

**PRESS RELEASE****NICE appraisal of rivaroxaban for the prevention of  
venous thromboembolism after surgery**

The National Institute for Health and Clinical Excellence (NICE) has today (22 April 2009) published final guidance on the use of rivaroxaban for the prevention of venous thromboembolism in adults after having planned total hip replacement or total knee replacement surgery. NICE produced the guidance as part of its rapid single technology appraisal (STA) work programme.

When a blood clot forms in one of the deep veins in the leg, thigh, pelvis or arm it is known as deep vein thrombosis (DVT). DVT occurs in over 20% of surgical patients and over 40% of patients undergoing major orthopaedic surgery. The blood clot itself is not life threatening, and more often than not does not cause any symptoms. However, if it comes loose it can be carried in the blood to another part of the body where it can cause problems – this is called a venous thromboembolism. If the blood clot reaches the lungs (called pulmonary embolism) it can be fatal.

Rivaroxaban is a drug that helps to prevent blood from clotting. It does this by stopping a substance called Factor Xa from working. Factor Xa is necessary in the formation of blood clots. Rivaroxaban should be given shortly after surgery and for a few weeks after this to help prevent venous thromboembolism.

**Dr Gillian Leng, NICE Deputy Chief Executive, said:** "People having surgery to replace their hip or knee joint are at risk of venous thromboembolism because they are inactive during and after their operation. If a clot travels to the lungs it can be fatal and even if a blood clot does not come loose, it can still cause long-term damage to the veins leading to pain and swelling. The independent Appraisal Committee carefully considered the evidence and concluded that rivaroxaban is a

cost effective option for preventing blood clots, alongside other effective treatments already recommended by NICE. "

## Ends

### Notes to Editors

1. The guidance on rivaroxaban is available at [www.nice.org.uk/TA170](http://www.nice.org.uk/TA170)
2. A deep vein thrombosis (DVT) occurs when a blood clot forms in a vein. The DVT usually forms in a deep leg vein, and can cause immobility (lack of movement). Deep leg veins are the larger veins that run through the muscles of the calf or thigh. A DVT can form across all, or part, of the width of the vein, which can block blood flow either completely or partially.

### About NICE

1. The National Institute for Health and Clinical Excellence (NICE) is the independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health.
2. NICE produces guidance in three areas of health:
  - **public health** – guidance on the promotion of good health and the prevention of ill health for those working in the NHS, local authorities and the wider public and voluntary sector
  - **health technologies** – guidance on the use of new and existing medicines, treatments and procedures within the NHS
  - **clinical practice** – guidance on the appropriate treatment and care of people with specific diseases and conditions within the NHS.