

**National Institute for Health and Clinical Excellence
Health Technology Appraisal**

Cilostazol, naftidrofuryl oxalate, pentoxifylline and inositol nicotinate for the treatment of intermittent claudication in people with peripheral arterial disease

Comment 1: the draft remit

| Section | Consultees | Comments | Action |
|-----------------|---|--|--|
| Appropriateness | Vascular Society of Great Britain and Ireland | In general this is a highly appropriate topic. PAD is a common condition in middle aged and elderly patients and guidance is needed as to how these medications should be used. The main other intervention of relevance is supervised exercise. It would be worth considering a comparison with supervised exercise if possible. | Comment noted. The inclusion of supervised exercise programmes as a comparator was discussed at the scoping workshop. It was agreed at the scoping workshop that supervised exercise programmes should not be included as a separate comparator because it would be given as an adjunct treatment. |
| | British Cardiovascular Intervention Society | However, given that many of these patients also have ischaemic heart disease and aortic valve disease, it would be appropriate for the effect of the appraisal treatments on angina status to be considered. Cilostazol can also be used as an agent to protect against stent thrombosis, and so its use in patients also taking aspirin as well as either clopidogrel or prasugrel should also be considered. | Comment noted. The interventions included in the appraisal are being appraised within the remit which specifies only intermittent claudication. |

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| | Otsuka Pharmaceuticals | Peripheral arterial disease impacts on patients' lives significantly affecting mortality and morbidity. Specifically, the predominant symptom is intermittent claudication affects their walking distance and health related quality of life. Currently, in the NHS, treatment for patients is inconsistent and improved guidance could result in better management and improve the health of patients. | Comment noted. |
| Wording | Vascular Society of Great Britain and Ireland | Yes. | Comment noted. |
| | Otsuka Pharmaceuticals | The wording is reflective of the issue of clinical and cost effectiveness that should be considered. A key point is that Pletal's (cilostazol) indication is limited to intermittent claudication while the other molecules tend to have a wider peripheral arterial disease indication | Comment noted. The Methods Guide for Technology Appraisals states that the most appropriate comparator in the care pathway would be one that, at the time of the appraisal, reflects standard care in the NHS for the population for which the technology being appraised has, or is gaining a marketing authorisation |
| Timing Issues | Vascular Society of Great Britain and Ireland | Moderately urgent. | Comment noted. |
| | Otsuka Pharmaceuticals | Approximately 5% of over 55s suffer from intermittent claudication which equates to approximately three quarters of a million patients in the U.K. There is variation in practice of patient management of intermittent claudication throughout the U.K. | Comment noted. |

Comment 2: the draft scope

| Section | Consultees | Comments | Action |
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| Background information | Vascular Society of Great Britain and Ireland | OK. | Comment noted. |
| | Aberdeen Health Technology Assessment Group | Arterial bypass - might be better to mention both femoro-popliteal and distal bypass. Fem-pop is often not possible in the diabetics because they have more widespread and distal disease, so a long bypass to the foot is sometimes necessary. | Comment noted. The scope is a brief document intending to summarise the key points of the condition and of the technologies. |
| | Otsuka Pharmaceuticals | Disease etiology, symptomatology, epidemiology, risks and treatments are well summarized in this section. | Comment noted. |
| The technology/ intervention | Vascular Society of Great Britain and Ireland | OK. | Comment noted. |
| | Otsuka Pharmaceuticals | Cilostazol is a selective phosphodiesterase type 3 (PDE3) inhibitor. Many of the pharmacological effects of cilostazol are mediated by intracellular cAMP, resulting in platelet aggregation inhibition and vasodilation. In addition, cilostazol also inhibits adenosine uptake and elevates extracellular adenosine levels which may further potentiate the elevation of intracellular cAMP in platelets and smooth muscle cells. Resulting beneficial pharmacological effects of cilostazol are: antiplatelete effect, vasodilatory effect, vascular smooth muscle cell relaxation and inhibition of proliferation and decrease in plasma lipids. | Comment noted. The scope is a brief document intending to summarise the key points of the condition and of the technologies. |
| Population | Vascular Society of Great Britain and Ireland | OK. | Comment noted. |
| | Otsuka Pharmaceuticals | The population for Pletal is patients with intermittent claudication without rest pain or peripheral tissue necrosis. | Comment noted. The 'technology' section of the scope is consistent with this. |

| Section | Consultees | Comments | Action |
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| Comparators | Vascular Society of Great Britain and Ireland | <p>Supervised exercise programs. These could reasonably be described as best alternative care.</p> <p>There is also some recent work (in press) that statins can improve walking distance. Since these are commonly used it may be worth considering them also.</p> | <p>Comment noted. The inclusion of supervised exercise programmes as a comparator was discussed at the scoping workshop. It was agreed at the scoping workshop that supervised exercise programmes should not be included as a separate comparator because it would be given as an adjunct treatment.</p> <p>Comment noted.</p> |
| | Aberdeen Health Technology Assessment Group | Walking is a key comparator. The message is always "stop smoking and keep walking. | Comment noted. The 'comparator' section of the scope states 'management of peripheral arterial disease with out vasodilator therapy' which is consistent with this. |
| | Otsuka Pharmaceuticals | All treatments listed are the standard treatments available for Intermittent claudication currently used in the NHS. However, it should be noted that Pletal is the only product with a specific indication for intermittent claudication. | Comment noted. |
| Outcomes | Vascular Society of Great Britain and Ireland | They seem OK. | Comment noted. |

| Section | Consultees | Comments | Action |
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| | Department of Health | We assume that vascular interventions, such as vascular surgery or percutaneous intervention/stenting, are included under the heading 'cardiovascular events' in the outcome measures to be assessed. Whilst they do not appear to be mentioned specifically, we feel that freedom from an intervention is a significant endpoint. | Comment noted. The 'cardiovascular events' outcome has been reworded for clarity as follows: vascular events including interventions and requirement of hospitalisation. |
| | Aberdeen Health Technology Assessment Group | <p>Amputation should be an outcome, especially amongst the diabetics. The two commonest causes of non-traumatic amputation are smoking and diabetes. Foot ulcer might also be an outcome, especially in diabetics.</p> <p>Ankle-brachial pressure index can be misleading in diabetics, because they often have calcification of the middle section of the arterial wall ("Monckeberg's medial calcification") which means that it doesn't compress easily and give a misleading high measurement of blood pressure in the foot. It's the comparison of BP in arm and foot.</p> <p>The reference case timescale should be life, which in this group is curtailed because of cardiac mortality. Though intermittent claudication is often mild, and may improve spontaneously - the series reported in studies are often a more severe spectrum of disease.</p> | <p>Comment noted. The 'cardiovascular events' outcome has been reworded for clarity as follows: vascular events including interventions and requirement of hospitalisation.</p> <p>Comment noted.</p> <p>Comment noted. The Methods Guide for Technology Appraisals states the time horizon should be sufficiently long to reflect all important differences in the costs or outcomes of technologies being compared.</p> |

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| | Otsuka Pharmaceuticals | <p>The outcome measures listed capture the most important health related benefits in intermittent claudication. Improvement in maximal and pain-free walking distance (WD) directly address the symptoms of PAD and this should also be reflected in an improvement in the physical components of Quality of Life assessments.</p> <p>When WDs are compared indirectly (not in a direct comparison in the same trial) between treatments across two trials, the following potential varying factors must be taken into consideration:</p> <p>WD measured on flat ground or graded treadmill, grade of treadmill, constant or variable grade.</p> <p>Depending on the grade of the treadmill exercise, WD measured on graded treadmill can be multiplied by the factor 1.5-3 to obtain the corresponding walking distance on flat ground, based on the same amount of energy spent.</p> <p>Comparisons of Treatment Effect over placebo between two treatments evaluated in different trials only give reliable results if either treatment effects for both trials are based on absolute WD or are based on logarithm-transformed WD.</p> | <p>Comment noted.</p> <p>Comment noted.</p> <p>Comment noted.</p> <p>Comment noted.</p> <p>Comment noted.</p> |
| Economic analysis | Vascular Society of Great Britain and Ireland | As they are the standard ones for NICE I am sure they are appropriate. Certainly at least a 5 year time window needs to be considered. It is important to appreciate that these intervention are to improve quality of life but not extend life in most cases. | Comment noted. The Methods Guide for Technology Appraisals states the time horizon should be sufficiently long to reflect all important differences in the costs or outcomes of technologies being compared. |
| | Otsuka Pharmaceuticals | The economic analysis appears appropriate, no further comments | Comment noted. |
| Equality and Diversity | Vascular Society of Great Britain and Ireland | No issues. | Comment noted. |

Summary form

| Section | Consultees | Comments | Action |
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| | Otsuka Pharmaceuticals | No further suggestions | Comment noted. |
| Other considerations | Otsuka Pharmaceuticals | No further suggestions | Comment noted |
| Questions for consultation | Otsuka Pharmaceuticals | No further questions | Comment noted |
| Additional comments on the draft scope. | Aberdeen Health Technology Assessment Group | <p>The statins and clopidogrel guidances are not really relevant to this MTA. They are there just because most people with PVD also have coronary disease, and many of them die of that. They often have no symptoms of heart disease, so one benefit of diagnosing int claud is that patients may be started on cardioprotective therapy.</p> <p>A recent study is relevant - the POPADAD trial in patients with peripheral arterial disease showed nu benefit of aspirin or anti-oxidants. BMJ 2008:337:a1840, published online October 16th.</p> | <p>Comment noted. Technology appraisal 90 recommended clopidogrel alone (within its licensed indications) for people who are intolerant of low-dose aspirin and either have experienced an occlusive vascular event or have symptomatic peripheral arterial disease.</p> <p>Comment noted. NICE Technology appraisal 94 has been removed from the scope</p> <p>Comment noted.</p> |

Comment 4: Regulatory issues

| Section | Consultees | Comments | Action |
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| Section | Consultees | Comments | Action |
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| Remit | Genus Pharmaceuticals | Yes | Comment noted. |
| | Otsuka Pharmaceuticals | Inclusion of the following wording should be considered | Comment noted. |
| Current or proposed marketing authorisation | Genus Pharmaceuticals | Current indications for the technology: as stated in the draft scope/remit Planned indications for the technology: no changes planned | Comment noted. |
| | Otsuka Pharmaceuticals | Current indication: (peripheral arterial disease Fontaine stage II) | Comment noted. |
| | | Planned indications for the technology: not applicable | Comment noted. |
| | | Target date for regulatory submission not applicable | Comment noted. |
| | | Regulatory process: not applicable | Comment noted. |
| | | Anticipated date of CHMP positive opinion: not applicable | Comment noted. |

The following consultees/commentators indicated that they had no comments on the draft remit and/or the draft scope

- Actavis UK
- Genus Pharmaceuticals Ltd
- Royal College of Nursing
- RICE -Research Institute for the Care of Older People
- Sanofi-Aventis
- Welsh Assembly Government

