

Can Zyban® (bupropion / Wellbutrin®) be given with SSRIs

Product description

Zyban® ✕ ▼ contains **bupropion SR** 150mg and is marketed for smoking cessation at a dose of 150mg po bid x 2-3 months. An initial starting dose of 150mg po od x 3-5 days may help to minimize side effects. (Common side effects include: agitation, insomnia, tremor, GI upset, decreased appetite.)

Wellbutrin® ☞ ☐ also contains **bupropion SR** and is available in 100mg & 150mg tablets. It is marketed for the treatment of depression at a dosage of 100-150mg po od-bid (Max. 450mg/day). **Wellbutrin XL** ☞ ⊗ is now available as 150mg & 300mg tablets.

Mechanism of action

Bupropion affects both dopamine and norepinephrine without significant effects on serotonin. The exact mechanism of action is not completely understood but it is thought that the neurotransmitters may be involved to reduce nicotine withdrawal symptoms and treat depression.¹

Combination use with SSRIs

Monotherapy with an antidepressant is usually preferable to combination therapy. However, there are cases where combination therapy may be indicated. While concurrent use of bupropion with MAOIs is contraindicated², bupropion has been safely used together with SSRIs in trials (& only case reports with venlafaxine). Thus, in a successfully treated depressed patient on a SSRI who wants to quit smoking, the cautious addition of bupropion (Zyban®) to the SSRI may be considered. Alternatively, if the patient is a poor responder to their current antidepressant therapy, simply switch to bupropion. If the initial antidepressant dose was relatively high, one may consider tapering the dose prior to adding or switching to bupropion. If switching, a washout period may be desirable to minimize side effects.

Potential interactions: Since bupropion can cause a dose-dependent increase in seizures, concurrent use with SSRIs could increase this risk. Concurrent use could also increase the potential for additive stimulation effects such as tremor, anxiety, panic symptoms, and psychotic reactions.

Concurrent use of bupropion with SSRIs has been successful in studies for the treatment of SSRI related sexual dysfunction.^{3,4} These studies have usually aimed for lower doses of bupropion (75-150mg /day). Concurrent use has also been cautiously recommended in bipolar patients⁵ or for resistant depression⁶ after several options have been tried first. Combination limitations include: ↑ SE's, ↑ DI's, ↑ cost & the possibility that bupropion monotherapy may be effective.

Summary

The concurrent use of bupropion (Zyban®/Wellbutrin®) and SSRIs may be considered in select patients who do not have contraindications (such as a history of seizures), and who are already well stabilized on an SSRI. Since the combination has only limited studies⁷, caution is warranted.

☞ EDS ✕ non-formulary in SK ▼=covered by NIHB ⊗=not NIHB ☐=prior approval NIHB DI=drug interaction SE=side effects

References

- ¹ The Medical Letter on Drugs and Therapeutics, 1997;39(1007):77-78.
- ² Hansten and Horn's Drug Interactions Analysis and Management 2006.
- ³ Ashton AK, Rosen RC. Bupropion as an antidote for SSRI-induced sexual dysfunction. J Clin Psychiatry 1998;59:112-5. (Clayton AH, et al. A placebo-controlled trial of bupropion SR as an antidote for SSRI-induced sexual dysfunction. J Clin Psychiatry. 2004 Jan;65(1):62-7.)
- ⁴ Labbate LA, et al. Treatment of fluoxetine-inuced sexual dysfunction with bupropion: a case report. Ann Clin Psychiatry 1994;6:13-15.
- ⁵ The Expert Consensus Series: Bipolar Disorder 2004. www.psychguides.com; Canadian BPAD Guidelines 2005 www.canmat.org
- ⁶ Canadian Depression Guidelines 2001 www.canmat.org
- ⁷ Trivedi MH, et al. STAR*D Study Team. Medication augmentation after the failure of SSRIs for depression. n=565 N Engl J Med. 2006 Mar 23;354(12):1243-52.