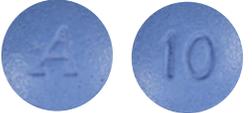
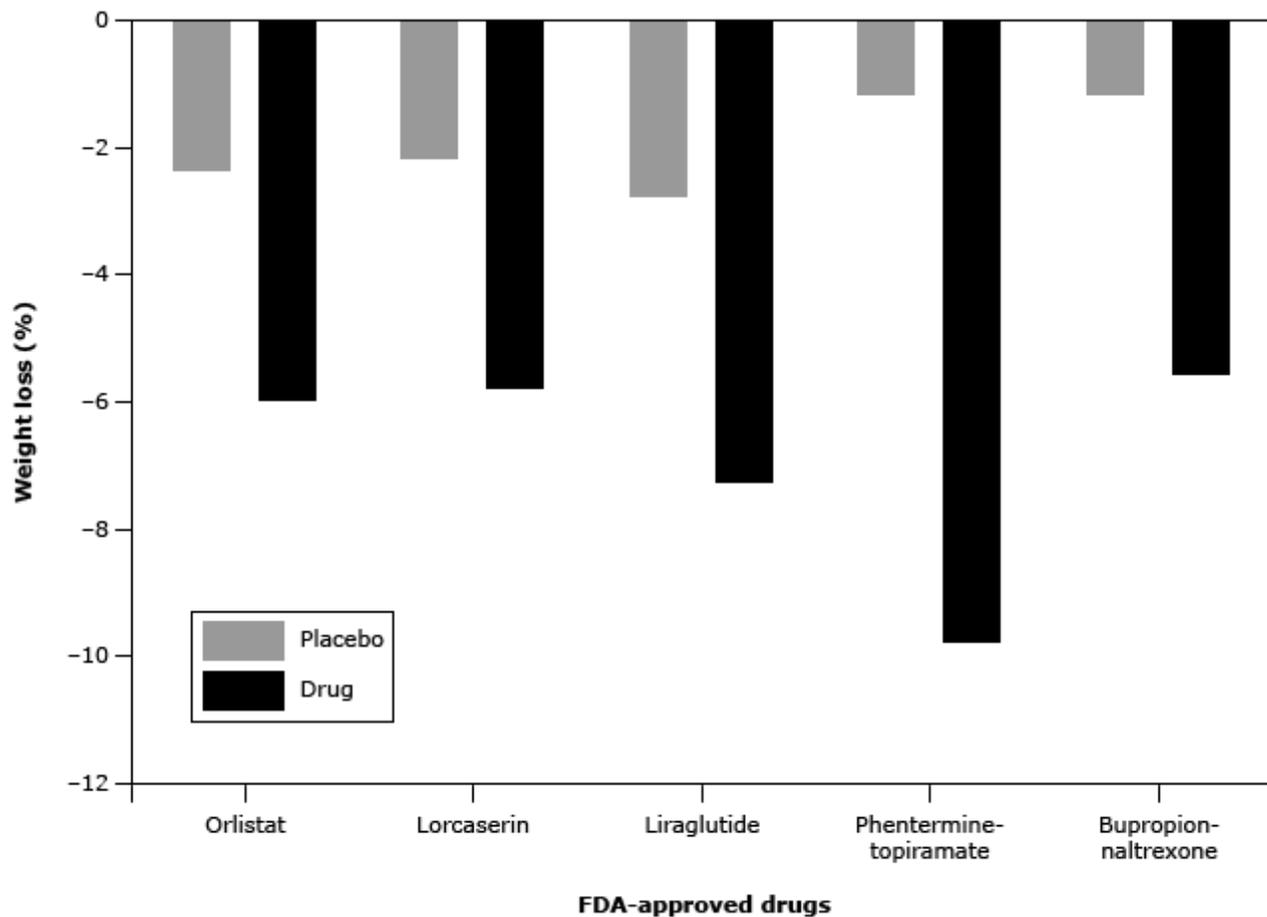


# Weight loss medications

Medication	Mechanism	Target population	Adverse effects	Dosing	Cost
<b>Orlistat</b> 	blocks fat uptake in small intestines	<u>avoid</u> in patients with type II diabetes; side-effects often limit its use	-bloating, gas, fecal incontinence -makes people hungry, causing them to eat high carb diet -nephrotoxicity, pancreatitis	Alli: 60 mg TID with meal containing fat  Xenical: 120 mg TID with meal containing fat	\$40-50 for one month; \$600/month without insurance
<b>Saxenda (liraglutide)</b> 	GLP1 agonist promotes early satiety by decreasing gastric emptying	first line for patients with <b>type II diabetes</b>	-nausea/vomiting, diarrhea -pancreatitis -hypoglycemia <b>-avoid in patients with flx medullary thyroid ca or MEN syndrome</b>	SQ: initial 0.6 mg daily for one week; increase by 0.6 mg weekly to target dose 3 mg once daily; at 16 weeks, discontinue if <4% weight loss not achieved	\$25 for 30 day supply (1 box) with company coupon (with insurance); without insurance ~\$1300/mo
<b>Qsymia</b> (phentermine and topiramate) 	<b>phentermine</b> is sympathomimetic - stimulates hypothalamus to release norepi; <b>topiramate</b> acts centrally (blocks Na channels, enhances GABA(A) activity, inhibits carbonic anhydrase)	- phentermine alone can be useful for <b>short term weight loss</b> (e.g. 3 months prior to wedding); avoid in pts with significant baseline anxiety *Qsymia helps 50% of patients lose 10% of weight.	<b>phentermine:</b> raises BP and HR <b>topiramate:</b> paresthesias, disturbance in attention, <b>teratogenic</b> (must document birth control) *Goal is to lose 0.5->1 lb/wk; risk of rebound weight gain if too fast	first 2 weeks, take low dose, then bring back in 12 weeks to check what percent weight they've lost; if >3%, keep on same dose; if <3%, may need uptitration. If need to stop at highest dose, need to titrate off (risk of seizure).	\$98 for 6 week supply (if send Rx directly to company); \$200/month without insurance
<b>Contrave</b> (bupropion and naltrexone) 	bupropion inhibits reuptake of dopamine and norepinephrine; naltrexone is an opioid antagonist	patients desiring therapy for <b>smoking cessation</b> and obesity	nausea, vomiting, dry mouth, insomnia; transient increase in BP and HR in initial 12 weeks; avoid if pt has uncontrolled HTN, seizure disorder, eating disorder, on chronic opioids	week 1: one tablet daily (8 mg of naltrexone and 90 mg bupropion) week 2: one tablet BID; week 3: two tablets QAM / 1 tablets QPM week 4: two tablets BID	\$60/month with company coupon; \$272/month without insurance
<b>Belviq (Lorcaserin)</b> 	selective 5HT2C serotonin agonist decreases food intake through POMC neurons to promote satiety	good first line single agent for those without diabetes, but can also be used in diabetics	headache, dizziness, nausea, dry mouth; avoid CrCl<30; possible risk of breast ca in rat model (data from clinical trial uncertain, FDA still investigating)	10 mg twice daily; re-evaluate after 12 weeks.	\$100/month with coupon; \$300/month without insurance

## Weight loss at 12 months for FDA-approved drugs



From UptoDate. Data from: Khera R, Murad MH, Chandar AK, et al. Association of pharmacological treatments for obesity with weight loss and adverse events: A systematic review and meta-analysis. JAMA 2016; 315:2424. doi: 10.1001/jama.2016.7602