that develops as a result of physiological adaptation in response to repeated drug use, manifested by withdrawal signs and symptoms after abrupt discontinuation or a significant dose reduction of a drug.

Withdrawal signs and symptoms after abrupt discontinuation or dose reduction following prolonged use of CNS stimulants including methylphenidate hydrochloride tablets include dysphoric mood; depression; fatigue; vivid, unpleasant dreams; insomnia or hypersomnia; increased appetite; and psychomotor retardation or agitation.

Tolerance

Methylphenidate hydrochloride tablets may produce tolerance. Tolerance is a physiological state characterized by a reduced response to a drug after repeated administration (i.e., a higher dose of a drug is required to produce the same effect that was once obtained at a lower dose).

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- Write unordered list in to word document.
- Close Word Application.

10 OVERDOSAGE

Clinical Effects of Overdose

Overdose of CNS stimulants is characterized by the following sympathomimetic effects:

- Cardiovascular effects including tachyarrhythmias, and hypertension or hypotension. Vasospasm, myocardial infarction, or aortic dissection may precipitate sudden cardiac death. Takotsubo cardiomyopathy may develop.
- CNS effects including psychomotor agitation, confusion, and hallucinations. Serotonin syndrome, seizures, cerebral vascular accidents, and coma may occur.
- Life-threatening hyperthermia (temperatures greater than 104°F) and rhabdomyolysis may develop.

Overdose Management

Consider the possibility of multiple drug ingestion. Because methylphenidate has a large volume of distribution and is rapidly metabolized, dialysis is not useful. Consider contacting the Poison Help line (1-800-222-1222) or a medical toxicologist for additional overdose management recommendations.

11 DESCRIPTION

Methylphenidate hydrochloride tablets contains methylphenidate hydrochloride, a CNS stimulant. It is available as tablets of 5 mg, 10 mg, and 20 mg strength for oral administration.

Methylphenidate hydrochloride is methyl α -phenyl-2-piperidineacetate hydrochloride, and its structural formula is:

Methylphenidate hydrochloride, USP is a white to off-white fine crystalline powder. Its solutions are acid to litmus. It is freely soluble in water and in methanol, soluble in alcohol, and slightly soluble in chloroform and in acetone. Its molecular weight is 269.77 g/mol.

Methylphenidate hydrochloride tablets contains the following inactive ingredients: D&C Yellow No. 10 (5-mg and 20-mg tablets), lactose monohydrate, microcrystalline cellulose, sodium starch glycolate (Potato), magnesium stearate, and talc.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Methylphenidate hydrochloride is a CNS stimulant. The mode of therapeutic action in ADHD and narcolepsy is not known.

12.2 Pharmacodynamics

Methylphenidate is a racemic mixture comprised of the *d*- and *l*-*threo* enantiomers. The *d*-*threo* enantiomer is more pharmacologically active than the *l*-*threo* enantiomer. Methylphenidate blocks the reuptake of norepinephrine and dopamine into the presynaptic neuron and increase the release of these monoamines into the extraneuronal space.

Cardiac Electrophysiology

A formal QT study has not been conducted in patients taking methylphenidate hydrochloride tablets.

The effect of dexmethylphenidate, the pharmacologically active d-enantiomer of methylphenidate hydrochloride tablets, on the QT interval was evaluated in a double-blind, placebo- and open-label active (moxifloxacin)-controlled study following single doses of dexmethylphenidate XR 40 mg (maximum recommended adult total daily dosage) in 75 healthy volunteers.

Electrocardiograms were collected up to 12 hours postdose. Frederica's method for heart rate correction was employed to derive the corrected QT interval (QTcF). The maximum mean prolongation of QTcF intervals was less than 5 ms, and the upper limit of the 90% confidence interval was below 10 ms for all time-matched comparisons versus placebo. This was below the threshold of clinical concern and there was no evident exposure response relationship.

12.3 Pharmacokinetics

Absorption

The time to peak rate in children was 1.9 hours (0.3 to 4.4 hours) for the methylphenidate hydrochloride tablets.

Effect of Food

After a high-fat meal, both area under the curve (AUC) (by 25 %) and C_{max} (by 27 %) are higher. Time to C_{max} (T_{max}) is faster after a high-fat meal (median T_{max}: 2.5 hours) as compared to without food (median T_{max}: 3 hours).

Distribution

Binding to plasma proteins is low (10% to 33%). The volume of distribution was 2.65 ± 1.11 L/kg for d- methylphenidate and 1.80 ± 0.91 L/kg for l- methylphenidate.

Elimination

The systemic clearance is 0.40 ± 0.12 L/h/kg for d-methylphenidate and 0.73 ± 0.28 L/h/kg for l-methylphenidate.

Metabolism

Methylphenidate is metabolized primarily by de-esterification to alpha-phenyl-piperidine acetic acid (ritalinic acid), which has little or no pharmacologic activity.

Excretion

After oral administration, 78% to 97% of the dose is excreted in the urine and 1% to 3% in feces in the form of metabolites within 48 to 96 hours. Most of the dose is excreted in the urine as alpha-phenyl-2-piperidine acetic acid (60% to 86%). The cumulative urinary excretion of alpha-phenyl-2-piperidine acetic acid are not significantly different for methylphenidate hydrochloride extended-release tablets.

Studies in Specific Populations

Male and Female Patients

In a clinical study involving adult subjects who received methylphenidate hydrochloride extended-release tablets, plasma concentrations of methylphenidate hydrochloride's major metabolite appeared to be greater in females than in males. No gender differences were observed for methylphenidate hydrochloride plasma concentration in the same subjects.

Racial or Ethnic Groups

There is insufficient experience with the use of methylphenidate hydrochloride tablets to detect ethnic variations in pharmacokinetics.

Patients with Renal Impairment

Methylphenidate hydrochloride tablets have not been studied in renally-impaired patients. Renal impairment is expected to have minimal effect on the pharmacokinetics of methylphenidate since less than 1% of a radiolabeled dose is excreted in the urine as unchanged compound, and the major metabolite (ritalinic acid), has little or no pharmacologic activity.

Patients with Hepatic Impairment

Methylphenidate hydrochloride tablets have not been studied in patients with hepatic impairment. Hepatic impairment is expected to have minimal effect on the pharmacokinetics of methylphenidate since it is metabolized primarily to ritalinic acid by nonmicrosomal hydrolytic esterases that are widely distributed throughout the body.

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, and Impairment of Fertility

Carcinogenesis

In a lifetime carcinogenicity study carried out in B6C3F1 mice, methylphenidate caused an increase in hepatocellular adenomas, and in males only, an increase in hepatoblastomas at a daily dose of approximately 60 mg/kg/day. This dose is approximately 2 times the MRHD of 60 mg/day given to children on mg/m² basis. Hepatoblastoma is a relatively rare rodent malignant tumor type. There was no increase in total malignant hepatic tumors. The mouse strain used is sensitive to the development of hepatic tumors and the significance of these results to humans is unknown.

Methylphenidate did not cause any increase in tumors in a lifetime carcinogenicity study carried out in F344 rats; the highest dose used was approximately 45 mg/kg/day, which is approximately 4 times the MRHD (children) on a mg/m² basis.

In a 24-week carcinogenicity study in the transgenic mouse strain p53+/-, which is sensitive to genotoxic carcinogens, there was no evidence of carcinogenicity. Male and female mice were fed diets containing the same concentration of methylphenidate as in the lifetime carcinogenicity study; the high-dose groups were exposed to 60 to 74

mg/kg/day of methylphenidate.

Mutagenesis

Methylphenidate was not mutagenic in the *in vitro* Ames reverse mutation assay, in the *in vitro* mouse lymphoma cell forward mutation assay, or in the *in vitro* chromosomal aberration assay using human lymphocytes. Sister chromatid exchanges and chromosome aberrations were increased, indicative of a weak clastogenic response, in an *in vitro* assay in cultured Chinese Hamster Ovary cells. Methylphenidate was negative *in vivo* in males and females in the mouse bone marrow micronucleus assay.

Impairment of Fertility

No human data on the effect of methylphenidate on fertility are available. Methylphenidate did not impair fertility in male or female mice that were fed diets containing the drug in an 18-week continuous breeding study. The study was conducted at doses up to 160 mg/kg/day, approximately 10times the MRHD of 60 mg/day given to adolescents on a mg/m² basis.

16 HOW SUPPLIED/STORAGE AND HANDLING

Methylphenidate Hydrochloride Tablets, USP are available as follows

5 mg Tablets - light yellow colored, round, flat face tablets with "n above 573" debossed on one side and plain on the other side, supplied as:

Bottles of 30NDC 43386-573-03

Bottles of 100.....NDC 43386-573-01

Bottles of 500NDC 43386-573-05

10 mg Tablets - white to off white colored, round, flat face tablets with "n above 574" debossed on one side and bisected line debossed on the other side, supplied as:

Bottles of 30 NDC 43386-574-03

Bottles of 100.....NDC 43386-574-01

Bottles of 500NDC 43386-574-05

20 mg Tablets - light yellow colored, round biconvex tablets with "n above 575" debossed on one side and bisect line debossed on the other side, supplied as:

Bottles of 30NDC 43386-575-03

Bottles of 100.....NDC 43386-575-01

Bottles of 500NDC 43386-575-05

Store at 20°C to 25°C (68°F to 77°F), excursions permitted between 15°C and 30°C (59°F and 86°F) [see USP Controlled Room Temperature].

Protect from light.

Dispense in tight, light-resistant container (USP).

Disposal

Comply with local laws and regulations on drug disposal of CNS stimulants. Dispose of remaining, unused, or expired methylphenidate hydrochloride tablets by a medicine takeback program or by an authorized collector registered with the Drug Enforcement Administration. If no take-back program or authorized collector is available, mix methylphenidate hydrochloride tablets with an undesirable, nontoxic substance to make it less appealing to children and pets. Place the mixture in a container, such as a sealed plastic bag and discard methylphenidate hydrochloride tablets in the household trash.

|PATIENT COUNSELING INFORMATION

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

Controlled Substance Status/High Potential for Abuse and Dependence

Advise patients that methylphenidate hydrochloride tablets are controlled substances, and they can be abused and lead to dependence. Instruct patients that they should not give methylphenidate hydrochloride tablets to anyone else. Advise patients to store

methylphenidate hydrochloride tablets in a safe place, preferably locked, to prevent abuse. Advise patients to comply with laws and regulations on drug disposal. Advise patients to dispose of remaining, unused, or expired methylphenidate hydrochloride tablets by a medicine take-back program if available [see *Boxed Warning, Warnings and Precautions (5.1), Drug Abuse and Dependence (9.1, 9.2, 9.3), How Supplied/Storage and Handling (16)*].

Serious Cardiovascular Risks

Advise patients that there is a potential serious cardiovascular risk, including sudden death, myocardial infarction, stroke, and hypertension with methylphenidate hydrochloride tablets use. Instruct patients to contact a healthcare provider immediately if they develop symptoms, such as exertional chest pain, unexplained syncope, or other symptoms suggestive of cardiac disease [see *Warnings and Precautions (5.2)*].

Blood Pressure and Heart Rate Increases

Instruct patients that methylphenidate hydrochloride tablets can cause elevations of their blood pressure and pulse rate [see *Warnings and Precautions (5.3)*].

Psychiatric Risks

Advise patients that methylphenidate hydrochloride tablets, at recommended doses, can cause psychotic or manic symptoms, even in patients without prior history of psychotic symptoms or mania [see *Warnings and Precautions (5.4)*].

Priapism

Advise patients of the possibility of painful or prolonged penile erections (priapism). Instruct them to seek immediate medical attention in the event of priapism [see *Warnings and Precautions (5.5)*].

Circulation Problems in Fingers and Toes [Peripheral Vasculopathy, Including Raynaud's Phenomenon]

Instruct patients about the risk of peripheral vasculopathy, including Raynaud's phenomenon, and associated signs and symptoms: fingers or toes may feel numb, cool, painful, and/or may change color from pale, to blue, to red. Instruct patients to report to their physician any new numbness, pain, skin color change, or sensitivity to temperature in fingers or toes.

Instruct patients to call their physician immediately with any signs of unexplained wounds appearing on fingers or toes while taking methylphenidate hydrochloride tablets. Further clinical evaluation (e.g., rheumatology referral) may be appropriate for certain patients [see *Warnings and Precautions (5.6)*].

Suppression of Growth

Advise patients that methylphenidate hydrochloride tablets may cause slowing of growth and weight loss [see *Warnings and Precautions (5.7)*].

Pregnancy Registry

Advise patients that there is a pregnancy exposure registry that monitors pregnancy outcomes in patients exposed to ADHD medications, including methylphenidate hydrochloride tablets, during pregnancy [see *Use in Specific Populations (8.1)*].

Manufactured by:

Novel Laboratories, Inc.

Somerset, NJ 08873

Manufactured for:

Lupin Pharmaceuticals, Inc.

Baltimore, MD 21202

SAP Code: 275056

Rev. 11/2023

SPL MEDGUIDE

MEDICATION GUIDE

Methylphenidate Hydrochloride

(METH-il-FEN-i-date HYE-droe-KLOR-ide)

Tablets, USP CII

Rx Only

What is the most important information I should know about methylphenidate hydrochloride tablets?

Methylphenidate hydrochloride tablets may cause serious side effects, including:

- **Abuse, misuse, and addiction.** Methylphenidate hydrochloride tablets has a high chance for abuse and misuse and may lead to substance use problems, including addiction. Misuse and abuse of methylphenidate hydrochloride tablets, other methylphenidate containing medicines, and amphetamine containing medicines, can lead to overdose and death. The risk of overdose and death is increased with higher doses of methylphenidate hydrochloride tablets or when it is used in ways that are not approved, such as snorting or injection.
- Your healthcare provider should check you or your child's risk for abuse, misuse, and addiction before starting treatment with methylphenidate hydrochloride tablets and will monitor you or your child during treatment.
- Methylphenidate hydrochloride tablets may lead to physical dependence after prolonged use, even if taken as directed by your healthcare provider.
- Do not give methylphenidate hydrochloride tablets to anyone else. See "**What is methylphenidate hydrochloride tablets?**" for more information.
- Keep methylphenidate hydrochloride tablets in a safe place and properly dispose of any unused medicine. See "**How should I store methylphenidate hydrochloride tablets?**" for more information.
- Tell your healthcare provider if you or your child have ever abused or been dependent on alcohol, prescription medicines, or street drugs.
- **Risks for people with serious heart disease.** Sudden death has happened in people who have heart defects or other serious heart disease.

Your healthcare provider should check you or your child carefully for heart problems before starting methylphenidate hydrochloride tablets.

Tell your healthcare provider if you or your child have any heart problems, heart disease, or heart defects.

Call your healthcare provider or go to the nearest hospital emergency room right away if you or your child has any signs of heart problems, such as chest pain, shortness of breath, or fainting while taking methylphenidate hydrochloride tablets.

- **Increased blood pressure and heart rate.**
- Your healthcare provider should check you or your child's blood pressure and heart rate regularly during treatment with methylphenidate hydrochloride tablets.
- **Mental (psychiatric) problems:**
- **All Patients**
- new or worse behavior and thought problems
- new or worse bipolar illness
- new psychotic symptoms (such as hearing voices, believing things that are not true, are suspicious) or new manic symptoms

Tell your healthcare provider about any mental problems you or your child have, or about a family history of suicide, bipolar illness, or depression.

Call your healthcare provider right away if you or your child have any new or worsening mental symptoms or problems while taking methylphenidate hydrochloride tablets, especially seeing or hearing things that are not real, believing things that are not real, or are suspicious.

What is methylphenidate hydrochloride tablets?

- Methylphenidate hydrochloride tablets are a central nervous system (CNS) stimulant prescription medicine. **It is used for the treatment of Attention Deficit Hyperactivity Disorder (ADHD).** Methylphenidate hydrochloride tablets may help increase attention and decrease impulsiveness and hyperactivity in patients with ADHD.
- Methylphenidate hydrochloride tablets should be used as a part of a total treatment program for ADHD that may include counseling or other therapies.

- Methylphenidate hydrochloride tablets are also used in the treatment of a sleep disorder called narcolepsy.

Methylphenidate hydrochloride tablets is a federally controlled substance (CII) because it contains methylphenidate that can be a target for people who abuse prescription medicines or street drugs. Keep methylphenidate hydrochloride tablets in a safe place to protect it from theft.

Never give your methylphenidate hydrochloride tablets to anyone else, because it may cause death or harm them. Selling or giving away methylphenidate hydrochloride tablets may harm others and is against the law.

Methylphenidate hydrochloride tablets should not be taken if you or your child:

- are allergic to methylphenidate hydrochloride, or any of the ingredients in methylphenidate hydrochloride tablets. See the end of this Medication Guide for a complete list of ingredients in methylphenidate hydrochloride tablets.
- are taking or have taken within the past 14 days an anti-depression medicine called a monoamine oxidase inhibitor or (MAOI).

Methylphenidate hydrochloride tablets may not be right for you or your child. Before starting methylphenidate hydrochloride tablets, tell your or your child's doctor about all health conditions (or a family history of) including:

- heart problems, heart disease, heart defects, high blood pressure
- mental problems, including psychosis, mania, bipolar illness, or depression
- circulation problems in fingers or toes
- have eye problems, including increased pressure in your eye, glaucoma, or problems with your close-up vision (farsightedness)
- have or had repeated movements or sounds (tics) or Tourette's syndrome, or have a family history of tics or Tourette's syndrome.
- if you are pregnant or plan to become pregnant. It is not known if methylphenidate hydrochloride tablets will harm your unborn baby.
- if you are breastfeeding or plan to breastfeed. methylphenidate hydrochloride passes into your breast milk. Talk to your healthcare provider about the best way to feed your baby during treatment with methylphenidate hydrochloride tablets.

Tell your healthcare provider about all of the medicines that you or your child takes including prescription and over-the-counter medicines, vitamins, and herbal supplements. Methylphenidate hydrochloride tablets and some medicines may interact with each other and cause serious side effects. Sometimes the doses of other medicines will need to be adjusted while taking methylphenidate hydrochloride tablets.

Your healthcare provider will decide whether methylphenidate hydrochloride tablets can be taken with other medicines.

Especially tell your healthcare provider if you or your child takes:

- anti-depression medicines including MAOIs
- blood pressure medicines (anti-hypertensive)

Know the medicines that you or your child takes. Keep a list of your medicines with you to show your healthcare provider and pharmacist.

- You should not take methylphenidate hydrochloride tablets on the day of your operation if a certain type of anesthetic is used. This is because there is a chance of a sudden rise in blood pressure and heart rate during the operation.

Do not start any new medicine while taking methylphenidate hydrochloride tablets without talking to your healthcare provider first.

How should methylphenidate hydrochloride tablets be taken?

- Take methylphenidate hydrochloride tablets exactly as prescribed. Your healthcare provider may adjust the dose until it is right for you or your child.
- Methylphenidate hydrochloride tablets are usually taken 2 to 3 times a day.
- Take methylphenidate hydrochloride tablets 30 to 45 minutes before a meal.
- Your healthcare provider may do regular checks of the blood, heart, and blood pressure while taking methylphenidate hydrochloride tablets. Children should have their height and weight checked often while taking methylphenidate hydrochloride tablets. If you or your child take too much methylphenidate hydrochloride tablets, call your healthcare provider or Poison Help line at 1-800-222-1222 or go to the nearest hospital emergency room right away.

What are the possible side effects of methylphenidate hydrochloride tablets?

Methylphenidate hydrochloride tablets may cause serious side effects, including:

- see "**What is the most important information I should know about methylphenidate hydrochloride tablets?**" for information on reported heart and mental problems.
- **painful and prolonged erections (priapism)** have occurred with methylphenidate. If you or your child develops priapism, seek medical help right away. Because of the potential for lasting damage, priapism should be evaluated by a healthcare provider immediately.
- **circulation problems in fingers and toes** (peripheral vasculopathy, including Raynaud's phenomenon):
 - fingers or toes may feel numb, cool, painful
 - fingers or toes may change color from pale, to blue, to red
 - Tell your healthcare provider if you or your child have, numbness, pain, skin color change, or sensitivity to temperature in the fingers or toes.
- **Call your healthcare provider right away if you have or your child has any signs of unexplained wounds appearing on fingers or toes while taking methylphenidate hydrochloride tablets.**
- **slowing of growth (height and weight) in children**
- **Common side effects include:**
 - fast heart beat
 - headache
 - nervousness
 - decreased appetite
 - nausea
 - abnormal heartbeat
 - (palpitations)
 - trouble sleeping
 - sweating a lot
 - dry mouth
 - stomach pain

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

How should I store methylphenidate hydrochloride tablets?

- Store methylphenidate hydrochloride tablets in a safe place and in a tightly closed container at room temperature between 68°F to 77°F (20°C to 25°C).
- Protect from light.
- Dispose of remaining, unused, or expired methylphenidate hydrochloride tablets by a medicine take-back program at a U.S. Drug Enforcement Administration (DEA) authorized collection site. If no take-back program or DEA authorized collector is available, mix methylphenidate hydrochloride tablets with an undesirable, nontoxic substance such as dirt, cat litter, or used coffee grounds to make it less appealing to children and pets. Place the mixture in a container, such as a sealed plastic bag and throw away (discard) methylphenidate hydrochloride tablets in the household trash. Visit www.fda.gov/drugdisposal for additional information on disposal of unused medicines.
- **Keep methylphenidate hydrochloride tablets and all medicines out of the reach of children.**

General information about the safe and effective use of methylphenidate hydrochloride tablets.

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

What are the ingredients in methylphenidate hydrochloride tablets?

Active ingredient: methylphenidate HCl

Inactive ingredients: D&C Yellow No. 10 (5-mg and 20-mg tablets), lactose monohydrate, microcrystalline cellulose, sodium starch glycolate (potato), magnesium stearate, and talc

Manufactured by:

Novel Laboratories, Inc.

Somerset, NJ 08873

Manufactured for:

Lupin Pharmaceuticals, Inc.

Baltimore, MD 21202

SAP Code: 275055

Rev. 11/2023

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

Revised: 11/2023

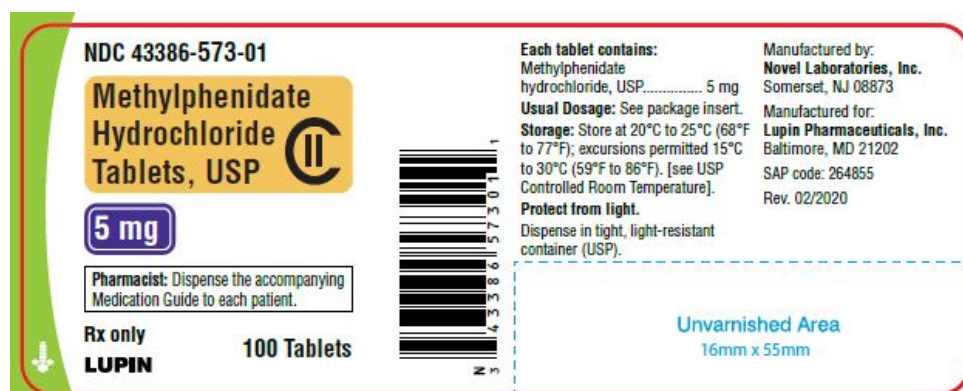
For more information, call 1-866-403-7592

PACKAGE LABEL.PRINCIPAL DISPLAY PANEL

Methylphenidate Hydrochloride Tablets, USP 5 mg

100 Tablets

NDC 43386-573-01

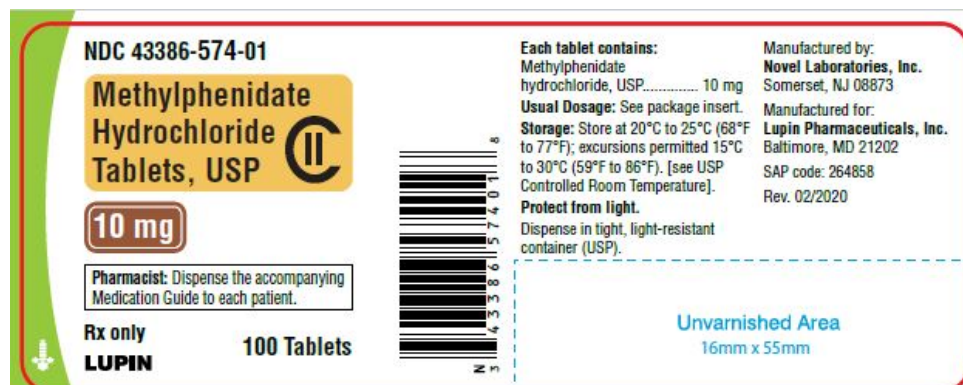


5 mg-100 ct container
5 mg-100 ct container

Methylphenidate Hydrochloride Tablets, USP 10 mg

100 Tablets

NDC 43386-574-01

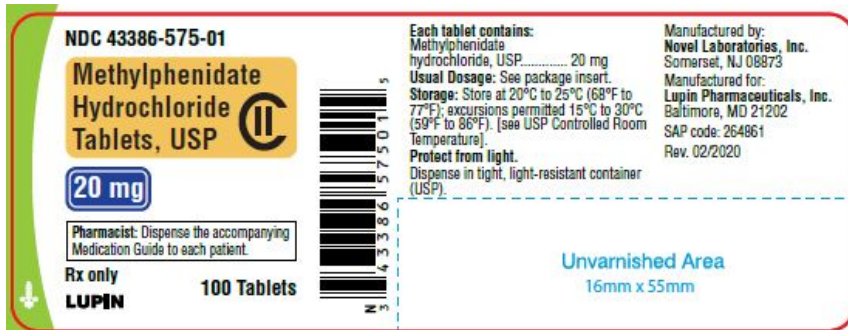


10 mg-100 ct container
10 mg-100 ct container

Methylphenidate Hydrochloride Tablets, USP 20 mg

100 Tablets

NDC 43386-575-01



20 mg-100 ct container
20 mg-100 ct container

METHYLPHENIDATE HYDROCHLORIDE

methylphenidate hydrochloride tablet

Product Information				
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:43386-573	
Route of Administration	ORAL	DEA Schedule	CII	
Active Ingredient/Active Moiety				
Ingredient Name		Basis of Strength	Strength	
METHYLPHENIDATE HYDROCHLORIDE (UNII: 4B3SC438HI) (METHYLPHENIDATE - UNII:207ZZ9QZ49)		METHYLPHENIDATE HYDROCHLORIDE	5 mg	
Inactive Ingredients				
Ingredient Name			Strength	
LACTOSE MONOHYDRATE (UNII: EWQ57Q8I5X)				
CELLULOSE, MICROCRYSTALLINE (UNII: OP1R32D61U)				
SODIUM STARCH GLYCOLATE TYPE A POTATO (UNII: 5856J3G2A2)				
TALC (UNII: 7SEV7J4R1U)				
D&C YELLOW NO. 10 (UNII: 35SW5USQ3G)				
MAGNESIUM STEARATE (UNII: 70097M6I30)				
Product Characteristics				
Color	YELLOW	Score	no score	
Shape	ROUND	Size	6mm	
Flavor		Imprint Code	nabove573	
Contains				
Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:43386-573-01	100 in 1 BOTTLE; Type 0: Not a Combination Product	01/20/2016	
2	NDC:43386-573-05	500 in 1 BOTTLE; Type 0: Not a Combination Product	01/31/2040	
3	NDC:43386-573-03	30 in 1 BOTTLE; Type 0: Not a Combination Product	01/31/2040	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA207884	01/20/2016	

METHYLPHENIDATE HYDROCHLORIDE

methylphenidate hydrochloride tablet

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:43386-574
Route of Administration	ORAL	DEA Schedule	CII

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
METHYLPHENIDATE HYDROCHLORIDE (UNII: 4B35C438HI) (METHYLPHENIDATE - UNII:207ZZ9QZ49)	METHYLPHENIDATE HYDROCHLORIDE	10 mg

Inactive Ingredients

Ingredient Name	Strength
LACTOSE MONOHYDRATE (UNII: EWQ57Q8I5X)	
CELLULOSE, MICROCRYSTALLINE (UNII: OP1R32D61U)	
SODIUM STARCH GLYCOLATE TYPE A POTATO (UNII: 5856J3G2A2)	
TALC (UNII: 7SEV7J4R1U)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	

Product Characteristics

Color	WHITE	Score	2 pieces
Shape	ROUND	Size	7mm
Flavor		Imprint Code	nabov574
Contains			

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:43386-574-01	100 in 1 BOTTLE; Type 0: Not a Combination Product	01/20/2016	
2	NDC:43386-574-05	500 in 1 BOTTLE; Type 0: Not a Combination Product	01/31/2040	
3	NDC:43386-574-03	30 in 1 BOTTLE; Type 0: Not a Combination Product	01/31/2040	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA207884	11/13/2015	

METHYLPHENIDATE HYDROCHLORIDE

methylphenidate hydrochloride tablet

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:43386-575
Route of Administration	ORAL	DEA Schedule	CII

Active Ingredient/Active Moiety				
Ingredient Name		Basis of Strength	Strength	
METHYLPHENIDATE HYDROCHLORIDE (UNII: 4B3SC438HI) (METHYLPHENIDATE - UNII:207ZZ9QZ49)		METHYLPHENIDATE HYDROCHLORIDE	20 mg	
Inactive Ingredients				
Ingredient Name			Strength	
LACTOSE MONOHYDRATE (UNII: EWQ57Q8I5X)				
CELLULOSE, MICROCRYSTALLINE (UNII: OP1R32D61U)				
SODIUM STARCH GLYCOLATE TYPE A POTATO (UNII: 5856J3G2A2)				
TALC (UNII: 75EV7J4R1U)				
D&C YELLOW NO. 10 (UNII: 35SW5USQ3G)				
MAGNESIUM STEARATE (UNII: 70097M6I30)				
Product Characteristics				
Color	YELLOW	Score	2 pieces	
Shape	ROUND	Size	8mm	
Flavor		Imprint Code	nabove575	
Contains				
Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:43386-575-01	100 in 1 BOTTLE; Type 0: Not a Combination Product	01/20/2016	
2	NDC:43386-575-03	30 in 1 BOTTLE; Type 0: Not a Combination Product	01/31/2040	
3	NDC:43386-575-05	500 in 1 BOTTLE; Type 0: Not a Combination Product	01/31/2040	
Marketing Information				
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date	
ANDA	ANDA207884	11/13/2015		

Labeler - Lupin Pharmaceuticals, Inc. (089153071)

Registrant - Novel Laboratories, Inc. (793518643)

Establishment

Name	Address	ID/FEI	Business Operations
Novel Laboratories, Inc.		793518643	ANALYSIS(43386-573, 43386-574, 43386-575) , MANUFACTURE(43386-573, 43386-574, 43386-575) , PACK(43386-573, 43386-574, 43386-575)

Revised: 3/2024

Lupin Pharmaceuticals, Inc.