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## National Institute for Clinical Excellence

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# PRESS RELEASE

# NICE issues updated guidance on the use of coronary artery stents for the treatment of coronary artery disease

The National Institute for Clinical Excellence (NICE) is committed to ensuring that its guidance is up-to-date and takes account of the latest evidence and has a planned programme for reviewing its guidance. NICE has today issued guidance to the NHS in England and Wales on the use of drug eluting stents for the treatment of coronary artery disease (CAD). The recommendations for their use form part of the Institute's updated guidance on coronary artery stents first issued in May 2000.

CAD is the most common form of heart disease and causes about 110,000 deaths annually in England and Wales – one of the highest rates in the world. It results from a narrowing (stenosis) of coronary arteries caused by the development of fatty plaque on the inner walls of the artery. Stents are thin wire mesh structures that act as permanent linings to keep the artery inflated, and are now commonly used where a non-surgical procedure to widen a narrowed blood vessel in the heart using a balloon catheter (a percutaneous coronary intervention or "PCI") is the clinically appropriate procedure to treat the condition. In 2001around 85% of all PCIs used stents.

Using conventional bare metal stents (BMS) has been shown to prevent the renarrowing of the artery (restenosis) caused by recoil of the artery which happens in PCI without stents when the balloon increasing the calibre of the artery is deflated. Drug eluting stents (DES) aim to address the two other main causes of restenosis – contraction of the artery's outer layer of cells secondary to an injury reaction and proliferation of smooth muscle cells within the arterial wall – by slowly releasing a drug contained in the stent's special polymer coating. The NICE guidance relates to two drug-eluting stents which are currently licensed in the UK: the Taxus stent, which

elutes paclitaxel to inhibit cell division; and the Cypher stent, which elutes sirolimus (previously known as rapamycin), an immunosuppressive agent that reduces inflammation.

In summary the NICE guidance recommends that:

- stents should be used routinely for people with either stable or unstable angina or with acute myocardial infarction (MI) undergoing PCI.
- The choice of whether a conventional bare metal stent or drug eluting stent is
  used should be based on the anatomy of the target vessel for stenting, with the
  guidance recommending the use of a DES in PCI for patients with symptomatic
  CAD in whom the target artery is less than 3mm in calibre (internal diameter) or
  the lesion is longer than 15mm.
- If more than one artery is being stented, these considerations apply for each artery.

Andrew Dillon, Chief Executive and executive lead for the appraisal, said: "The number of PCIs undertaken in England and Wales remains significantly below the European Union average. This is despite research showing that patients for whom both coronary artery bypass grafting and a PCI involving stenting are appropriate would choose a PCI in almost every case because it is less invasive and carries with it a lower mortality rate during surgery. Today's guidance, in recommending the use of stents where clinically appropriate, is an affirmation of that choice and provides clear advice to the NHS and patients, no matter where they live in England and Wales."

#### **Ends**

### **Notes to Editors**

### Q&A's and further information

 A Q&A document is available to support this press release. If you received this press release by e-mail it is attached. If you would like to receive a copy by e-mail or fax please contact NICE on the numbers above. The full guidance is available on the NICE website at http://www.nice.org.uk/Docref.asp?d=89884

## About the NICE guidance

NICE follows a process which allows consultees including patients and health
professionals to submit evidence, nominate their own experts, be consulted on draft
guidance and appeal if they feel the guidance is perverse, that NICE has exceeded its
powers or if NICE has not followed the published process for its work.

#### **About NICE**

- NICE is part of the NHS. It is the independent organisation responsible for providing national guidance on treatments and care for those using the NHS in England and Wales. Its guidance is for healthcare professionals and patients and their carers to help them make decisions about treatment and healthcare. For further information about NICE you can visit www.nice.org.uk.
- 3. NICE produces guidance in three areas of health:
  - the use of new and existing medicines and treatments within the NHS in England and Wales technology appraisals
  - the appropriate treatment and care of patients with specific diseases and conditions within the NHS in England and Wales clinical guidelines.
  - whether interventional procedures used for diagnosis or treatment are safe enough and work well enough for routine use—interventional procedures.
- 4. NICE also funds three enquiries that undertake research into the way patients are treated to identify ways of improving the quality of care (the investigations are known as confidential enquiries).
- 5. NICE guidance and recommendations are prepared by independent groups that include professionals working in the NHS and people who are familiar with the issues affecting patients and carers.