

# The Carlat Psychiatry Report

## WELLBUTRIN/ZYBAN (bupropion) Fact Sheet (Available in IR, SR, and XL Formulations)

**Manufacturer:** GlaxoSmithKline; available as generic bupropion IR and SR; generic bupropion XL received approval in 2006.

### Indications:

- Major Depressive Disorder
- Prevention of Seasonal Affective Disorder (Wellbutrin XL only)
- Smoking cessation (Zyban only)

### Mechanism:

- Wellbutrin is chemically unrelated to SSRI, tricyclic or other known antidepressants; mediated by noradrenergic and/or dopaminergic mechanisms.

### Dosing:

- Supplied in:
  - XL: 150 mg and 300 mg tablets
  - SR: 100 mg, 150 mg, and 200 mg film-coated tablets
  - IR (original immediate release version): 75 mg and 100 mg tablets
  - Zyban: 150 mg purple tablets
- XL beginning dose: 150 mg QAM; may increase to usual dose of 300 mg QAM if adequately tolerated after at least 4 days; maximum dose 450 mg QAM.
- SR beginning dose: Start at 100 mg QAM, and gradually titrate to usual dose of 150 mg BID; maximum dose 200 mg BID.
- Zyban: Begin two weeks before quit date at 150 mg QD, increase to 150 mg BID after 3 days.
- Dose must be reduced in patients with kidney or liver impairment.

### Side Effects:

- Most common (for Wellbutrin SR 300 mg/day) are: anorexia, dry mouth, rash, sweating, tinnitus, and tremor (>5% and  $\geq$  twice placebo rate).
- Seizure risk at 300 mg/day or less is 0.1%, similar to risk with other ADs; seizure risk at 450 mg/day is about 0.4%, and at 600 mg/day almost 4%.
- **Black Box Warning:** In clinical trials, SSRIs and SNRIs increased the risk of suicidality in children (from 2% to 4%). No actual suicides occurred in these trials.
- Pregnancy Risk Category C

### Drug-drug Interactions:

- Luvox (fluvoxamine) inhibits the metabolism of bupropion, possibly increasing levels.
- Wellbutrin can increase levels of a variety of antidepressants, most notably Effexor.

### Pearls:

- All four formulations are equally effective, and there is no demonstrated difference in risk of seizure; XL has a slight convenience advantage for the patient (once-daily dosing).