

## Perindopril arginine

This is one of a number of bulletins providing further information on medicines that should be given low priority, are poor value for money, are suitable for self care or for which there are safer, more suitable alternatives. This guidance will support Clinical Commissioning Groups (CCGs) in taking action on items that should not routinely be prescribed in primary care or on the NHS. Further bulletins, including the overarching 'Low Value Medicines' information bulletin are available on the PrescQIPP website: <https://www.prescqipp.info/drop-list/headline-areas/the-prescqipp-drop-list#low-value-medicines-lvm>

This bulletin focuses on perindopril arginine tablets and provides the rationale for therapy to be switched to perindopril erbumine and for new patients not to be started on perindopril arginine tablets.

### Recommendations

- Perindopril arginine (Coversyl® arginine) has no clinical benefit over the generic perindopril erbumine salt and is more costly. In view of the difference in cost between perindopril arginine and generic perindopril erbumine the preferred choice is generic perindopril erbumine.
- Commence new patients requiring perindopril on generic perindopril erbumine.
- Review all patients prescribed perindopril arginine or any branded Coversyl® products for suitability for switching to generic perindopril erbumine.
- Switch all suitable patients to generic perindopril erbumine. As with all switches, these should be tailored to the individual patient.

### Background

The NHS England guidance on items which should not routinely be prescribed in primary care lists products that are regarded as low priority for funding, poor value for money or for which there are safer alternatives (<https://www.england.nhs.uk/publication/items-which-should-not-be-routinely-prescribed-in-primary-care-guidance-for-ccgs/>). Perindopril arginine (Coversyl®) features on the list as an item that is poor value for money, as although it is clinically effective, more cost-effective products are available.

There are two commercially available salts of perindopril – perindopril arginine and perindopril erbumine. Perindopril is considered an effective ACE inhibitor, but perindopril arginine has no clinical benefit over perindopril erbumine, no difference in safety profile and is more expensive.

### National guidance

The National Institute for Health and Care Excellence (NICE) advises that if appropriate, non-proprietary (generic) drugs of a low acquisition cost should be prescribed as first line choices of drug therapy for hypertension to minimise costs.<sup>1</sup> Where an antihypertensive drug is indicated (as outlined by NICE), angiotensin-converting enzyme (ACE) inhibitors are one of the mainstays of antihypertensive therapy for most people. They are included in step 1 for patients aged under 55 years and at step 2 (in combination with a calcium channel blocker) and step 3 for all patients.

ACE inhibitors are also indicated in patients with heart failure<sup>2</sup> and in the secondary prevention of myocardial infarction (MI).<sup>3</sup> Perindopril is currently licensed in the UK for the treatment of hypertension, the treatment of symptomatic heart failure and to reduce the risk of cardiovascular events in patients with a history of myocardial infarction and/or revascularisation.<sup>4</sup>

The arginine salt version of perindopril was developed as it is more stable in extremes of the Australian climate than the erbumine salt, which results in a longer shelf-life of three years as opposed to two years.<sup>5,6</sup> However, in the context of the UK climate and supply chain this benefit is not significant and there is no robust evidence to suggest a clinically significant benefit of perindopril arginine over perindopril erbumine.

The manufacturer (Servier) discontinued their original brand Coversyl® when they launched Coversyl® Arginine.<sup>4</sup> Consequently, any branded prescriptions written as Coversyl® (or the combination product Coversyl® Plus) without specifying whether the arginine or erbumine salt is intended, would also mean the more expensive branded product Coversyl® Arginine is dispensed.

## Reviewing prescribing – stopping or switching

Perindopril arginine has no clinical benefit and is more expensive than generic perindopril erbumine. In view of the substantial difference in cost between perindopril arginine and generic perindopril erbumine, the preferred choice is generic perindopril erbumine.

**Table 1: Recommended dose equivalence<sup>7</sup>**

Current treatment	Switch to
Coversyl® Arginine 2.5mg once daily	Perindopril erbumine 2mg once daily
Coversyl® Arginine 5mg once daily	Perindopril erbumine 4mg once daily
Coversyl® Arginine 10mg once daily	Perindopril erbumine 8mg once daily

\*All switches should be tailored to the individual patient.

Clinicians may wish to choose other options according to the individual clinical need of the patient. This could include a trial of discontinuing treatment gradually, if antihypertensive medication is no longer needed. Follow-up the patient carefully (e.g. at about four week intervals for six months, then two or three times a year) to detect any recurrence of hypertension.<sup>8</sup>

For patients receiving Coversyl® Arginine Plus, the combination product of perindopril 5mg and indapamide 1.25mg, there is no direct switch. However, prescribing perindopril erbumine 4mg plus an appropriate diuretic as a separate component or a perindopril erbumine/amlodipine combination treatment is the best option. It is important to note that the perindopril erbumine/amlodipine products are flat prices across all strengths. Prescribing the components separately provides greater flexibility of dosing and is in line with the Coversyl® Arginine Plus SPC which states that when possible individual dose titration with the components is recommended.<sup>9</sup>

## Costs and savings

The table below shows the cost of generic perindopril erbumine compared to the perindopril arginine salt (including combination products with indapamide). Prices are from the December 2020 Drug Tariff.<sup>10</sup>

**Table 2: Costs of perindopril containing products**


Drug	Cost per 30 tablets (£)
Perindopril erbumine 2mg tablets	£2.85
Perindopril erbumine 4mg tablets	£4.49
Perindopril erbumine 8mg tablets	£5.25
Perindopril erbumine 4mg/Amlodipine 5mg tablets	£5.01
Perindopril erbumine 4mg/Amlodipine 10mg tablets	£5.01
Perindopril erbumine 8mg/Amlodipine 5mg tablets	£5.01
Perindopril erbumine 8mg/Amlodipine 10mg tablets	£5.01
Perindopril arginine 2.5mg tablets	£4.43
Perindopril arginine 5mg tablets	£6.28
Perindopril arginine 10mg tablets	£10.65
Perindopril arginine 5mg/indapamide 1.25mg tablets	£9.51

In England and Wales, almost £790,000 is currently being spent on perindopril arginine preparations in the course of a year (ePACT July to September 2020). Switching to the equivalent dose of perindopril erbumine (plus separate indapamide for patients taking the combination product or the perindopril erbumine/amlodipine combination product) **has the potential to release savings of approximately £359,000 annually. This equates to £564 per 100,000 patients.**

## References

1. National Institute for Health and Care Excellence (NICE). NICE Clinical Guideline NG136. Hypertension in Adults: diagnosis and management. Last Updated November 2016. Available at: <https://www.nice.org.uk/guidance/ng136/chapter/Recommendations#starting-antihypertensive-drug-treatment>
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10. Department of Health. Drug Tariff. December 2020. Available via [www.nhsbsa.nhs.uk](http://www.nhsbsa.nhs.uk)

## Additional PrescQIPP resources

 Briefing	<a href="https://www.prescqipp.info/our-resources/bulletins/bulletin-209-per-indopril-arginine/">https://www.prescqipp.info/our-resources/bulletins/bulletin-209-per-indopril-arginine/</a>
 Implementation tools	
 Data pack	<a href="https://data.prescqipp.info/#/views/B209_Perindoprilarginine/Front-Page?.iid=1">https://data.prescqipp.info/#/views/B209_Perindoprilarginine/Front-Page?.iid=1</a>

This bulletin was originally developed in May 2018, however as the price of perindopril erbumine was higher than perindopril arginine it was not published. The prices have now come down but the savings are not as high as they previously were. The prices and references have been updated in this resource it has been published for those commissioners who still wish to review prescribing.

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