

- **CONCEPTION AND CONTRACEPTION** Manufacturer advises women of childbearing potential should use effective contraception during treatment and for one month after last dose—avoid in women of childbearing potential not using effective contraception unless clearly necessary and the potential benefit outweighs risk; patients should be fully informed of the risks related to the use of zonisamide during pregnancy.
- **PREGNANCY** Manufacturer advises use only if clearly necessary and the potential benefit outweighs risk— toxicity in *animal* studies; patients should be fully informed of the risks related to the use of zonisamide during pregnancy. See also *Pregnancy* in *Epilepsy* p. 321. **Monitoring** The dose should be monitored carefully during pregnancy and after birth, and adjustments made on a clinical basis.
- **BREAST FEEDING** Manufacturer advises avoid for 4 weeks after last dose.
- **HEPATIC IMPAIRMENT** Avoid in severe impairment. **Dose adjustments** Initially increase dose at 2-week intervals if mild or moderate impairment.
- **RENAL IMPAIRMENT** **Dose adjustments** Initially increase dose at 2-week intervals; discontinue if renal function deteriorates.
- **TREATMENT CESSATION** Avoid abrupt withdrawal (consult product literature for recommended withdrawal regimens in children).
- **PRESCRIBING AND DISPENSING INFORMATION** **Switching between formulations** Care should be taken when switching between oral formulations. The need for continued supply of a particular manufacturer's product should be based on clinical judgement and consultation with the patient or their carer, taking into account factors such as seizure frequency and treatment history.

Patients may need to be maintained on a specific manufacturer's branded or generic zonisamide product.

- **PATIENT AND CARER ADVICE** Children and their carers should be made aware of how to prevent and recognise overheating and dehydration. **Medicines for Children leaflet: Zonisamide for preventing seizures** www.medicinesforchildren.org.uk/zonisamide-preventing-seizures
- **NATIONAL FUNDING/ACCESS DECISIONS** **Scottish Medicines Consortium (SMC) decisions** SMC No. 949/14 The *Scottish Medicines Consortium* has advised (March 2014) that zonisamide (*Zonegran*®) is accepted for restricted use within NHS Scotland as adjunctive treatment of focal seizures, with or without secondary generalisation, in adolescents and children aged 6 years and above. It is restricted to use on advice from specialists in paediatric neurology or epilepsy.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug. Forms available from special-order manufacturers include: oral suspension, oral solution

Capsule

CAUTIONARY AND ADVISORY LABELS 3, 8, 10

▶ Zonisamide (Non-proprietary)

Zonisamide 25 mg Zonisamide 25mg capsules | 14 capsule PoM

£8.82 DT = £7.50

Zonisamide 50 mg Zonisamide 50mg capsules | 56 capsule PoM

£39.77 DT = £39.77

Zonisamide 100 mg Zonisamide 100mg capsules | 56 capsule PoM

£62.72 DT = £4.72

▶ Zonegran (Eisai Ltd)

Zonisamide 25 mg Zonegran 25mg capsules | 14 capsule PoM

£8.82 DT = £7.50

Zonisamide 50 mg Zonegran 50mg capsules | 56 capsule PoM

£47.04 DT = £39.77

Zonisamide 100 mg Zonegran 100mg capsules | 56 capsule PoM

£62.72 DT = £4.72

ANTI-EPILEPTICS > BARBITURATES

10-Mar-2020

Phenobarbital

(Phenobarbitone)

● INDICATIONS AND DOSE

All forms of epilepsy except typical absence seizures

▶ BY MOUTH

- ▶ Child 1 month-11 years: Initially 1–1.5 mg/kg twice daily, then increased in steps of 2 mg/kg daily as required; maintenance 2.5–4 mg/kg 1–2 times a day
- ▶ Child 12-17 years: 60–180 mg once daily
- ▶ Adult: 60–180 mg once daily, dose to be taken at night

Status epilepticus

▶ BY INTRAVENOUS INJECTION

- ▶ Adult: 10 mg/kg (max. per dose 1 g), dose to be administered at a rate no more than 100 mg/minute, injection to be diluted 1 in 10 with water for injections

▶ BY SLOW INTRAVENOUS INJECTION

- ▶ Neonate: Initially 20 mg/kg, dose to be administered at a rate no faster than 1 mg/kg/minute, then 2.5–5 mg/kg 1–2 times a day.

- ▶ Child 1 month-11 years: Initially 20 mg/kg, dose to be administered at a rate no faster than 1 mg/kg/minute, then 2.5–5 mg/kg 1–2 times a day
- ▶ Child 12-17 years: Initially 20 mg/kg (max. per dose 1 g), dose to be administered at a rate no faster than 1 mg/kg/minute, then 300 mg twice daily

DOSE EQUIVALENCE AND CONVERSION

- ▶ For therapeutic purposes phenobarbital and phenobarbital sodium may be considered equivalent in effect.

- **CAUTIONS** Avoid in Acute porphyrias p. 1120 · children · debilitated · elderly · history of alcohol abuse · history of drug abuse · respiratory depression (avoid if severe)

CAUTIONS, FURTHER INFORMATION Consider vitamin D supplementation in patients who are immobilised for long periods or who have inadequate sun exposure or dietary intake of calcium.

- **INTERACTIONS** → Appendix 1: antiepileptics

● SIDE-EFFECTS

GENERAL SIDE-EFFECTS

- Agranulocytosis · anticonvulsant hypersensitivity syndrome · behaviour abnormal · bone disorders · bone fracture · cognitive impairment · confusion · depression · drowsiness · folate deficiency · hepatic disorders · memory loss · movement disorders · nystagmus · respiratory depression · skin reactions

SPECIFIC SIDE-EFFECTS

- ▶ With oral use Anxiety · hallucination · hypotension · megaloblastic anaemia · severe cutaneous adverse reactions (SCARs) · thrombocytopenia
- ▶ With parenteral use Agitation · anaemia · aplastic anaemia · Dupuytren's contracture · hypocalcaemia · irritability · toxic epidermal necrolysis

Overdose For details on the management of poisoning, see Active elimination techniques, under Emergency treatment of poisoning p. 1430.

- **ALLERGY AND CROSS-SENSITIVITY** Antiepileptic hypersensitivity syndrome associated with phenobarbital. See under *Epilepsy* p. 321 for more information.

● PREGNANCY

Monitoring The dose should be monitored carefully during pregnancy and after birth, and adjustments made on a clinical basis.

- **BREAST FEEDING** Avoid if possible; drowsiness may occur.