Bayer

Bayer AG
Investor Relations
51368 Leverkusen
Germany
www.investor.bayer.com

Investor News

Venous Blood Clot Prevention after Knee and Hip Replacement Surgery:

Rivaroxaban is First Novel Oral Anticoagulant to Significantly Reduce the Composite Outcome of Symptomatic VTE and Death

- Rivaroxaban shows superior efficacy to enoxaparin for this clinical outcome with a comparable safety profile
- Pre-specified analysis of pooled data from RECORD 1-3 studies involving nearly 10,000 patients

Leverkusen, June 30, 2008 – Results from a pre-specified pooled analysis of three Phase III studies, RECORD1, 2 and 3, were presented at the 20th International Congress on Thrombosis (ICT) in Athens. The investigational anticoagulant rivaroxaban (Xarelto®), taken as one tablet once-daily, has shown to be significantly more effective than enoxaparin at reducing the composite of symptomatic venous thromboembolism (VTE) and all cause mortality at day 12 of treatment after major orthopedic surgery. With these findings, rivaroxaban is the first novel oral anticoagulant to demonstrate a significant reduction of this clinical endpoint when compared to an existing standard therapy. Adverse events that may affect surgical outcomes were not significantly increased – including bleeding. Rivaroxaban is being jointly developed by Bayer HealthCare AG and Johnson & Johnson Pharmaceutical Research & Development, L.L.C.

“Results from this pooled analysis emphasize the potential of rivaroxaban to play a key role in reducing the risks for patients undergoing major orthopedic surgery. It is the first time since anticoagulants were introduced that a new oral compound has significantly reduced the number of symptomatic blood clots and deaths compared to current standards”, commented Dr. A.G.G. Turpie, Professor of Medicine, McMaster University, Canada and Principal Investigator for the RECORD program. “Together with its improved convenience and the outstanding efficacy results from the individual RECORD studies, rivaroxaban has the promise to set a new clinical standard in the prevention of VTE.”

The key endpoint for the pooled analysis of the RECORD1-3 data was the composite of symptomatic VTE and all-cause mortality within a 12-day treatment phase. This allowed a comparison across all three trials as it reflects the end of the enoxaparin-controlled period in RECORD2 and RECORD3. The results of the pooled analysis showed that rivaroxaban significantly reduced this composite endpoint by 56% compared with enoxaparin (0.4% versus 0.8%, respectively; odds ratio: 0.44; $p<0.005$) whilst maintaining a similar safety profile.

The pooled analysis was based on the data from three studies from the RECORD (**RE**gulation of **C**oagulation in major **O**rthopedic surgery reducing the **R**isk of **D**VT and PE) program: RECORD1, 2 and 3. These studies evaluated rivaroxaban for the prevention of VTE after total hip or knee replacement surgery in nearly 10,000 patients.

The positive results of this new pooled analysis reinforce the findings from the individual RECORD studies which were further validated by their recent publication of RECORD2 in *The Lancet* and of RECORD1 & 3 in the *New England Journal of Medicine*.

Besides the pooled analysis, four oral presentations and ten posters were presented on rivaroxaban at the 20th ICT. All abstracts are to be published in a supplement of *Pathophysiology of Haemostasis and Thrombosis*.

Notes to editors:

Unmet Needs in Venous Thromboembolism (VTE)
In the EU, blood clots exceed 1.5 million events annually and are responsible for killing 544,000 people each year – more than breast cancer, prostate cancer, HIV/AIDS and road traffic accidents combined.

VTE is a serious life-threatening condition. It includes deep vein thrombosis (DVT) – a blood clot in a deep vein (usually in the leg) – and pulmonary embolism (PE) – a blood clot in the lungs. These clots often break apart and travel through the bloodstream, blocking blood flow to vital organs. During hip or knee replacement procedures, the large veins of the leg that carry blood back to the heart are damaged which significantly increases the VTE risk for patients undergoing such major orthopedic surgery. In fact,

venous blood clots occur in 40-60% of patients undergoing major orthopedic surgery and not receiving preventative care.

An estimated 815,000 hip replacement procedures were performed in the US and Europe in 2005 while the number of knee replacement procedures was estimated to be 761,000 and is expected to significantly increase in the next years. But the threat stretches beyond orthopedic surgery: Blood clots are one of the leading causes of global disease and death in many patient populations, including those with atrial fibrillation at risk for stroke, those at risk for acute myocardial infarction (heart attack) and acutely ill hospitalized patients, such as those with cancer.

To learn more about VTE please visit www.thrombosisadviser.com

About the RECORD program

RECORD (**RE**gulation of **C**oagulation in major **O**rthopedic surgery reducing the **R**isk of **D**VT and PE), is a global program of clinical trials involving 12,729 patients, comparing rivaroxaban with enoxaparin in patients following either total knee or hip replacement surgery.

- In **RECORD1,** rivaroxaban demonstrated a 70% relative risk reduction (RRR) in total VTE in patients undergoing total hip replacement (THR) surgery compared with enoxaparin, with a similar safety profile. The duration of thromboprophylaxis in both treatments was five weeks. Results from RECORD1 were recently published in the *New England Journal of Medicine* (2008; 358: 2765–2775).
- In **RECORD2,** extended-duration rivaroxaban (35+/-4 days) demonstrated a 79% RRR in total VTE and a similar rate of major bleeding in patients undergoing THR surgery compared to patients dosed with short-duration therapy with enoxaparin (10–14 days) followed by placebo. Results from RECORD2 were recently published in *The Lancet* (2008; 372: 29–37)
- In **RECORD3,** rivaroxaban demonstrated 49% RRR in total VTE in patients undergoing total knee replacement (TKR) surgery compared to enoxaparin, with a similar safety profile. Both treatments were dosed for 10–14 days. Results from RECORD3 were recently published in the *New England Journal of Medicine* (2008; 358: 2776–2785).
- In **RECORD4**, 10mg once-daily rivaroxaban was compared to the U.S.-approved regimen for enoxaparin of 30mg injected twice-daily. Rivaroxaban demonstrated a 31% RRR in total VTE in patients undergoing TKR surgery compared to

enoxaparin, with a similar safety profile. Both treatments were continued for 10–14 days. Top-line results from this study were first presented in May 2008 at the annual meeting of the European Federation of National Associations of Orthopaedics & Traumatology (EFORT).

About Rivaroxaban

The extensive clinical trial program for rivaroxaban makes it the most studied, oral, direct Factor Xa inhibitor in the world today. Based on the clinical evidence in more than 20,000 patients, rivaroxaban has not been associated with compromised liver function. A more definitive statement will be made once the data from long-term exposure to rivaroxaban in the VTE treatment and stroke prevention in atrial fibrillation (SPAF) programs are available. Almost 50,000 patients are expected to be evaluated in the already finalized and ongoing total clinical development program.

Bayer HealthCare submitted a regulatory filing to the European Agency for the Evaluation of Medicinal Products (EMEA) at the end of October 2007 for approval to market rivaroxaban in the EU for the prevention of VTE in patients undergoing major orthopaedic surgery of the lower limbs. To date, the drug has been filed in more than 10 additional countries, including Canada and China, and is also expected to be filed for approval in the U.S. in mid 2008, where if approved, it will be commercialized by Scios Inc. and Ortho-McNeil, Inc., both of which are wholly-owned subsidiaries of Johnson & Johnson.

The trade name of rivaroxaban is expected to be Xarelto®, pending health authority approval.

About Bayer HealthCare

The Bayer Group is a global enterprise with core competencies in the fields of health care, nutrition and high-tech materials. Bayer HealthCare, a subsidiary of Bayer AG, is one of the world's leading, innovative companies in the healthcare and medical products industry and is based in Leverkusen, Germany. The company combines the global activities of the Animal Health, Consumer Care, Diabetes Care and Pharmaceuticals divisions. The pharmaceuticals business operates under the name Bayer Schering Pharma. Bayer HealthCare's aim is to discover and manufacture products that will improve human and animal health worldwide. Find more information at www.bayerhealthcare.com.

Bayer Schering Pharma is a worldwide leading specialty pharmaceutical company. Its research and business activities are focused on the following areas: Diagnostic Imaging, General Medicine, Specialty Medicine and Women's Healthcare. With innovative products, Bayer Schering Pharma aims for leading positions in specialized markets worldwide. Using new ideas, Bayer Schering Pharma aims to make a contribution to medical progress and strives to improve the quality of life. Find more information at www.bayerscheringpharma.de.

Bayer AG, Investor Relations contacts:
Dr. Alexander Rosar (+49-214-30-81013)
Dr. Juergen Beunink (+49-214-30-65742)
Peter Dahlhoff (+49-214-30-33022)
Ilia Kürten (+49-214-30-35426)
Ute Menke (+49-214-30-33021)
Judith Nestmann (+49-214-30-66836)
Dr. Olaf Weber (+49-214-30-33567)