

Shortages of Nifedipine products / Discontinuation of Adalat[®] products including all nifedipine 5mg and 10mg immediate release capsules

**Updated: 17th April 2019 to include current availability of Adipine XL
and Tensipine MR formulations**

Description of products affected

- Nifedipine capsule 5mg is licensed for the prophylaxis of chronic stable angina pectoris, the treatment of Raynaud's phenomenon and essential hypertension. The recommended starting dose is 5 mg every eight hours with subsequent titration of dose according to response, permitting an increase to a maximum of 20 mg every eight hours.¹
- The long acting and slow release formulations of Adalat are licensed for the treatment of hypertension and prophylaxis of angina.²
- The long acting (XL) formulations of Adipine are licensed for the treatment of hypertension and prophylaxis of chronic stable angina pectoris.³
- The modified release (MR) formulations of Tensipine are licensed for the treatment of hypertension and prophylaxis of chronic stable angina pectoris.⁴

Background

Adalat products:

- Adalat 5mg immediate release capsules* –discontinued from February 2019.
- Adalat 10mg immediate release capsules* – discontinued after March 2019.
- Adalat Retard 10mg modified release tablets – discontinued after November 2018.
- Adalat Retard 20mg modified release tablets – discontinued August 2018.
- Adalat LA 20mg*, 30mg and 60mg prolonged release – out of stock until 2021.

*Bayer is the sole supplier of these 3 formulations

Current formulary choices:

- Adipine XL 30mg prolonged release tablets – out of stock until end of April 2019.
- Adipine XL 60mg prolonged release tablets – limited stock available.
- Tensipine 10mg modified release tablets –April 2019 stock is now available.
- Tensipine 20mg modified release tablets – April 2019 stock is now available.

Therefore, due to stock availability issues of the current nifedipine prolonged release formulary choices, where patients in primary care are unable to obtain their normal brand of nifedipine we recommend prescribing:

- **Tensipine MR** – Available as a 10mg or 20mg twice daily tablet.
- **Coracten XL*** - Available as a 30mg or 60mg once daily capsule.

*Capsules should be swallowed whole with a little fluid.

Coracten formulations are licensed for

- Treatment of hypertension.
- Prophylaxis of chronic stable angina pectoris).
- Treatment of Prinzmetal (variant) angina when diagnosed by a cardiologist.

The capsule shells of all Coracten formulations are made of gelatin. If this is clinically unacceptable to the patient an alternative calcium-channel blocker should be considered, noting the variance in licensing.

Alternative agents and management options

Immediate release capsules (5mg and 10mg)

Nifedipine is a dihydropyridine calcium-channel blocker (CCB). In practice, the immediate release capsules should only have been used for treating patients with essential hypertension or chronic stable angina pectoris if no other treatment is appropriate because of a risk of a dose dependent increase in the risk of cardiovascular complications (e.g. myocardial infarction) and mortality which may occur with use of fast release nifedipine capsules.^{1,5} In addition, use of the immediate release capsules can be associated with precipitate and uncontrolled reduction in blood pressure. It would therefore not be the initial treatment of choice for patients with hypertension and angina.

Nifedipine is also formulated as slow release tablets and capsules³, but they are not licensed for the treatment of Raynaud's phenomenon, which is an indication for the immediate-release formulation. No other dihydropyridines are licensed for the treatment of Raynaud's phenomenon. There is clinical experience suggesting that long-acting nifedipine is effective for the treatment of Raynaud's and has fewer adverse reactions than rapid-acting preparations, therefore patients could be switched to a similar dose of a modified release preparation (off-label).⁶

Within primary care nifedipine modified release / prolonged release which are currently available and should be considered are:

- **Tensipine MR.** Available as a 10mg or 20mg twice daily tablet.
- **Coracten XL.** Available as a 30mg or 60mg once daily capsule.

There are no guidance or data on dose conversion between immediate and modified release nifedipine preparations so if a patient needs to be switched, the nearest equivalent daily dose should be prescribed and patient's blood pressure and / or frequency of angina attacks (if applicable) monitored in the initial stages of the switch, in addition to monitoring for adverse effects such as headaches, dizziness and oedema.

Immediate-release nifedipine capsules are administered three times a day.¹ Modified release nifedipine preparations are dosed once or twice daily depending on brand selected. Patients will need to be counselled on the change in frequency of dosing to avoid potential errors. Likewise, they should be advised to report any adverse effects.

Alternatively, for the treatment of angina and hypertension, amlodipine (formulary 1st line CCB) is licensed for both indications.⁷

Autonomic dysreflexia

Individuals with spinal cord injury (SCI) at or above T6 level are at risk of autonomic dysreflexia (AD), an acute and potentially life threatening condition resulting from an excessive autonomic response to stimuli below the level of the SCI.⁹ This can cause severe, sudden hypertension which requires immediate treatment with nifedipine capsules administered sublingually (5 or 10 mg).^{9,10}

Use of nifedipine for this indication is 'Hospital Only'. Prescribing in primary care is not recommended.

Imports of 5mg immediate release capsules

The Department of Health have been working with potential alternative manufacturers and are working to get another licensed supply to the UK market; it is currently estimated that supplies could be available April to May 2019.

Whilst imports of unlicensed product are available, use of an unlicensed product in primary care is not recommended where an alternative product, prescribed off-label, is clinically suitable for the patient. Please consult the Medicines Optimisation Team (CAPCCG.prescribingpartnership@nhs.net) before prescribing imports of unlicensed products or specials.

Long acting/ slow release formulations

The long acting preparations are administered once daily and the slow release preparations twice daily. There are generic versions of all Adalat modified release preparations apart from Adalat LA 20mg.^{3,4,13} When switching between brands, closer monitoring of BP may be required in the initial stages and patients reassured that they are receiving the same drug and dose but to report any adverse effects.

For patients on Adalat LA 20mg, options are to switch to slow release preparation of 10mg strength which is administered twice a day (Coracten SR 10mg capsules) or depending on current BP, trial next strength up (30mg) of a once daily preparation (Coracten XL 30mg capsules). Other long acting CCBs are available and licensed indications should be checked as they may not all share the same ones as the Adalat range.

Administration via enteral feeding tubes or for patients unable to swallow modified release or prolonged release nifedipine tablets

Clinicians in primary care who require information on administration of nifedipine via enteral feeding tubes or for patients unable to swallow modified release / prolonged release formulations should contact the Medicines Optimisation Team via CAPCCG.prescribingpartnership@nhs.net for further advice.

References

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Disclaimer: *The content of this memo may not reflect national guidance. Some of this memo is based on **clinical opinion** from practitioners. Users should bear this in mind. Any decision to prescribe off-label must take into account the relevant GMC guidance and governance procedures for unlicensed medicines. Prescribers are advised to pay particular attention to the risks associated with using unlicensed medicines or using a licensed medicine off-label. As with all prescribing, the prescriber is medically and legally responsible for the prescriptions they sign and for their decisions and actions when they supply and administer medicines or authorise or instruct others to do so.*