*Extract from -* [*EBI\_Guidance\_List3\_0523.pdf (aomrc.org.uk)*](https://ebi.aomrc.org.uk/wp-content/uploads/2023/03/EBI_Guidance_List3_0523.pdf)

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**Angioplasty for PCI (percutaneous coronary intervention) in stable angina**

Stable angina is typically chest discomfort which comes on with exertion and is relieved by rest. NICE guidance (CG126) indicates that medical management should be optimised in such patients. This includes lifestyle interventions, medications to reduce risk and appropriate medications to improve angina.

Clinical trials looking at the role of revascularisation (widening of blocked or narrowed coronary arteries) by percutaneous coronary intervention (PCI) in patients with stable angina showed that PCI did not improve mortality (death rate). However, longer-term follow up is needed to see if differences emerge over time. The current primary aim of PCI in stable angina is to improve angina symptoms.

The EBI programme proposes clear, evidence-based criteria for the use of PCI across England. PCI should only be performed in patients with stable angina that fulfil these criteria, after optimisation of medication. Patients should be properly consented with documented shared decision making.

**Clinical overview**

Stable angina is typically defined as exertional chest discomfort that is relieved by rest. However, there is a variation to the presentation of stable angina, and this is beyond the scope of this document. The European Society of Cardiology (ESC) and American Heart Association/ American College of Cardiology (AHA/ACC) guidelines recommend that in most patients with stable angina, percutaneous coronary intervention (PCI) should be considered for symptom relief. Ideally medical therapy, which should include therapies for the reduction of cardiovascular risk as well as anti-anginal therapies, should be optimised prior to PCI being considered.

**Guidance**

**This guidance applies to those 18 years and over.**

**This guidance does not apply to:**

— Patients presenting with ST-elevation myocardial infarction, non ST-elevation myocardial infarction or staged procedures after acute coronary syndrome

— Patients presenting with unstable angina defined as myocardial ischaemia at rest or on minimal exertion in the absence of acute cardiomyocyte injury/necrosis

— Patients presenting with crescendo (rapidly worsening) stable angina

— Patients who may be best treated with coronary artery bypass graft surgery .

PCI should only be performed in patients with stable angina if patients:

— Have ongoing anginal symptoms despite optimal anti-anginal medication\*

**OR**

— Have ongoing angina symptoms with intolerance of anti-anginal medications\*

**OR**

— Are participating in clinical research in stable coronary artery disease In addition, if agreed at an appropriately constituted myocardial revascularisation cardiac multidisciplinary meeting (MDM)\*\*, PCI may also be performed in patients with stable angina in the following cases:

— In patients with impaired left ventricular systolic function

**OR**

— In patients with left main stem disease

**OR**

— In patients with significant ischemic burden

**OR**

— Where PCI is otherwise considered appropriate by the MDM.\*\*

All patients being considered for elective revascularisation should have documented evidence that a formal shared decision-making process has taken place with informed patient choice.

\*Optimal medical management should be offered and include:

**Lifestyle interventions:**

— Weight management

— Smoking cessation

— Adherence to a cardioprotective diet

— Regular physical activity.

**Risk reduction management:**

— Antiplatelet therapy or anticoagulant in line with current guidelines

— Adequate lipid lowering therapy

— ACE Inhibitor or alternative to optimal dose

— Anti-hypertensive therapy to guideline-directed targets

— Appropriate glycaemic control in patients with diabetes.

**Anti-anginal medication in line with current guidelines:**

— Preferably two anti-anginal agents at recommended daily dose.

— Symptoms should ideally be reassessed after an appropriate period of optimal anti-anginal medication uptitration and assessment of side effects.

\*\* Patients without ongoing angina should be discussed at an appropriate multidisciplinary meeting (MDM) before being offered PCI. This could include patients that are not within these criteria, for example, patients undergoing transcutaneous aortic valve implantation, asymptomatic patients with evidence of significant ischaemia, occupational indications, or patient preference.

An appropriately constituted myocardial revascularisation MDM would typically include:

— MDM coordinator

— Interventional cardiologist – at least one (the norm should be two or more)

— Non-interventional cardiologists – at least one (the norm should be two or more)

— Cardiac surgical consultant – at least one (the norm should be two or more)

— Other attendees including cardiac anaesthetists / intensivists may be required for some cases.

See references for guidance on the conduct of myocardial revascularisation MDMs.

Please note that this guidance is intended as a standard threshold for access. However, if you/ your patient falls outside of these criteria, the option to apply for an Individual Funding Request is still available to you.

**Rationale for recommendation**

The results of multiple trials in stable coronary artery disease (CAD), including COURAGE and ISCHEMIA have shown that revascularization does not improve mid-term mortality. However, revascularisation did significantly reduce spontaneous myocardial infarction in ISCHEMIA, therefore longer term follow up will be important.

Furthermore, it is important to note that around one third of the patients allocated to medical therapy in both COURAGE and ISCHEMIA had to undergo revascularisation within their primary follow up periods because of ongoing angina. There are selected subgroups where PCI can be offered at an earlier stage: patients with impaired left ventricular systolic function and significant left main stem disease. A multidisciplinary heart team approach\*\* and shared decision making with the patient is key.

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