



FDA Approves XARELTO® (rivaroxaban) to Reduce the Risk of Stroke and Systemic Embolism in Patients with Nonvalvular Atrial Fibrillation

XARELTO® Combines Proven Effectiveness and Demonstrated Safety Profile with Convenient, Once-Daily Dosing

RARITAN, NJ, November 4, 2011 - Janssen Pharmaceuticals, Inc. announced today the U.S. Food and Drug Administration (FDA) has approved XARELTO® to reduce the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation. XARELTO® is the only oral anticoagulant approved in the U.S. that offers once-daily dosing, without the need for routine blood monitoring.

"Today's approval of XARELTO® offers physicians a new option to reduce stroke risk in patients who are living with atrial fibrillation, and the continuous threat of strokes," said Gerald V. Naccarelli*, M.D., Professor of Medicine, Chief of Division of Cardiology, Pennsylvania State University College of Medicine and Milton S. Hershey Medical Center. "A majority of my atrial fibrillation patients are on multiple medicines for conditions that further increase the risk of stroke. I welcome a therapy like XARELTO® that has demonstrated effectiveness and safety in these patients, with the added convenience of a once-daily dose."

XARELTO® is approved to reduce the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation at a dose of 20 mg once daily, or 15 mg once daily for patients with moderate to severe renal impairment, taken with the evening meal. There are limited data on the relative effectiveness of XARELTO® and warfarin in reducing the risk of stroke and systemic embolism when warfarin therapy is well-controlled.

Atrial fibrillation (AFib) is the most common cardiac rhythm disorder¹ and affects more than 2.2 million people in the U.S.² In patients with AFib, the heart's irregular heartbeat makes them vulnerable to the formation of a blood clot in the atria, which sometimes can break off and travel to the brain, potentially resulting in a stroke.³ The presence of common conditions such as high blood pressure, heart failure, diabetes, and prior stroke, along with being over the age of 75, are factors that further increase the risk of stroke in people living with AFib. People living with AFib are at a five-fold increased risk for stroke compared with the general population.⁴

"The prevalence of atrial fibrillation is increasing, and many patients who are at risk for stroke are not currently being managed effectively or optimally," said Robert M. Califf*, M.D., ROCKET AF study co-chairman and Vice Chancellor for Clinical Research at Duke University. "In clinical studies, XARELTO® was shown to be effective in patients who are at increased risk of stroke, and especially in those with co-morbidities such as high blood pressure or diabetes, and other factors that increase the risk of stroke. These patients represent many of those with the most to gain from effective anticoagulation."

The approval of XARELTO® in this indication was based on the pivotal, double-blind Phase 3 ROCKET AF (**R**ivaroxaban **O**nce-daily oral direct Factor Xa inhibition **C**ompared with vitamin **K** antagonism for the prevention of stroke and **E**mbolism **T**rial in **A**trial **F**ibrillation) global clinical trial, in which once-daily rivaroxaban effectively reduced the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation, with major bleeding rates comparable to warfarin. In bleeding categories of great concern, such as bleeding into a critical organ and fatal bleeding, fewer events were observed with rivaroxaban. In the categories of bleeding resulting in transfusions and gastrointestinal bleed, more events were observed with rivaroxaban. To see the details of the ROCKET AF trial published in the *New England Journal of Medicine*, please click [here](#).

"Today's FDA approval of XARELTO® gives patients with nonvalvular atrial fibrillation a new anticoagulation option - one that helps reduce the risk of stroke and has proven tolerability and convenient once-daily dosing and administration," said Peter M. DiBattiste, M.D., Global Therapeutic Area Head, Cardiovascular and Metabolism, Johnson & Johnson Pharmaceutical Research & Development, L.L.C. (J&JPRD). "We are pleased to bring to market a medicine that will potentially help millions of patients."

Janssen Pharmaceuticals, Inc. holds U.S. marketing rights for XARELTO®, and will be supported by the Bayer HealthCare U.S. sales force in designated hospital accounts.

FDA has required a Risk Evaluation and Mitigation Strategy (REMS) for XARELTO® to communicate the risks of increased risk of thrombotic events, including stroke, if XARELTO® is discontinued without introducing an adequate alternative anticoagulant in patients with nonvalvular atrial fibrillation, and the potential decreased efficacy of XARELTO® (15 mg and 20 mg) if not taken with the evening meal. The XARELTO® REMS consists of a Medication Guide and a communication plan.

About XARELTO®

In addition to this new indication, XARELTO® is indicated for the prophylaxis of deep vein thrombosis (DVT), which may lead to pulmonary embolism (PE) in people undergoing knee or hip replacement surgery. XARELTO® has been used by more than a million patients worldwide in the orthopedic setting. XARELTO® belongs to a group of medicines called anticoagulants. It works by blocking the blood clotting Factor Xa and thereby reduces the tendency of the blood to form clots.

XARELTO® is the fifth New Drug Application the U.S. FDA has approved from the Janssen Pharmaceutical Companies this year.

J&JPRD (the research and development affiliate of Janssen) and Bayer HealthCare are developing rivaroxaban jointly. The companies are evaluating rivaroxaban for a broad range of disorders in which blood clotting plays a major role. The extensive program of clinical trials makes rivaroxaban the most studied oral, Factor Xa inhibitor in the world today. By the time of its completion, more than 75,000 patients will have participated in the rivaroxaban clinical development program.

Important Safety Information

WHAT IS THE MOST IMPORTANT INFORMATION I SHOULD KNOW ABOUT XARELTO®?

For people taking XARELTO® for atrial fibrillation:

People with atrial fibrillation (an irregular heart beat) are at an increased risk of forming a blood clot in the heart, which can travel to the brain, causing a stroke, or to other parts of the body. XARELTO® lowers your chance of having a stroke by helping to prevent clots from forming. If you stop taking XARELTO®, you may have an increased risk of forming a clot in your blood.

- **Do not stop taking XARELTO® without talking to the doctor who prescribes it for you. Stopping XARELTO® increases your risk of having a stroke or forming blood clots in other parts of your body.**

If you have to stop taking XARELTO®, your doctor may prescribe another blood thinner medicine to prevent a blood clot from forming.

For all people taking XARELTO®:

- XARELTO® can cause bleeding which can be serious, and rarely may lead to death. This is because XARELTO® is a blood thinner that reduces blood clotting. While you take XARELTO® you are likely to bruise more easily and it may take longer for bleeding to stop.

You may have a higher risk of bleeding if you take XARELTO® and take other medicines that increase your risk of bleeding including:

- aspirin or aspirin containing products,
- non-steroidal anti-inflammatory drugs (NSAIDs)
- warfarin sodium (Coumadin®, Jantoven®)
- any medicine that contains heparin
- clopidogrel (Plavix®)
- prasugrel (Effient®)
- ticagrelor (Brilinta®)

Tell your doctor if you take any of these medicines. Ask your doctor or pharmacist if you are not sure if your medicine is one listed above.

Call your doctor or get medical help right away if you develop any of these signs or symptoms of bleeding:

- tingling, numbness or muscle weakness, especially in your legs. This is particularly important if you had a procedure called spinal or epidural puncture as part of your anesthesia during surgery.
- any unexpected bleeding, or bleeding that lasts a long time (such as nose bleeds that happen often, unusual bleeding from gums, or menstrual bleeding that is heavier than normal or vaginal bleeding)
- bleeding that is severe or that you cannot control
- red, pink or brown urine
- bright red or black stools (look like tar)
- cough up blood or blood clots
- vomit blood or your vomit looks like "coffee grounds"
- headaches, feeling dizzy or weak

- pain, swelling, or new drainage at wound sites

WHO SHOULD NOT TAKE XARELTO®?

Do not take XARELTO® if you:

- currently have abnormal or unusual bleeding
- are allergic to rivaroxaban or any of the ingredients of XARELTO®

WHAT SHOULD I TELL MY DOCTOR BEFORE OR WHILE TAKING XARELTO®?

Before taking XARELTO® tell your doctor if you:

- Have ever had bleeding problems
- Have liver or kidney problems
- Have any other medical condition
- Are pregnant or planning to become pregnant
- Are breastfeeding or plan to breastfeed

Tell all of your doctors and dentists that you are taking XARELTO®. They should talk to the doctor who prescribed XARELTO® for you before you have any surgery, medical or dental procedure.

Tell your doctor about all the medicines you take, including prescription and nonprescription medicines, vitamins, and herbal supplements. Some of your other medicines may affect the way XARELTO® works. Certain medicines may increase your risk of bleeding.

Especially tell your doctor if you take:

- ketoconazole (Nizoral®)
- itraconazole (Onmel™, Sporan®)
- ritonavir (Norvir®)
- lopinavir/ritonavir (Kaletra®)
- indinavir (Crixivan®)
- carbamazepine (Carbatrol®, Equetro®, Tegretol®, Tegretol®-XR, Teril™, Epi®)
- phenytoin (Dilantin-125®, Dilantin®, Phenobarbital, Solfoton™)
- rifampin (Rifater®, Rifamate®, Rimactane®, Rifadin®)
- St. John's wort (*Hypericum perforatum*)

Ask your doctor if you are not sure if your medicine is one listed above. Know the medicines you take. Keep a list of them to show your doctor and pharmacist when you get a new medicine.

HOW SHOULD I TAKE XARELTO®?

Take XARELTO® exactly as prescribed by your doctor. **Do not change your dose or stop taking XARELTO® unless your doctor tells you to.**

For people who have:

- **atrial fibrillation:** Take XARELTO® 1 time a day **with your evening meal. Stopping XARELTO® may increase your risk of having a stroke or forming blood clots in other parts of your body.**
- **hip or knee replacement surgery:** Take XARELTO® 1 time a day **with or without food.**
- Your doctor may stop XARELTO® for a short time before any surgery, medical or dental procedure. Your doctor will tell you when to start taking XARELTO® again after your surgery or procedure.
- Do not run out of XARELTO®. Refill your prescription for XARELTO® before you run out. When leaving the hospital following a hip or knee replacement, be sure that you will have XARELTO® available to avoid missing any doses.
- If you miss a dose of XARELTO®, take it as soon as you remember on the same day.
- If you take too much XARELTO®, go to the nearest hospital emergency room or call your doctor right away.

WHAT ARE THE POSSIBLE SIDE EFFECTS OF XARELTO®?

XARELTO® can cause bleeding which can be serious, and rarely may lead to death. *Please see "What is the most important information I should know about XARELTO®?"*

Tell your doctor if you have any side effect that bothers you or that does not go away.

Discuss any side effects with your doctor. You are also encouraged to report side effects to the FDA: visit <http://www.fda.gov/medwatch> or call 1-800-FDA-1088. You may also report side effects to Janssen Pharmaceuticals, Inc. at 1-800-JANSSEN (526-7736).

Please see full [Product Information](#) and [Medication Guide](#).

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About Janssen Pharmaceuticals, Inc.

Janssen Pharmaceuticals, Inc. is dedicated to addressing and resolving the major unmet medical needs of our time. Driven by our commitment to patients, healthcare professionals, and caregivers, we strive to develop sustainable and integrated healthcare solutions by working in partnership with all stakeholders on the basis of trust and transparency. Our daily work is guided by meeting goals of excellence in quality, innovation, safety, and efficacy in order to advance patient care.

Our company provides medicines for an array of health concerns in several therapeutic areas. Other innovative therapies that Janssen Pharmaceuticals, Inc. offers currently include [ACIPHEX® \(rabeprazole sodium\)](#), [DORIBAX® \(doripenem for injection\)](#), [ELMIRON® \(pentosan polysulfate sodium\)](#), [NUCYNTA® \(tapentadol\)](#) and [NUCYNTA® ER \(tapentadol extended-release tablets\)](#). The full prescribing information for NUCYNTA® and NUCYNTA® ER, including boxed warnings, are available [here](#) and [here](#).

For more information on Janssen Pharmaceuticals, Inc., visit us at www.janssenpharmaceuticalsinc.com or follow us on Twitter at www.twitter.com/JanssenUS.

About Johnson & Johnson Pharmaceutical Research & Development, L.L.C.

J&JPRD is a wholly-owned subsidiary of Johnson & Johnson, the world's most broadly based producer of health care products. J&JPRD is headquartered in Raritan, N.J., and has facilities throughout Europe, the United States and Asia. J&JPRD is actively involved in drug discovery and development within a variety of therapeutic areas, including Cardiovascular and Metabolism, Central Nervous System, Immunology, Oncology and Virology, to address unmet medical needs worldwide. More information can be found at www.jnjpharmarnd.com.

(This press release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. These statements are based on current expectations of future events. If underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results could vary materially from the expectations and projections of Janssen Pharmaceuticals, Inc., Johnson & Johnson Pharmaceutical Research & Development, L.L.C. and/or Johnson & Johnson. Risks and uncertainties include, but are not limited to, general industry conditions and competition; economic factors, such as interest rate and currency exchange rate fluctuations; technological advances and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approvals; domestic and foreign health care reforms and governmental laws and regulations; trends toward health care cost containment; and increased scrutiny of the healthcare industry by government agencies. A further list and description of these risks, uncertainties and other factors can be found in Exhibit 99 of Johnson & Johnson's Annual Report on Form 10-K for the fiscal year ended January 2, 2011. Copies of this Form 10-K, as well as subsequent filings, are available online at www.sec.gov, www.jnj.com or on request from Johnson & Johnson. Janssen Pharmaceuticals, Inc., Johnson & Johnson Pharmaceutical Research & Development, L.L.C. and Johnson & Johnson do not undertake to update any forward-looking statements as a result of new information or future events or developments.)

*Drs. Califf and Naccarelli are paid consultants to Janssen Pharmaceuticals, Inc.

1. Fuster V, Rydén LE, Cannom DS, et al. 2011 ACCF/AHA/HRS focused updates incorporated into the ACC/AHA/ESC 2006 guidelines for the management of patients with atrial fibrillation: a report of the American College of Cardiology Foundation/American Heart Association Task Force on practice guidelines developed in partnership with the European Society of Cardiology and in collaboration with the European Heart Rhythm Association and the Heart Rhythm Society. *J Am Coll Cardiol*. 2011;57:e101-e198. Doi:10.1016/j.jacc.2010.09.013.
2. Kannel WB, Benjamin EJ. *Med Clin North Am*. 2008; 92:17-40.
3. American College of Cardiology: CardioSmart. Atrial Fibrillation. <http://www.cardiosmart.org/HeartDisease/CTT.aspx?id=222>.
4. Roger VL, Go AS, Lloyd-Jones DM, et al. Heart disease and stroke statistics--2011 update: a report from the American Heart Association. *Circulation* 2011; 123: e18-e209.