

Medicines Optimisation

# Prescribing Memo

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## MHRA Drug Safety Update Nitrofurantoin, reminder on precautions for use

Date: 11<sup>th</sup> September 2013

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### Summary

Use of nitrofurantoin for urinary tract infections is contraindicated in patients with <60 mL/min creatinine clearance. Healthcare professionals should be aware of a patient's current renal function when prescribing, especially for elderly patients

### Please note e-GFR and creatinine clearance are not the same thing

The link below can be used to calculate creatinine clearance from serum creatinine values. You will also need age and weight of the patient.

<http://www.nuh.nhs.uk/nch/antibiotics/Renal%20impairment/clcrcalc.asp>

Alternatively practices using SystemOne, can access clinical tools and click on Renal Disease Calculations in order to obtain Creatinine clearance.

Nitrofurantoin is an oral antibiotic used in the treatment of urinary tract infections. The antibacterial efficacy in this infection depends on the renal secretion of nitrofurantoin into the urinary tract. In patients with renal impairment, renal secretion of nitrofurantoin is reduced, which can result in treatment failure. Nitrofurantoin is therefore contraindicated in those with <60 mL/min creatinine clearance.

Since January 2012, the MHRA have received reports of 11 patients with renal impairment who had experienced inappropriate prescription of nitrofurantoin, some of which resulted in treatment failure.

#### Reminder for healthcare professionals:

- Be aware of current renal function when prescribing nitrofurantoin, especially for elderly patients
- The product information should be consulted in relation to established risks of nitrofurantoin, which include: pulmonary toxicity; hepatic toxicity; peripheral neuropathy; and contraindications in G6PD deficiency and acute porphyria
- Guidance on the appropriate use of antibiotics can be found at

<http://www.cddmedicinesmanagement.nhs.uk/documents/Prescribing/Guidelines/Infections/MANAGEMENT%20OF%20INFECTION%20GUIDANCE%20FOR%20PRIMARY%20CARE%20-%202013%20review.pdf>