



Shortage of methylphenidate modified-release (MR) tablets

Introduction

There was a National Patient Safety Alert (NatPSA) issued in September 2023 concerning the shortage of methylphenidate modified-release (MR) capsules and tablets, lisdexamfetamine capsules, and guanfacine MR tablets. Whilst these supply issues subsequently improved it is understood that a significant stock issue with methylphenidate modified-release **tablets** e.g. Concerta, Xaggitin, Xenidate has arisen again.

Recommendations

The Specialist Pharmacy Services (SPS) have produced some useful guidance on [Considerations when prescribing modified-release methylphenidate](#). Within this they provide the following advice on

Switching between brands

“There may be occasions when switching between brands is necessary (for example, due to a manufacturing shortage or symptom control). The MHRA advises [caution if switching between MR methylphenidate products](#) as it can alter symptom management at different times of the day. This is due to differences in available strengths, ratios of IR to MR methylphenidate, and pharmacokinetics.”

As such, since different brands of the MR **tablets** have a similar pharmacokinetic profile if there is a supply issue with one brand of MR **tablets** it is usually recommended to switch to another brand of MR **tablet**. However, if there are no brands of MR **tablet** available it will be necessary to switch the patient to a different preparation. SPS advise that 18mg of the MR **tablets** are approximately equivalent to 15mg of immediate release (IR) tablets. There may however be an issue with switching patients, particularly school-aged children, to immediate release tablets since the majority will require a second dose at midday or late afternoon. Therefore, it might be better to consider switching appropriate patients to MR **capsules** because whilst these preparations have a shorter duration of action than the MR **tablets**, patients are less likely to require a second dose. SPS advise that 15mg of MR **capsules** (rather than 18mg of the MR **tablet**) is approximately equivalent to 15mg of IR tablets. Unfortunately, since there aren't MR **capsule** dosage equivalences for most of the MR **tablet** preparations the [suggested](#) alternatives in the table below are a slightly lower equivalent dose, except for the 36mg MR tablet preparation. As such if patients on XL capsules get break-through symptoms during the day it may be appropriate for them to be prescribed a 5mg dose of methylphenidate IR tablets at midday or late afternoon. If they still get break-through symptoms, then it may be appropriate to increase the dose of the XL capsule.

Usual dose of Methylphenidate MR tablets	Suggested alternative dose
Methylphenidate 18mg XL OD	Methylphenidate 10mg XL capsule OD
Methylphenidate 27mg XL OD	Methylphenidate 20mg XL capsule OD
Methylphenidate 36mg XL OD	Methylphenidate 30mg XL capsule OD
Methylphenidate 54mg XL OD	Methylphenidate 40mg XL capsule OD

Note – The brands of methylphenidate use XL rather than MR.

Note – Equasym is the brand of MR capsules with the most similar pharmacokinetic profile to MR tablets. Unfortunately, this brand is not licensed for adults.

The MHRA advise that product choice should be made on a case-by-case basis involving the patients (and carer where applicable) and any requirement to switch brands suitably communicated. Patients should be encouraged to report any changes to their symptoms or side effects after switching. It is appreciated that implementing this MHRA advise is not easy and whilst the above guidance is not simple, it is hoped that it will help clinicians if they have patients with methylphenidate stock issues. If required further input should be sought from specialists.