PHENTERMINE HCL- phentermine hcl capsule
DIRECT RX

PHENTERMINE HCL C-IV

Phentermine Hydrochloride, USP 15 mg and 30 mg is indicated as a short-term (a few weeks) adjunct in a regimen of weight reduction based on exercise, behavioral modification and caloric restriction in the management of exogenous obesity for patients with an initial body mass index ≥30 kg/m2, or≥27 kg/m2 in the presence of other risk factors (e.g., controlled hypertension, diabetes, hyperlipidemia).

Below is a chart of Body Mass Index (BMI) based on various heights and weights.

BMI is calculated by taking the patient's weight, in kilograms (kg), divided by the patient's height, in meters (m), squared. Metric conversions are as follows: pounds ÷ 2.2 = kg; inches x 0.0254 = meters.

91cf84db-figure-01
The limited usefulness of agents of this class, including Phentermine hydrochloride, [see CLINICAL PHARMACOLOGY (12.1, 12.2)] should be measured against possible risk factors inherent in their use such as those described below.

Exogenous Obesity
Dosage should be individualized to obtain an adequate response with the lowest effective dose.
The usual adult dose is 15 mg to 30 mg at approximately 2 hours after breakfast for appetite control. Late evening medication should be avoided because of the possibility of resulting insomnia. Administration of one capsule (30 mg) daily has been found to be adequate in depression of the appetite for 12 to 14 hours.

Phentermine is not recommended for use in patients 16 years of age and under.

Late evening medication should be avoided because of the possibility of resulting insomnia.

Capsules containing 15 mg and 30 mg Phentermine Hydrochloride

•History of cardiovascular disease (e.g., coronary artery disease, stroke, arrhythmias, congestive heart failure, uncontrolled hypertension)

•During or within 14 days following the administration of monoamine oxidase inhibitors

•Hyperthyroidism

•Glaucoma

•Agitated states

•History of drug abuse

•Pregnancy [see Use in Specific Populations (8.1)]

•Nursing [see Use in Specific Populations (8.3)]

•Known hypersensitivity, or idiosyncrasy to the sympathomimetic amines

5.1 Co-administration with Other Drug Products for Weight Loss

Phentermine is indicated only as short-term (a few weeks) monotherapy for the management of exogenous obesity. The safety and efficacy of combination therapy with phentermine and any other drug products for weight loss including prescribed drugs, over-the-counter preparations, and herbal products, or serotonergic agents such as selective serotonin reuptake inhibitors (e.g., fluoxetine, sertraline, fluvoxamine, paroxetine), have not been established. Therefore, co-administration of phentermine and these drug products is not recommended.

5.2 Primary Pulmonary Hypertension

Primary Pulmonary Hypertension (PPH) – a rare, frequently fatal disease of the lungs – has been reported to occur in patients receiving a combination of phentermine with fenfluramine or dexfenfluramine. The possibility of an association between PPH and the use of phentermine alone cannot be ruled out; there have been rare cases of PPH in patients who reportedly have taken phentermine alone. The initial symptom of PPH is usually dyspnea. Other initial symptoms may include angina pectoris, syncope or lower extremity edema. Patients should be advised to report immediately any deterioration in exercise tolerance. Treatment should be discontinued in patients who develop new, unexplained symptoms of dyspnea, angina pectoris, syncope or lower extremity edema, and patients should be evaluated for the possible presence of pulmonary hypertension.

5.3 Valvular Heart Disease

Serious regurgitant cardiac valvular disease, primarily affecting the mitral, aortic and/or tricuspid valves, has been reported in otherwise healthy persons who had taken a combination of phentermine with fenfluramine or dexfenfluramine for weight loss. The possible role of phentermine in the etiology of these valvulopathies has not been established and their course in individuals after the drugs are stopped is not known. The possibility of an association between valvular heart disease and the use of phentermine alone cannot be ruled out; there have been rare cases of valvular heart disease in patients who reportedly have taken phentermine alone.

5.4 Development of Tolerance, Discontinuation in Case of Tolerance

When tolerance to the anorectant effect develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued.

5.5 Effect on the Ability to Engage in Potentially Hazardous Tasks

Phentermine may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly.

5.6 Risk of Abuse and Dependence

Phentermine is related chemically and pharmacologically to amphetamine (d- and dll-amphetamine) and other related stimulant drugs have been extensively abused. The possibility of abuse of phentermine should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. See Drug Abuse and Dependence (9) and Overdosage (10).

The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

5.7 Usage with Alcohol

Concomitant use of alcohol with Phentermine may result in an adverse drug reaction.

5.8 Use in Patients with Hypertension

Use caution in prescribing Phentermine for patients with even mild hypertension (risk of increase in blood pressure).

5.9 Use in Patients on Insulin or Oral Hypoglycemic Medications for Diabetes Mellitus

A reduction in insulin or oral hypoglycemic medications in patients with diabetes mellitus may be required.

7.1 Monoamine Oxidase Inhibitors
Use of Phentermine is contraindicated during or within 14 days following the administration of monoamine oxidase inhibitors because of the risk of hypertensive crisis.

7.2 Alcohol

Concomitant use of alcohol with phentermine may result in an adverse drug reaction.

7.3 Insulin and Oral Hypoglycemic Medications

Requirements may be altered [see Warnings and Precautions (5.9)].

7.4 Adrenergic Neuron Blocking Drugs

Phentermine may decrease the hypotensive effect of adrenergic neuron blocking drugs.

8.1 Pregnancy
Teratogenic Effects

Pregnancy category X

Phentermine is contraindicated during pregnancy because weight loss offers no potential benefit to a pregnant woman and may result in fetal harm. A minimum weight gain, and no weight loss, is currently recommended for all pregnant women, including those who are already overweight or obese, due to obligatory weight gain that occurs in maternal tissues during pregnancy. Phentermine has pharmacologic activity similar to amphetamine (d- and dll-amphetamine) [see Clinical Pharmacology (12.1)]. Animal reproduction studies have not been conducted with phentermine. If this drug is used during pregnancy, or if the patient becomes pregnant while taking this drug, the patient should be apprised of the potential hazard to a fetus.

8.3 Nursing Mothers

It is not known if Phentermine is excreted in human milk; however, other amphetamines are present in human milk. Because of the potential for serious adverse reactions in nursing infants, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

8.4 Pediatric Use

Safety and effectiveness in pediatric patients have not been established. Because pediatric obesity is a chronic condition requiring long-term treatment, the use of this product, approved for short-term therapy, is not recommended.

8.5 Geriatric Use

In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

This drug is known to be substantially excreted by the kidney, and the risk of toxic reactions to this drug may be greater in patients with impaired renal function. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection, and it may be useful to monitor renal function.

8.6 Renal Impairment

Phentermine was not studied in patients with renal impairment. Based on the reported excretion of Phentermine in urine, exposure increases can be expected in patients with renal impairment. Use caution when administering Phentermine to patients with renal impairment [see Clinical Pharmacology (12.3)].

9.1 Controlled Substance
Phentermine is a Schedule IV controlled substance.

9.2 Abuse

Phentermine is related chemically and pharmacologically to the amphetamines. Amphetamines and other stimulant drugs have been extensively abused and the possibility of abuse of phentermine should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program.

9.3 Dependence

Abuse of amphetamines and related drugs may be associated with intense psychological dependence and severe social dysfunction. There are reports of patients who have increased the dosage of these drugs to many times than recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity and personality changes. A severe manifestation of chronic intoxication is psychosis, often clinically indistinguishable from schizophrenia.

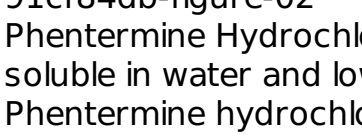
The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

10.1 Acute Overdosage
Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, and panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmia, hypertension or hypotension, and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea and abdominal cramps. Overdosage of pharmacologically similar compounds has resulted in fatal poisoning usually terminates in convulsions and coma.

Management of acute phentermine hydrochloride intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard. Acidification of the urine increases phentermine excretion. Intravenous phentolamine (Regitine®, CIBA) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates overdosage.

10.2 Chronic Intoxication

Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. See Drug Abuse and Dependence (9.3).

Phentermine Hydrochloride USP has the chemical name of α, α -Dimethylphenethylamine hydrochloride. The structural formula is as follows:

91cf84db-figure-02
Phentermine Hydrochloride is a white, odorless, hygroscopic, crystalline powder which is soluble in water and lower alcohols; slightly soluble in chloroform and insoluble in ether.
Phentermine hydrochloride, an anorectic agent for oral administration, is available as:
a) powder-filled capsules containing 15 mg Phentermine hydrochloride (equivalent to 12 mg Phentermine) or 30 mg Phentermine hydrochloride (equivalent to 24 mg Phentermine) and inactive ingredients: corn starch, gelatin, lactose monohydrate and magnesium stearate. In addition, the 15 mg capsules contain D&C Yellow #10, FD&C Blue #1, FD&C Red #3, FD&C Red #40, titanium dioxide and the 30 mg capsules contain D&C Yellow #10, FD&C Red #3, titanium dioxide.
b) bead-filled capsules containing 30 mg Phentermine hydrochloride (equivalent to 24 mg Phentermine) and inactive ingredients: corn starch, sucrose, hypromellose, povidone, and talc. In addition, the capsule contains FD&C blue #1/Brilliant blue FCF Aluminum Lake, D&C red #28 and gelatin.

12.1 Mechanism of Action
Phentermine is a sympathomimetic amine with pharmacologic activity similar to the prototype drugs of this class used in obesity, amphetamine (d- and dll-amphetamine). Drugs of this class used in obesity are commonly known as “anorectics” or “anorexigenics.” It has not been established that the primary action of such drugs in treating obesity is one of appetite suppression since other central nervous system actions, or metabolic effects, may also be involved.

12.2 Pharmacodynamics

Typical of amphetamines include central nervous system stimulation and elevation of blood pressure. Tachyphylaxis and tolerance have been demonstrated with all drugs of this class in which these phenomena have been looked for.

12.3 Pharmacokinetics

Following the administration of Phentermine, Phentermine reaches peak concentrations (Cmax) after 3 to 4.4 hours.

Specific Populations

Renal Impairment

Phentermine was not studied in patients with renal impairment. The literature reported cumulative urinary excretion of phentermine under uncontrolled urinary pH conditions is 62% to 85%. Exposure increases can be expected in patients with renal impairment. Use caution when administering phentermine to patients with renal impairment.

Drug Interactions

In a single-dose study comparing the exposures after oral administration of a

combination capsule of 15 mg Phentermine and 92 mg topiramate to the exposures after oral administration of a 15 mg Phentermine capsule or a 92 mg topiramate capsule, there is no significant topiramate exposure change in the presence of Phentermine. However, in the presence of topiramate, Phentermine Cmax and AUC increase 13% and 42%, respectively.

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility
Studies have not been performed with phentermine to determine the potential for carcinogenesis, mutagenesis or impairment of fertility.

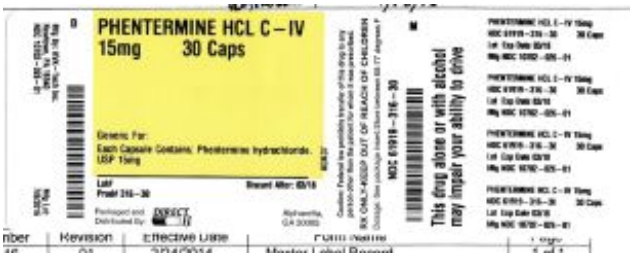
In relatively short-term clinical trials, adult obese subjects instructed in dietary management and treated with “anorectic” drugs lost more weight on the average than those treated with placebo and diet.

The magnitude of increased weight loss of drug-treated patients over placebo-treated patients is only a fraction of a pound a week. The rate of weight loss is greatest in the first weeks of therapy for both drug and placebo subjects and tends to decrease in succeeding weeks. The possible origins of the increased weight loss due to the various drug effects are not established. The amount of weight loss associated with the use of an “anorectic” drug varies from trial to trial, and the increased weight loss appears to be related in part to variables other than the drugs prescribed, such as the physician-investigator, the population treated and the diet prescribed. Studies do not permit conclusions as to the relative importance of the drug and non-drug factors on weight loss.

The natural history of obesity is measured over several years, whereas the studies cited are restricted to a few weeks’ duration; thus, the total impact of drug-induced weight loss over that of diet alone must be considered clinically limited.

Phentermine Hydrochloride capsules, USP are available as follows:

Phentermine Hydrochloride capsules, USP 15 mg are supplied as gray opaque cap, rich yellow opaque body with black imprint “K 26” on both the cap and body, filled with powder.



PHENTERMINE HCL

phentermine hcl capsule

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	**Item Code (Source)**	NDC:61919-316(NDC:10702-026)
Route of Administration	ORAL	**DEA Schedule**	CIV

Active Ingredient/Active Moiety		
Ingredient Name	**Basis of Strength**	**Strength**
PHENTERMINE HYDROCHLORIDE (UNII: 0K2I505OTV) (PHENTERMINE - UNII:C045TQL4WP)	PHENTERMINE HYDROCHLORIDE	15 mg

Inactive Ingredients	
Ingredient Name	**Strength**
STARCH, CORN (UNII: O8232NY3SJ)	
GELATIN (UNII: 2G86QN327L)	
LACTOSE MONOHYDRATE (UNII: EWQ57Q8I5X)	
D&C YELLOW NO. 10 (UNII: 35SW5USQ3G)	

FD&C BLUE NO. 1 (UNII: H3R47K3TBD)	
FD&C RED NO. 3 (UNII: PN2ZH5LOQY)	
FD&C RED NO. 40 (UNII: WZB9127XOA)	
TITANIUM DIOXIDE (UNII: 15FIX9V2JP)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	

Product Characteristics

Color	yellow, gray	**Score**	no score
Shape	CAPSULE	**Size**	14mm
Flavor		**Imprint Code**	K;26
Contains			

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:61919-316-30	30 in 1 BOTTLE; Type 0: Not a Combination Product	07/08/2016	
2	NDC:61919-316-07	7 in 1 BOTTLE; Type 0: Not a Combination Product	07/08/2016	
3	NDC:61919-316-14	14 in 1 BOTTLE; Type 0: Not a Combination Product	07/08/2016	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA040886	07/08/2016	

Labeler - DIRECT RX (079254320)

Establishment

Name	Address	ID/FEI	Business Operations
DIRECT RX		079254320	repack(61919-316)

Revised: 4/2023 DIRECT RX