

## Specialist Initiated Drugs

### Prescribing Information Sheet

March 2018

#### **Bupropion hydrochloride (Zyban®) – Third-line treatment for depression**

##### **Formulary Status**

Bupropion for the treatment of depression after two previous antidepressants have been tried should be initiated by a KMPT specialist who will prescribe the initial supply.

The specialist will titrate the dose until the patient is stable to a dose range of 150 mg/day to 300 mg/day.

##### **On-going prescribing**

As an 'off licensed use' of a licensed medication, although EKPG have approved the information in this Prescribing Information sheet it remains an individual GPs decision on whether to accept a request for ongoing prescribing.

The consultant should discuss possibility of on-going prescribing with the GP **prior** to commencing treatment. In the event a GP does not accept the request to continue to prescribe, the KMPT consultant will continue

The responsibility for increasing/decreasing the dose or stopping treatment due to lack of effect or side effects remains with the specialist. They should be consulted if a change in treatment is required.

##### **Full prescribing guidance – Summary of Product Characteristics**

<https://www.medicines.org.uk/emc/product/3827/smpc>

##### **Indication and Dosage**

**Indication-** Bupropion for the treatment of depression after two previous antidepressants have been tried should be initiated by a specialist. Please see information in the above section for on-going supply.

**Presentation-** 150 mg prolonged release tablets

**Dosage and Administration** – It is recommended that patients are initiated on 150mg XL daily and that the dose is not increased for a minimum of 4 days

The maximum dose recommended by the Maudsley Prescribing Guidelines in Psychiatry is 400mg daily; however bupropion is only available in the UK as 150mg XL. The maximum dose recommended by KMPT is therefore 300mg daily which can be prescribed as a single dose of 300mg once daily or 150mg twice daily depending on patient tolerance (the maximum licensed dose in the USA)

**Elderly (over 65 years of age)** - The recommended dose in older people is 150mg once a day

**Renal impairment** - Bupropion should be used with caution in patients with renal insufficiency. The recommended dose in these patients is 150mg once a day

**Hepatic impairment** - Bupropion should be used with caution in patients with hepatic impairment. Because of increased variability in the pharmacokinetics in patients with mild to moderate impairment the recommended dose in these patients is 150mg once a day. No dosage adjustment is required in patients with mild hepatic impairment.

**Paediatric population** - Bupropion is not licensed for use in patients under 18 years of age

**Method of administration** - Bupropion tablets should be swallowed whole. The tablets should not be cut, crushed or chewed as this may lead to an increased risk of adverse effects including seizures.

Bupropion can be taken with or without food

**Overdose** - The main problems in severe overdose are convulsions and rarely cardiogenic shock. Convulsions have been reported after an ingestion of 575 mg (Spiller et al, 1994). Convulsions occur in up to 35% of overdoses (Balit et al, 2003). However, patients have been reported to be seizure-free despite ingestion of up to 9 g in adults and 10 mg/kg in children (Starr et al, 2009).

Bupropion is rapidly and almost completely absorbed. Hydroxybupropion is an important metabolite that may contribute to seizure development. Peak plasma concentrations are reached at 1-3 hours (parent), 6 hours (active metabolites). The half life of bupropion is 8-24 hours (parent), 20-37 hours (metabolites).

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## Monitoring

No routine monitoring is required.

## End of treatment

As with other anti-depressant medicinal products, if bupropion has to be discontinued it is recommended to withdraw it gradually.

If the current dose is 300mg daily this can be reduced to 150mg daily for one week before stopping.

If the current dose is 150mg, this can be stopped immediately without a reducing schedule

## Adverse effects, special warnings and precautions for use (consult SPC for full list)

### Contraindications

Zyban is contraindicated in patients with hypersensitivity to bupropion or any of the excipients

Zyban is contraindicated in patients with a current seizure disorder or any history of seizures.

Zyban is contraindicated in patients with a known central nervous system (CNS) tumour.

### Drug Interactions (consult SPC for full list)

Formal interaction studies have only been performed in adults.

Due to pharmacokinetic interactions plasma levels of bupropion or its metabolites may be altered, which may increase the potential for undesirable effects (e.g. dry mouth, insomnia, seizures). Therefore care should be taken when bupropion is given concomitantly with medicinal products which can induce or inhibit the metabolism of bupropion.

Bupropion inhibits metabolism by cytochrome P450 2D6. Caution is advised when medicinal products metabolised by this enzyme are administered concomitantly.

In the literature it has been shown that medications that inhibit CYP2D6 may lead to reduced concentrations of endoxifen which is the active metabolite of tamoxifen. Therefore the use of bupropion, which is an inhibitor of CYP2D6, should whenever possible be avoided during tamoxifen treatment

## Contact details of Specialist team

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## References

Summary of Product Characteristics Zyban<sup>®</sup>, GlaxoSmithkline updated 04-May-2017 <https://www.medicines.org.uk/emc/product/3827/smpc>

Highlights of prescribing information, FDA May 2017

[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2017/018644s052lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/018644s052lbl.pdf)

The Maudsley Prescribing Guidelines in Psychiatry 12<sup>th</sup> edition 2016