4 Platelet disorders

4.1 Essential thrombocythaemia

Other drugs used for Essential thrombocythaemia
Hydroxycarbamide, p. 985

ANTITHROMBOTIC DRUGS › CYCLIC AMP PHOSPHODIESTERASE III INHIBITORS

Anagrelide

28-May-2018

● **INDICATIONS AND DOSE**

Essential thrombocythaemia in patients at risk of thrombo-haemorrhagic events who have not responded adequately to other drugs or who cannot tolerate other drugs (initiated under specialist supervision)

▸ BY MOUTH

▸ Adult: Initially 500 micrograms twice daily, dose to be adjusted at weekly intervals according to response, increased in steps of 500 micrograms daily; usual dose 1–3 mg daily in divided doses (max. per dose 2.5 mg); maximum 10 mg per day

● **CAUTIONS** Cardiovascular disease—assess cardiac function before and regularly during treatment · concomitant use of drugs that prolong QT-interval—assess cardiac function before and regularly during treatment · risk factors for QT-interval prolongation—assess cardiac function before and regularly during treatment

● **INTERACTIONS** → Appendix 1: anagrelide

● **SIDE-EFFECTS**

▸ **Common or very common** Anaemia · arrhythmias · asthenia · diarrhoea · dizziness · fluid retention · gastrointestinal discomfort · gastrointestinal disorders · headaches · nausea · palpitations · skin reactions · vomiting

▸ **Uncommon** Alopecia · appetite decreased · arthralgia · chest pain · chills · confusion · congestive heart failure · constipation · depression · dry mouth · dyspnoea · erectile dysfunction · fever · haemorrhage · hypertension · insomnia · malaise · memory loss · myalgia · nervousness · oedema · pain · pancreatitis · pancytopenia · pneumonia · pulmonary hypertension · respiratory disorders · sensation abnormal · syncope · thrombocytopenia · weight changes

▸ **Rare or very rare** Angina pectoris · cardiomegaly · cardiomyopathy · coordination abnormal · drowsiness · dysarthria · influenza like illness · myocardial infarction · nocturia · pericardial effusion · postural hypotension · renal failure · tinnitus · vasodilation · vision disorders

▸ **Frequency not known** Hepatitis · nephritis tubulointerstitial

● **CONCEPTION AND CONTRACEPTION** Effective contraception required during treatment.

● **PREGNANCY** Manufacturer advises avoid (toxicity in *animal* studies).

● **BREAST FEEDING** Manufacturer advises avoid—present in milk in *animal* studies.

● **HEPATIC IMPAIRMENT** Manufacturer advises use with caution in mild impairment; avoid in moderate-to-severe impairment or if serum transaminases exceed 5 times the upper limit of normal.

● **RENAL IMPAIRMENT** Manufacturer advises avoid if eGFR less than 50 mL/minute/1.73 m^2.

● **MONITORING REQUIREMENTS**

▸ Monitor full blood count (monitor platelet count every 2 days for 1 week, then weekly until maintenance dose established).

▸ Monitor liver function.

▸ Monitor serum creatinine.

▸ Monitor urea.

▸ Monitor electrolytes (including potassium, magnesium and calcium) before and during treatment.

● **PATIENT AND CARER ADVICE**

Driving and skilled tasks Dizziness may affect performance of skilled tasks (e.g. cycling, driving).

● **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

Capsule

▸ Anagrelide (Non-proprietary)
Anagrelide (as Anagrelide hydrochloride) 500 microgram Anagrelide 500microgram capsules | 100 capsule PoM £404.57 DT = £402.87

▸ Xagrid (Shire Pharmaceuticals Ltd)
Anagrelide (as Anagrelide hydrochloride) 500 microgram Xagrid 500microgram capsules | 100 capsule PoM £404.57 DT = £402.87

4.2 Thrombocytopenias

ANTIHAEMORRHAGICS › THROMBOPOIETIN RECEPTOR AGONISTS

Lusutrombopag

14-Jan-2020

● **DRUG ACTION** Lusutrombopag is a thrombopoietin receptor agonist that binds to and activates the thrombopoietin (TPO) receptor, thereby increasing platelet production.

● **INDICATIONS AND DOSE**

Thrombocytopenia [in patients with chronic liver disease undergoing invasive procedures] (under expert supervision)

▸ BY MOUTH

▸ Adult: 3 mg once daily for 7 days, treatment to be started at least 8 days before procedure; in clinical trials procedures were carried out between 9 to 14 days after starting lusutrombopag

● **CAUTIONS** Administration before laparotomy, thoracotomy, open-heart surgery, craniotomy, or excision of organs (no clinical experience) · body-weight less than 45kg (limited information available) · history of splenectomy (no clinical experience) · risk factors for thromboembolism

CAUTIONS, FURTHER INFORMATION

▸ Body-weight less than 45kg Monitor platelet count approximately 5 days after the first dose and as necessary thereafter; stop treatment if the platelet count reaches $50x10^9$/litre or more and has increased $20x10^9$/litre from baseline.

● **SIDE-EFFECTS**

▸ **Common or very common** Headache · nausea · rash

▸ **Frequency not known** Embolism and thrombosis

● **PREGNANCY** Manufacturer advises avoid—no information available.

● **BREAST FEEDING** Manufacturer advises avoid—present in milk in *animal* studies.

● **HEPATIC IMPAIRMENT** Manufacturer advises caution in severe impairment (limited information available)—monitor platelet count approximately 5 days after the first dose and as necessary thereafter. Stop treatment if the platelet count reaches $50x10^9$/litre or more and has increased $20x10^9$/litre from baseline.

● **MONITORING REQUIREMENTS** Manufacturer advises monitor platelet count prior to procedure; more frequent monitoring may be required in some patients—see *Cautions* and *Hepatic Impairment* for further information.