- **Rare or very rare** Hyperglycaemia · toxic epidermal necrolysis

SIDE-EFFECTS, FURTHER INFORMATION Signs and symptoms suggestive of pancreatitis (including raised serum lipase) should be evaluated — discontinue if pancreatitis diagnosed.

- **PREGNANCY**

Dose adjustments Only use low-dose booster to increase the effect of other protease inhibitors.

- **HEPATIC IMPAIRMENT** When used as a *low-dose booster*, manufacturer advises caution in severe impairment; avoid in decompensated liver disease. When used in *high-doses*, manufacturer advises avoid in severe impairment.

Dose adjustments Manufacturer advises consult product literature of co-administered protease inhibitor.

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

Tablet

CAUTIONARY AND ADVISORY LABELS 21, 25

- **Ritonavir (Non-proprietary)**
  Ritonavir 100 mg Ritonavir 100mg tablets | 30 tablet PoM £16.52-£19.44 | 30 tablet PoM £19.44 (Hospital only)
- **Norvir** (AbbVie Ltd)
  Ritonavir 100 mg Norvir 100mg tablets | 30 tablet PoM £19.44

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Tipranavir

06-May-2020

- **INDICATIONS AND DOSE**

HIV infection resistant to other protease inhibitors, in combination with other antiretroviral drugs in patients previously treated with antiretrovirals–with low-dose ritonavir

- BY MOUTH USING CAPSULES
- Child 12–17 years: 500 mg twice daily
- BY MOUTH USING ORAL SOLUTION
- Child 2–11 years: 375 mg/m^2 twice daily (max. per dose 500 mg)

DOSE EQUIVALENCE AND CONVERSION

- The bioavailability of tipranavir oral solution is higher than that of the capsules; the oral solution is not interchangeable with the capsules on a milligram-for-milligram basis.

- **CAUTIONS** Abnormal liver function tests and/or signs or symptoms of liver injury (consider delaying treatment if serum transaminases are greater than 5 times the upper limit of normal—consult product literature) · patients at risk of increased bleeding from trauma, surgery or other pathological conditions
- **INTERACTIONS** → Appendix 1: HIV-protease inhibitors
- **SIDE-EFFECTS**
- **Uncommon** Hyperamylasaemia · hyperglycaemia · influenza like illness · renal failure · thrombocytopenia
- **Rare or very rare** Dehydration · hyperbilirubinaemia · intracranial haemorrhage
- **Frequency not known** Bleeding tendency

SIDE-EFFECTS, FURTHER INFORMATION Potentially life-threatening hepatotoxicity reported. Discontinue if signs or symptoms of hepatitis develop or if liver-function abnormality develops (consult product literature).

- **PREGNANCY** Manufacturer advises use only if potential benefit outweighs risk—toxicity in *animal* studies.
- **HEPATIC IMPAIRMENT** Manufacturer advises caution in mild impairment (risk of increased exposure)—monitor liver function before treatment, then every two weeks for 3 months, then monthly until 48 weeks, then every 8 to 12 weeks thereafter, and discontinue if liver function worsens; avoid in moderate to severe impairment.
- **MONITORING REQUIREMENTS** Monitor liver function before treatment, then every 2 weeks for 1 month, then every 4 weeks until 24 weeks, then every 8 to 12 weeks thereafter.
- **PRESCRIBING AND DISPENSING INFORMATION** Flavours of oral liquid formulations may include toffee and mint.
- **PATIENT AND CARER ADVICE** Patients or carers should be told to observe the oral solution for crystallisation; the bottle should be replaced if more than a thin layer of crystals form (doses should continue to be taken at the normal time until the bottle is replaced).

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

Capsule

CAUTIONARY AND ADVISORY LABELS 5, 21

EXCIPIENTS: May contain Ethanol

- **Aptivus** (Boehringer Ingelheim Ltd)
  Tipranavir 250 mg Aptivus 250mg capsules | 120 capsule PoM £441.00

Maraviroc

20-May-2020

- **DRUG ACTION** Maraviroc is an antagonist of the CCR5 chemokine receptor.

- **INDICATIONS AND DOSE**

CCR5-tropic HIV infection in combination with other antiretroviral drugs in patients previously treated with antiretrovirals

- BY MOUTH
- Child: (consult local protocol)

- **UNLICENSED USE** Not licensed for use in children.
- **CAUTIONS** Cardiovascular disease
- **INTERACTIONS** → Appendix 1: maraviroc
- **SIDE-EFFECTS**
- **Common or very common** Abdominal pain · anaemia · appetite decreased · asthenia · depression · diarrhoea · flatulence · headache · insomnia · nausea · rash
- **Uncommon** Hyperbilirubinaemia · increased risk of infection · myopathy · postural hypotension · proteinuria · renal failure · seizure
- **Rare or very rare** Angina pectoris · granulocytopenia · hepatic disorders · metastases · neoplasms · pancytopenia · severe cutaneous adverse reactions (SCARs)
- **Frequency not known** Fever · hypersensitivity · immune reconstitution inflammatory syndrome · organ dysfunction · osteonecrosis

SIDE-EFFECTS, FURTHER INFORMATION **Osteonecrosis** Osteonecrosis has been reported in patients with advanced HIV disease or following long-term exposure to combination antiretroviral therapy.

Hepatotoxicity Manufacturer advises consider discontinuation if signs or symptoms of acute hepatitis, or increased liver transaminases with systemic symptoms of hypersensitivity occur.

- **PREGNANCY** Manufacturer advises use only if potential benefit outweighs risk—toxicity in *animal* studies.
- **HEPATIC IMPAIRMENT** Manufacturer advises caution in impairment and in patients with chronic hepatitis (increased risk of hepatic side-effects; limited information available).
- **RENAL IMPAIRMENT** If estimated glomerular filtration rate less than 80 mL/minute/1.73 m^2, consult product literature.