Phentermine/Topiramate (Qsymia)\textsuperscript{1,2}

**Mechanism of action:** Sympathomimetic combined with an antiepileptic. Induces feelings of satiety and decreases feeling of hunger by modulating central norepinephrine and dopamine receptors (increases the availability of anorexigenic neurotransmitters: dopamine, serotonin and norepinephrine)

**Dose:** Phentermine component is immediate release; topiramate component is extended release:
- 3.75/23 mg (titration dose); 7.5/46 mg; 11.25/69 mg (titration dose) & 15/92 mg (maximum)
- 7.5/46 mg and 15/92 mg are the only two doses approved for long-term treatment.
- Requires titration schedule.

**Titration Schedule for Qsymia:**

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3 – Week 11</th>
<th>Week 12</th>
<th>Week 14</th>
<th>Discontinue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start: 3.75/23 mg (titration dose)</td>
<td>3.75/23 mg (titration dose)</td>
<td>7.5/46 mg and continue</td>
<td>If &lt; 3% weight loss is not achieved, discontinue or increase dose to 11.25/69 mg (titration dose) and continue</td>
<td>If indicated, increase to max dose 15/92 mg</td>
<td>Discontinue by taking 1 dose every other day for at least 1 week prior to stopping.</td>
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</tbody>
</table>

**Indications:** FDA approved in the 2012 for the long-term treatment of obesity.

**Controlled substance** schedule IV

**Drug Interactions:** Guanethidine, CNS stimulants, alcohol, tricyclic antidepressants, MAO inhibitors, antiepileptic drugs, carbonic anhydrase inhibitors, requirements for insulin or oral antidiabetic medications may be modified

**Side effects:** Paresthesias, headache, dizziness, taste aberrations, insomnia, constipation, dry mouth, nasopharyngitis, elevation in heart rate, anxiety, depression, memory or cognitive changes, and decreased bicarbonate

**Contraindications:** Pregnancy (category X, ensure negative pregnancy test monthly and contraception practices in women of childbearing years), breastfeeding, use of MAO inhibitor within 14 days, advanced cardiovascular disease, uncontrolled hypertension, hyperthyroidism, glaucoma, agitation, history of drug abuse.

Laboratory abnormalities may include:
- Metabolic acidosis; elevated creatinine;
- Lowering of glucose levels
- Hypoglycemic events may occur in patients with diabetes. Monitor and adjust/reduce antihyperglycemic medications

Clinical Pearls:
- Given immediate release phentermine, appetite effects are immediate
- Monitor BP and heart rate (variable results on BP and HR)
- *May alter the exposure to oral contraceptives, causing irregular menstrual bleeding but not an increased risk of pregnancy; Oral contraceptives should not be discontinued if spotting occurs*
- May potentiate CNS depressants such as alcohol; patients should avoid alcohol
- May potentiate hypokalemia of non-potassium-sparing diuretics
- Ensure patient consumes appropriate caloric intake when starting Qysmia (patients may be tempted to consume < 1000 kcal per day)
- Refer patients for eye exam within one year to screen for glaucoma
- Patient may be considered a non-responder if < 5% weight loss in 3 months

Please refer to the official prescribing information for each product for approved indications, contraindications, and warnings. Clinicians should appraise the information presented critically and are encouraged to consult appropriate resources for any updated information.