

Weight Loss Medications

Phentermine Hydrochloride

Drug Enforcement Agency DEA: Schedule IV drug

Indications: It is approved as monotherapy as a weight loss drug

Doses

To be taken once a day in the morning with or without food as prescribed by your doctor. Your doctor may recommend a dosage titration at intervals of 14 days.

What to Inform Your Doctor before Starting this Medication:

- Let your doctor know if you have ever had an allergic reaction to phentermine in the past
- If you are pregnant or are planning to become pregnant while on this medication
- If you are breastfeeding
- If you are taking a class of antidepressant known as serotonin reuptake inhibitors (SSRI) such as Paroxetine, Fluoxetine, Sertraline and Fluvoxamine
- If you are taking depression medication belonging to the group called the Monoamine Oxidase inhibitors or medications used in Parkinson's disease, as use of phentermine within 2 weeks of these medications can result in significantly elevated blood pressures.
- If you are taking any other medications - prescribed or over the counter, natural or homeopathic
- If you have heart disease, hypertension, pulmonary hypertension (increased blood pressures in the lungs) or have any other medical conditions.

What you should do or not do while taking this medication:

- If you are a woman of child bearing age, you should obtain negative pregnancy test before starting treatment and monthly pregnancy test thereafter. You should use an effective birth control method while taking phentermine since this medication can cause serious birth defects
- You should not drive or operate machinery until you know that this medication will not affect your ability to perform these tasks
- Long term use of this medication may lead to the development of tolerance - a condition whereby your medication dose seems to no longer be effective requiring dose escalation.
- This medication may be habit-forming especially when used on a prolonged period and may not be suitable for you if you have a history of drug or alcohol problems.
- When you desire to get off this medication, consult your doctor
- This medication is not for children under the age of 18 years.

Potential Adverse Reactions:

The following adverse reactions occurred in at least 5% or more of people during clinical trials

- Dizziness
- Dry mouth
- Constipation
- Sleep disturbance
- Numbness and tingling sensations
- Taste distortion or perversion

It may cause the following changes in your lab results

- metabolic acidosis (that may manifest as decreased serum CO₂ or HCO₂ levels)
- Elevated creatinine

Potential Drug Interactions:

- May potentiate the central nervous system depressant effect of alcohol
- May increase the likelihood of low serum potassium when taken with water pills (that do not spare serum potassium) such as furosemide

May lead to irregular menses when taken concomitantly with birth control pills, but it has not been shown to increase the likelihood of pregnancy resulting during use

- Do not stop your birth control pills if you develop menstrual irregularities or problems

Contra-Indications:

You should not use this medication if you have been diagnosed with pregnancy or are breast feeding

Hyperthyroidism

Glaucoma

You should not take this medication if you have taken any member of a class of medication called Monoamine Oxidase inhibitors within 14 days of prescribing phentermine. Ask your doctor or pharmacist if any of your current medication belong to this class or family of medication.

You should stop this medication and call your doctor if you develop reaction such as rash, or if you have a history of heart disease (such as irregular heart beat, or heart failure) or have poorly controlled hypertension.

You should stop the medication and call your doctor if you develop allergic or hypersensitivity reaction while taking this medication or if you become agitated, develop significant anxiety, restlessness, fast heart rate, or cognitive impairment.

Precautions

Tell your doctor before using this medication about your medical condition such as Type 2 diabetes, hypertension, seizure disorder, kidney problems, heart disease, Tourette's syndrome.

Phentermine belongs to the amphetamine family and prolonged use may therefore result in the development of tolerance, dependency or abuse.

Selected drugs Interactions:

-Alcohol: May increase the toxic effect of phentermine

-Pain medication: It may increase the analgesic effects of pain medication.

-Concurrent use with antacids may result in decrease in excretion of phentermine resulting in prolongation of the effect or increasing the toxic effect of phentermine.

-May reduce the sedative effect of antihistamines

-Blood pressure medications: Phentermine may decrease the effect of blood pressure medication.

-Cannabis: Simultaneous use may increase heart rate.

Monoamine oxidase inhibitors: May cause significant blood pressure elevation when used within 2 weeks of using these agents.

Multivitamins: May decrease blood levels of phentermine.

Seizure medications: Levels of some medications used for seizure such as phenytoin, phenobarbital can be decreased when used with phentermine resulting in more seizures.

Lorcaserin

US BRAND NAME: Bleviq US generic Equivalent: Unavailable.

Drug Enforcement Agency: Schedule IV drug

Indication: Weight loss medication

How it works: It works on receptors in the brain (5-HT_{2C}) to promote satiety.

DOSES

Take as directed by your doctor. You may take a missed dose as soon as you remember but not close to the next dose. Skip missed dose if you are close to the next dose.

What to Inform Your Doctor before Starting This Medication

-Let your doctor know if you have ever had an allergic reaction to Lorcaserine in the past

-If you are pregnant or planning to become pregnant while on this medication

-If you are breast feeding.

-Inform your doctor of all the medication including over the counter medications, herbal medications and homeopathic medications you are taking.

-Inform your doctor if you have kidney disease. Lorcaserine should be used with caution by those with mild to moderate kidney disease and should not be used by those with advanced kidney disease.

What you should do or Not Do While Taking this Medication

Follow your doctor's recommendations

-If you have Type 2 diabetes this medication may cause significantly low blood sugars.

If you are a woman of child bearing age, you should obtain negative pregnancy test before starting treatment and monthly thereafter. You should use an effective birth control method while taking this medication.

-This medication like most weight loss medication should not be used in children less than 18 years old.

-Stop Lorcaserin if you develop heart disease while taking this medication.

-Notify your doctor if you have not noticed $\geq 5\%$ weight loss in 12 weeks.

Potential Adverse Reactions:

-Dry mouth

-Headaches

-Dizziness

-Nausea/vomiting

-Constipation

-Cough

-Fatigue

-Slow heart rate

-Back pain

-Breast enlargement in men

Serious but rare Adverse Reactions:

-Pulmonary hypertension - elevated blood pressure in the lungs

-Abuse, dependency

-Serotonin Syndrome: A potentially life threatening reaction that may result suddenly when Lorcaserin is taken with certain medications, certain recreational drugs. (Click here to see list). The signs and symptoms of serotonin syndrome include but not limited to mild symptoms such as fast heart rate, sweating, and muscle twitching, shivering, and sweating. Symptoms of moderate serotonin syndrome include elevated blood pressures, elevated temperature, up to 104, hyperactive bowel sounds, increased reflexes, agitation. Severe symptoms include severely increased blood pressures, heart rates, and significantly increased temperatures of up to 106°F, seizures, kidney failure.

-Neuroleptic Malignant syndrome when used with certain medications

-Psychiatric problems including depression

-Suicidal ideations or thoughts

-Priapism: Persistent erections lasting longer than 4 hours

-Anemia

-Low white blood cell count

Contra-Indication:

-This medication can cause sedation and therefore impair your ability to operate vehicles or machineries

-Caution in patients with depression, psychiatric disorders or suicidal thoughts or history of suicidal thoughts.

-Lorcaserine when used with diabetic medications in patient with type 2 diabetes may result in low blood sugar (hypoglycemia).

-Renal disease

-Men with history of priapism (persistent erection)

Selected Drug Interactions:

-Concomitant use with other serotonergic agent including but not limited to sertraline, paroxetine, fluoxetine, citalopram, escitalopram, ergot derivatives, can potentiate serotonin effect and increase the risk of serotonin syndrome.

-Concomitant use with antidopaminergic agent (e.g. antipsychotics) may lead to serotonin syndrome, neuroleptic malignant syndrome

-Concomitant use with antiemetics (nausea and medicine medications) that are 5HT3 antagonists such as ondansetron can cause serotonin syndrome.

-Use with antiemetics like metoclopramide can result in serotonin syndrome.

-Use with Bupropion may result in the enhancement of the serotonergic effect of Lorcaserin and lead to serotonin syndrome. Concomitant use should be avoided.

-May increase risk of priapism when used with phosphodiesterase 5 inhibitors (a class of medications used in treatment of erectile dysfunction) such as sildenafil, tadalafil, and vardenafil.

Naltrexone / Bupropion Hydrochloride

US Brand Name: Contrave

Indications: Weight loss medicine for adults with weight related comorbidities with BMI > 27kg/m² or with BMI >30kg/m² without comorbidity.

Drug Enforcement Agency: Not a scheduled drug

Black Box Warning: There is increased risk of suicide when bupropion is used in children, adolescents and young adults with major depression or other psychiatric conditions, especially during the first months of treatment. No such increased risk noted in studies of patients >24 years old. Risk of suicide decreased in patients that of 65 years and older.

Bupropion when used for smoking cessation has been observed to cause neuropsychiatric changes, such as: agitation, hostility, depression, worsening of underlying or persisting psychiatric conditions.

How it works: Naltrexone is an opioid antagonist,

Bupropion is an aminoketone antidepressant

Mechanism of weight loss- unknown

Dosage Form: 8mg/90mg (Naltrexone HCL/ bupropion HCL)

Dose: Weekly dose titration over 4 weeks. Take medication as directed by your doctor. Taking more dose than you are told may lead to seizures. May be taken with meals or without meals. Avoid taking with high fat meals. Do not chew, break or crush this medication—swallow whole. If you miss any dosage, skip the missed dose and continue your regular regime. Doubling your dose may result in seizures

What to Inform Your Doctor before Starting with this Medication:

- tell your doctor about your allergies
- tell your doctor if you are allergic to any one of these medications.
- inform your doctor about all the medications, including prescribed medications, over the counter or herbal medication
- tell your doctor if you drink a lot of alcohol
- if you have seizures (bupropion should not be used in those with seizure disorders).

-if you are taking mood medications or medications used to treat Parkinson's disease

If you have high blood pressure

-if you are using any street drug or are addicted to prescribed drugs

-if you are pregnant

-if you are breast feeding

Do's and Don'ts While on this Medication; what you should do or not do while taking this medication:

-check your blood pressure and heart rate routinely while on this medication

-follow your blood sugars closely as you lose weight

-inform your doctor if you have any new onset eye problems when you are taking this medication

-inform your doctor before you take some medicines that contain opioids. These opioid containing drugs may include certain cough medicines, diarrhea medicines, pain medicines. The therapeutic effect of these medicines may be diminished during concomitant use with naltrexone/ bupropion

- if you are taking opioid medication(s) while taking naltrexone/bupropion, inform your doctor before you stop naltrexone/bupropion because not doing so may result in exaggeration of effects of the opioids.

-inform your doctor if you are addicted to any opioids as concomitant use of this medication with opioids can lead to significant withdrawal symptoms.

Potential Adverse Reactions:

- Dry mouth
- Constipation
- Dizziness
- Insomnia
- Tremors
- Irritation
- Nausea
- Vomiting
- Diarrhea
- Flushing
- Ringing in the ear
- Excessive sweating
- Fatigue
- Fast heart rate
- Distortion of sense of taste (dysgeusia)

Serious but rare side effects include:

- Suicide and homicidal ideation
- Seizures
- Liver damage
- Severe rash that may manifest as erythema, multiforme, Steven- Johnson syndrome
- Liver damage
- Close- angle glaucoma
- Worsening of depression
- Severe blood pressure elevations

Precautions:

Use with caution in opioid dependent patients as this may precipitate withdrawal. Patients who are dependent on opioids (including tramadol) should stop the opioids for at least 7-10 days before starting Naltrexone/bupropion. Long periods of discontinuation may be required after discontinuation of methadone or buprenorphine. Use with caution in patients currently taking seizure medicines, depression medicines, other psychiatric medications, theophylline and steroids or excessive use of alcohol and in patients who are addicted to stimulants or cocaine. To avoid seizures, always skip the missed doses and take your next dose. Do not take more than two doses at a time and not more than 4 doses in a day.

Contraindications:

- Allergy to either of the two medications
- Hypersensitivity to bupropion/ naltrexone
- Seizure disorders
- Eating disorders, such as anorexia nervosa, bulimia
- Concomitant use with other bupropion-containing medications
- Within 14 days of taking monoamine oxidase inhibitors
- Chronic opioid use
- Pregnancy and lactation
- Concomitant use with linezolid, parenteral methylene blue.
- Poorly controlled hypertension

Potential drug Interactions

Bupropion is a CYP2D6 inhibitor and therefore may increase serum concentrations of the following medications:

- Antidepressants: such as the (a) SSRI's including Fluoxetine, Sertraline, Paroxetine, Citalopram, Escitalopram, Fluvoxamine (b) many tricyclic antidepressants (c) SNRI's such as Duloxetine used for depression, fibromyalgia, diabetic neuropathy
- Antipsychotics such as Aripiprazole, Brexpiprazole, Iloperidone, Pimozide, Thioridazine

- Antiarrhythmic such as flecainide, propafenone
- Beta blockers such as metoprolol and Nebivolol used for hypertension
- Atomoxetine (used for ADHD)
- Fesoterodine- antispasmodic used for urinary spasm
- Neurologic agents such as Tetrabenazine
- Cancer medication Doxorubicin
- Tamsulosin used for BPH (Benign prostatic hypertrophy)

Medications that may enhance the toxic effects of Bupropion:

- Anti-Parkinson's medications (dopamine agonists)
- Other CYP2B6 inhibitors such as ticlopidine, clopidogrel may increase the serum levels of Bupropion (CYP2B6 inducers)
- HIV medications such as Efavirenz, Lopinavir, Ritonavir
- Antiepileptic medication: Carbamazepine, Phenobarbital, Phenytoin
- Antifungal agents such as Isavuconazonium,

Other interactions:

- Vortioxetine- May increase serum levels of vortioxetine and increase toxicity.
- Lorcaserin- combo may lead to serotonin syndrome
- Monoamine oxidase inhibitors- used with bupropion may result in significant blood pressure elevations
- Tamoxifen- concurrent use may decrease serum levels of acute metabolites of Tamoxifen.
- CNS toxicity can occur with concomitant use with dopaminergic drugs such as amantadine levodopa

Effect on drug screen - can cause false urine test results for amphetamines

Effect on pain medications:

- Naltrexone may reduce the therapeutic benefits of opioids
- May reduce the therapeutic action of codeine
- May increase toxic effect of opioid antagonist such as methylnaltrexone, Naloxegol, and increase risk of opioid withdrawal