



Quinine: reminder of dose-dependent QT-prolonging effects Updated Medicine Interactions

Quinine is not recommended as a routine treatment for nocturnal leg cramps¹ and is non-formulary for this indication in Tayside.

Quinine is well known to have effects on the QT interval. Prescribers should be aware of dose-dependent effects on the QT interval and use caution if prescribing quinine in patients with conditions that predispose to QT prolongation such as: pre-existing cardiac disease or electrolyte disturbance; in patients taking other medicines that could prolong the QT interval; or in patients with atrioventricular block.²

Quinine is metabolised via hepatic oxidative cytochrome P450 pathways, predominantly by CYP3A4. As CYP3A4 is involved in the metabolism of many drugs, it is important that potential interacting medicines are considered before co-prescription of quinine with other medicines. Quinine has a number of potentially significant drug interactions, including digoxin and warfarin, and also has significant toxicity in overdose.¹ It has been identified that serum levels of phenobarbital or carbamazepine could become raised when these anticonvulsants are used concomitantly with quinine; therefore it is now advised to monitor patients closely for evidence of toxicity if administration of quinine with phenobarbital or carbamazepine is necessary.²

In reviewing patients who are prescribed quinine for nocturnal leg cramps prescribers are reminded to consider whether continued treatment is required and potential adverse effects. After an initial trial of 4 weeks, treatment should be stopped if there is no benefit. Treatment should be interrupted approximately every 3 months to reassess the benefit. In patients taking quinine long term, a trial discontinuation may be considered.¹

Quinine is only included in the Tayside Area Formulary for the treatment of malaria. [NHS Tayside treatment of malaria guidance](#) includes IV quinine followed by oral quinine as one of the treatment options. This guidance includes information on the potential for quinine to prolong the QT interval and advises to check an ECG before starting IV quinine, and in older patients and patients with underlying cardiac disease to use cardiac monitoring and consider withholding regular anti-arrhythmic medication.

1. MHRA. Quinine: not to be used routinely for nocturnal leg cramps. Drug Safety Update volume 3, issue 11; June 2010: 3.

2. MHRA. Quinine: reminder of dose-dependent QT-prolonging effects; updated medicine interactions. Drug Safety Update volume 11, issue 4; November 2017: 2.

ESMYA® (ulipristal acetate) for Uterine Fibroids – New Safety Measures

An urgent medicine safety alert has been issued regarding Esmya® (ulipristal acetate 5mg) and reports of serious liver injury in women using this medicine for uterine fibroids. The MHRA have advised of new temporary safety measures whilst an EU wide review is undertaken. These include:

- Do **not** prescribe or supply any new treatment courses of Esmya® (including to women who have completed previous treatment courses).
- Perform LFTs at least monthly in all women currently taking Esmya® and repeat 2 to 4 weeks after stopping treatment.
- Check transaminase levels immediately in current or recent users of Esmya® who present with signs & symptoms of liver injury.
- Stop Esmya® treatment in any woman who develops transaminase levels more than 2 times the upper limit of normal and continue to monitor as clinically indicated.

See [MHRA Dear Healthcare letter - Esmya® \(ulipristal acetate\) for uterine fibroids](#) for further information.

Esmya® has moved to non-formulary in the Tayside Area Formulary.

For full information on any of the drugs listed below use the link to the Scottish Medicines Consortium (SMC) website below to search by generic, brand or SMC no.
See NHS Tayside 'Local Decisions on SMC Advice' database (link below) for full details on Board decisions - these are currently listed alphabetically by page.

SMC Advice

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aviptadil / phentolamine 25 micrograms / 2mg solution for injection (Invicorp®)
SMC No 1284/17

eliglustat 84mg hard capsules (Cerdelga®)
SMC No 1277/17

palbociclib 75mg, 100mg and 125mg hard capsules (Ibrance®)
SMC No 1276/17

tiotropium 2.5 microgram inhalation solution (Spiriva Respimat®)
SMC No 411/07

SMC 'Not recommended' medicines - 11 December 2017

bezlotoxumab 25mg/mL concentrate for solution for infusion (Zinplava®)
SMC No 1293/17

brodalumab 210mg solution for injection in pre-filled syringe (Kyntheum®)
SMC No 1283/17

fulvestrant 250 mg solution for injection (Faslodex®)
SMC No 1294/17

reslizumab 10mg/mL concentrate for solution for infusion (Cinqaero®)
SMC No 1233/17



New & Updated Formulary Links

Links updated or added within the formulary include:

[Information for adult patients using verapamil for cluster headaches \(PIL\)](#) (Staffnet link)

Other Formulary Updates

Accrete D3® One a Day 1000mg/880IU Chewable tablets has replaced Calceos® as the first choice for patients unable to swallow standard Accrete D3® tablets. The one a day chewable formulation of Accrete D3® has been added to the existing Accrete D3® formulary entry as a first choice along with standard tablets.

Aviptadil/phentolamine (Invicorp®) has been added to the formulary in addition to current therapies for erectile dysfunction for initiation after specialist consultation (Amber traffic light) if treatment with injectable alprostadil has failed or where the patient has suffered unacceptable adverse effects. See formulary section [07.04.05 Prostaglandin analogues and peripheral vasodilators](#).

Links to Additional Information

Monthly Drug Safety Updates:

www.gov.uk/government/publications/drug-safety-update-monthly-newsletter

For full details of medicines and forthcoming SMC Advice see SMC Website:

www.scottishmedicines.org.uk

For a Summary of a Product's Characteristics (SPCs) see Electronic Medicines Compendium Website:

<http://www.medicines.org.uk/emc/>

For full details on NHS Board decisions see Tayside Area Formulary - Local Decisions on SMC Advice database:

<http://www.nhstaysideadtc.scot.nhs.uk/approved/formular/medsearchmain.htm>

Local implementation of SMC recommendations is taken forward by the Tayside Prescribing Support Unit (PSU). This bulletin is based on evidence available to Tayside PSU at time of publication and is covered by the Disclaimer and Terms & Conditions of Use.

Medicines within the Tayside Area Formulary are intended to guide choice on a rational selection of medicines for **adults** which have been included on the basis of clinical efficacy, safety, patient acceptability and cost-effectiveness.

Local processes exist to allow prescribing of non-SMC approved medicines for individual patients and are available in the [NHS Tayside Policy on the Prescribing of Medicines that are Non-formulary \(including Individual Patient Treatment Requests\)](#).

This bulletin is produced by the Medicines Advisory Group (MAG), which is a sub-group of the NHS Tayside Area Drug and Therapeutics Committee. Please direct any queries to:

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