

Xarelto® (Rivaroxaban)

Bibliography



- ◆ Abdulsattar Y, Bhambri R, Nogid A. Rivaroxaban (Xarelto) for the Prevention of Thromboembolic Disease: An Inside Look at the Oral Direct Factor Xa Inhibitor. *P T*. 2009;34:238–244
- ◆ Abrams PJ, Emerson CR. Rivaroxaban: a novel, oral, direct factor xa inhibitor. *Pharmacotherapy*. 2009;29:167–81
- ◆ Ageno W. Rivaroxaban for the prevention of venous thromboembolism following major orthopedic surgery: the RECORD trials. *Expert Rev Cardiovasc Ther*. 2009;7:569-76
- ◆ Agnelli G, Gallus A, Goldhaber SZ, et al. Treatment of proximal deep-vein thrombosis with the oral, direct Factor Xa inhibitor, rivaroxaban (BAY 59-7939): the ODIXa-DVT (Oral Direct Factor Xa Inhibitor BAY 59-7939 in Patients with Acute Symptomatic Deep-Vein Thrombosis) study. *Circ*. 2007;116:180–187
- ◆ Benmira S, Banda ZK, Bhattacharya V. Old versus new anticoagulants: Focus on pharmacology. *Recent Pat Cardiovasc Drug Discov*. 2010 Mar 26 [Epub ahead of print] <http://www.ncbi.nlm.nih.gov/pubmed/20337579>
- ◆ Biemond BJ, Perzborn E, Friederich PW, et al. Prevention and treatment of experimental thrombosis in rabbits with rivaroxaban (BAY 59-7939) – an oral, direct Factor Xa inhibitor. *J Thromb Haemost*. 2007;97:471–477
- ◆ Borchmann P, Eichhorst B, Hellmann M, et al. Hämatologie 2008. *Dtsch Med Wochenschr*. 2008;133:1400–4
- ◆ Borris LC, Breindahl M, Lassen MR, et al. Differences in Urinary Prothrombin Fragment 1+2 Levels After Total Hip Replacement in Relation to Venous Thromboembolism and Bleeding Events. *J Thromb Haemost*. 2008;6:1671–1679
- ◆ Borris LC. Barriers to the optimal use of anticoagulants after orthopaedic surgery. *Arch Orthop Trauma Surg* 2009;129(11):1441-5
- ◆ Borris LC. New compounds in the management of venous thromboembolism after orthopedic surgery: focus on rivaroxaban. *Vasc Health Risk Manag*. 2008;4:855–62
- ◆ Borris LC. Rivaroxaban, a new, oral, direct factor Xa inhibitor for thromboprophylaxis after major joint arthroplasty. *Expert Opin Pharmacother*. 2009;10:1083–8
- ◆ Borris LC. Rivaroxaban and dabigatran etexilate: two new oral anticoagulants for extended postoperative prevention of venous thromboembolism after elective total hip arthroplasty. *Arch Orthop Trauma Surg*. 2009 Jun 30. [Epub ahead of print] <http://www.bloodjournal.org/cgi/pmidlookup?view=long&pmid=18621928>
- ◆ Büller HR, Lensing AW, Prins MH, et al. A dose-ranging study evaluating once-daily oral administration of the factor Xa inhibitor Rivaroxaban in the treatment of patients with acute symptomatic deep vein thrombosis. The EINSTEIN-DVT Dose-Ranging Study. *Blood*. 2008;112:2242–2247
- ◆ Chaplin S. Rivaroxaban: a new orally active direct inhibitor of Factor Xa. *Future Prescriber*. 2008;9:11–19
- ◆ Chen T, Lam S. Rivaroxaban: an oral direct factor xa inhibitor for the prevention of thromboembolism. *Cardiol Rev*. 2009;17:192–7
- ◆ Clayton RA, Gaston P, Howie CR. Oral rivaroxaban for the prevention of symptomatic venous thromboembolism after elective hip and knee replacement. *J Bone Joint Surg (Br)*. 2010;92(3):468
- ◆ Drouet L. [Rivaroxaban: mode of action]. *Ann Fr Anesth Reanim*. 2008;27 (Suppl 3):S9–S15
- ◆ Duggan ST, Scott LJ, Plosker GL. Rivaroxaban: a review of its use for the prevention of venous thromboembolism after total hip or knee replacement surgery. *Drugs*. 2009;69:1829–51
- ◆ Eriksson BI, Borris L, Dahl OE, et al, for the ODIXa-HIP Study Investigators. Oral, direct Factor Xa inhibition with BAY 59-7939 for the prevention of venous thromboembolism after total hip replacement. *J Thromb Haemost*. 2006;4:121–128



- ◆ Eriksson BI, Borris LC, Dahl OE, et al. Dose-escalation study of rivaroxaban (BAY 59-7939) – an oral, direct Factor Xa inhibitor – for the prevention of venous thromboembolism in patients undergoing total hip replacement. *Thromb Res.* 2007;120(5):685– 693
- ◆ Eriksson BI, Borris LC, Dahl OE, et al. A once-daily, oral, direct Factor Xa inhibitor, rivaroxaban (BAY 59-7939) for thromboprophylaxis after total hip replacement. *Circ.* 2006;114:2374–2381
- ◆ Eriksson BI, Borris LC, Friedman RJ, et al. Rivaroxaban versus enoxaparin for thromboprophylaxis after hip arthroplasty. *N Engl J Med.* 2008;358:2765–2775
- ◆ Eriksson BI. An introduction to rivaroxaban: the first oral, once-daily, direct Factor Xa inhibitor for the prevention of venous thromboembolism. *J Bone Joint Surg (Br.)* Sept 2008;(suppl)3–6
- ◆ Eriksson B, Kakkar AK, Turpie AGG, et al. Oral rivaroxaban for the prevention of symptomatic venous thromboembolism after elective hip and knee arthroplasty. *J Bone Joint Surg (Br.)* 2009;91-B:636–644
- ◆ Fassiadis N. Rivaroxaban, the first oral, direct factor Xa inhibitor. *Expert Opin Pharmacother.* 2009;10(18):2945-6
- ◆ Fiessinger JN. New oral anticoagulants: prospects. *Rev Prat.* 2010;60(5):613-616
- ◆ Fisher WD, Eriksson BI, Bauer KA, et al. Rivaroxaban for thromboprophylaxis after orthopaedic surgery: pooled analysis of two studies. *J Thromb Haemost.* 2007;97:931–937
- ◆ Gerotziafas GT, Elalamy I, Perzborn E, et al. *In vitro* inhibition of thrombin generation, after tissue factor pathway activation, by the oral, direct Factor Xa inhibitor rivaroxaban. *J Thromb Haemost.* 2007;5:886–888
- ◆ Gómez-Outes A, Suárez-Gea ML, Blázquez-Pérez A, et al. Rivaroxaban versus enoxaparin after total knee arthroplasty. *Lancet.* 2009;374:682
- ◆ Gómez-Outes A, Suárez-Gea ML, Blázquez-Pérez A, et al. Will oral rivaroxaban improve clinically relevant outcomes and thromboprophylaxis management in the orthopedic patient? *J Thromb Haemost.* 2009;7(12):2149-50
- ◆ Graff J, von Hentig N, Misselwitz F, et al. Effects of the oral, direct Factor Xa inhibitor rivaroxaban on platelet-induced thrombin generation and prothrombinase activity. *J Clin Pharmacol.* 2007;47:1398–1407
- ◆ Gulseth MP, Michaud J, Nutescu EA. Rivaroxaban: an oral direct inhibitor of factor Xa. *Am J Health Syst Pharm.* 2008;65:1520–1529
- ◆ Haas S. New anticoagulants – towards the development of an ‘ideal’ anticoagulant. *VASA.* 2009;38:13–29
- ◆ Haas S. Rivaroxaban – an oral, direct Factor Xa inhibitor: lessons from a broad clinical study programme. *Eur J Haematol.* 2009;82:339–349
- ◆ Haas S. Facts and artefacts of coagulation assays for Factor Xa inhibitors. *J Thromb Haemost.* 2010;103(4):686-688
- ◆ Harber CR, Nathanson MH. Rivaroxaban for thromboembolism prophylaxis after orthopaedic surgery. *Anaesthesia.* 2010;65(6):552-5
- ◆ Heindl B, Spannagl M. New oral anticoagulants: Consequences for perioperative coagulation diagnostics and therapy. *Anaesthetist.* 2009;58(12):1252-5
- ◆ Jiang J, Hu Y, Zhang J, et al. Safety, pharmacokinetics and pharmacodynamics of single doses of rivaroxaban – an oral, direct factor Xa inhibitor – in elderly Chinese subjects. *J Thromb Haemost.* 2010;103:234–41
- ◆ Kakar P, Watson T, Lip GY. Drug evaluation: Rivaroxaban, an oral, direct inhibitor of activated Factor X. *Curr Opin Investig Drugs.* 2007;8:256–265
- ◆ Kakar P, Watson T, Lip GY. Rivaroxaban. *Drugs Today.* 2007;43:129–136



- ◆ Kakkar AK, Brenner B, Dahl OE, et al. Extended duration rivaroxaban versus short-term enoxaparin for the prevention of venous thromboembolism after total hip arthroplasty: a double-blind, randomised controlled trial. *Lancet*. 2008;372:31–39
- ◆ Kakkar AK. Rivaroxaban: venous thromboembolism risk reduction after total hip arthroplasty. *J Bone Joint Surg (Br)*. 2008;(suppl)18–23
- ◆ Kamphuisen PW. Thromboprophylaxis with rivaroxaban or enoxaparin did not differ for major bleeding in knee arthroplasty. *ACP J Club*. 2008;149:6–7
- ◆ Kamphuisen PW. Thromboprophylaxis with rivaroxaban or enoxaparin did not differ for major bleeding or other safety outcomes in hip arthroplasty. *ACP J Club*. 2008;149:6–7
- ◆ Klauser W. What's new in hip and knee surgery? *J Bone Joint Surg (Br)*. 2008;(suppl)7–12
- ◆ Komotar RJ, Starke RM, Connolly ES Jr. Orally administered factor xa inhibitor, rivaroxaban: a novel thromboembolic prophylaxis agent. *Neurosurgery*. 2008;63:N10–11
- ◆ Kubitz D, Becka M, Mueck W, et al. Rivaroxaban (BAY 59-7939) – an oral, direct Factor Xa inhibitor – has no clinically relevant interaction with naproxen. *Br J Clin Pharmacol*. 2007;63:469–476
- ◆ Kubitz D, Becka M, Mueck W, et al. Safety, tolerability, pharmacodynamics, and pharmacokinetics of rivaroxaban – an oral, direct Factor Xa inhibitor – are not affected by aspirin. *J Clin Pharmacol*. 2006;46:981–990
- ◆ Kubitz D, Becka M, Voith B, et al. Safety, pharmacodynamics, and pharmacokinetics of single doses of BAY 59-7939, an oral, direct Factor Xa inhibitor. *Clin Pharmacol Ther*. 2005;78:412–421
- ◆ Kubitz D, Becka M, Wensing G, et al. Safety, pharmacodynamics and pharmacokinetics of BAY 59-7939 – an oral, direct Factor Xa inhibitor – after multiple dosing in healthy male subjects. *Eur J Clin Pharmacol*. 2005;61:873–880
- ◆ Kubitz D, Becka M, Zuehlsdorf M, et al. Body weight has limited influence on the safety, tolerability, pharmacokinetics, or pharmacodynamics of rivaroxaban (BAY 59-7939) in healthy subjects. *J Clin Pharmacol*. 2007;47:218–226
- ◆ Kubitz D, Becka M, Zuehlsdorf M, et al. Effect of food, an antacid, and the H2 antagonist ranitidine on the absorption of BAY 59-7939 (rivaroxaban), an oral, direct factor Xa inhibitor, in healthy subjects. *J Clin Pharmacol*. 2006;46:549–558
- ◆ Kubitz D, Haas S. Novel Factor Xa inhibitors for prevention and treatment of thromboembolic disease. *Expert Opin Investig Drugs*. 2006;15:843–855
- ◆ Kubitz D, Mueck W, Becka M. Randomized, double-blind, crossover study to investigate the effect of rivaroxaban on QT-interval prolongation. *Drug Saf*. 2008;31:67–77
- ◆ Kubitz D, Becka M, Roth A, et al. Dose-escalation study of the pharmacokinetics and pharmacodynamics of rivaroxaban in healthy elderly subjects. *Curr Med Res Opin*. 2008;24:2757–2765
- ◆ Kwong LM. Rivaroxaban, an oral, direct Factor Xa inhibitor: a new option for thromboprophylaxis. *Orthopedics*. In press
- ◆ Lang D, Freudenberger C, Weinz C. *In vitro* metabolism of rivaroxaban – an oral, direct Factor Xa inhibitor – in liver microsomes and hepatocytes of rat, dog and man. *Drug Metab Dispos*. 2009;37(5):1046–55
- ◆ Lassen MR, Ageno W, Borris LC, et al. Rivaroxaban for thromboprophylaxis after total knee arthroplasty. *N Engl J Med*. 2008;358:2776–2785
- ◆ Lassen MR. Rivaroxaban reduces symptomatic venous thromboembolism and has a potential positive economic impact after total knee arthroplasty. *J Bone Joint Surg (Br)*. 2008;(suppl)24–29



- ◆ Lassen M, Laux V. Emergence of new oral antithrombotics: a critical appraisal of their clinical potential. *Vasc Health Risk Manag.* 2008;4:1373–1386
- ◆ Lassen M. Recent developments in the use of oral anticoagulants *Expert Opin Pharmacother.* 2009;10:1769–81
- ◆ Laux V, Perzborn E, Kubitza D, et al. Preclinical and clinical characteristics of rivaroxaban: a novel, oral, direct Factor Xa inhibitor. *Semin Thromb Haemost.* 2007;33(5):515–523
- ◆ Laux V, Perzborn E, Heitmeier S, et al. Direct inhibitors of coagulation proteins – the end of the heparin and low-molecular-weight heparin era for anticoagulant therapy? *J Thromb Haemost.* 2009;102:892–899
- ◆ Lippi G, Franchini M, Targher G. Rivaroxaban for thromboprophylaxis. *N Engl J Med.* 2008;359:2174; (author reply) 2175–2176
- ◆ Longo UG, Maffulli N, Denaro V. Rivaroxaban versus enoxaparin after total knee arthroplasty. *Lancet.* 2009;374(9691):681–682
- ◆ Lotke PA. Rivaroxaban for thromboprophylaxis. *N Engl J Med.* 2008;359:2174; (author reply) 2175–2176
- ◆ Luiting W, Ros JJW. Rivaroxaban (Xarelto). *Pharmaceutisch Weekblad.* 2008;143:26–27
- ◆ Mantz J. Rivaroxaban: a decisive step forward in the management of postoperative thromboembolic disease? *Ann Fr Anesth Reanim.* 2008;27 (suppl)3:S1
- ◆ McCullagh L, Tilson L, Walsh C, et al. A cost-effectiveness model comparing rivaroxaban and dabigatran etexilate with enoxaparin sodium as thromboprophylaxis after total hip and total knee replacement in the Irish healthcare setting. *Pharmacoeconomics.* 2009;27:829–846
- ◆ Mega J, Braunwald E, Mohanavelu S, et al; on behalf of the ATLAS ACS-TIMI 46 study group. Rivaroxaban versus placebo in patients with acute coronary syndromes (ATLAS ACS-TIMI 46): a randomised, double-blind, phase II trial. *Lancet.* 2009;374(9683):29–38
- ◆ Melillo SN, Scanlon JV, Exter BP, et al. Rivaroxaban for thromboprophylaxis in patients undergoing major orthopedic surgery (June) (CE). *Ann Pharmacother.* 2010 Apr 27. [Epub ahead of print] <http://www.theannals.com/cgi/content/full/44/6/1061>
- ◆ Morell J, Sullivan B, Khalabuda M, et al. Role of orally available antagonists of Factor Xa in the treatment and prevention of thromboembolic disease: Focus on rivaroxaban. *J Clin Pharmacol.* 2010 Feb 2. [Epub ahead of print] <http://jcp.sagepub.com/cgi/rapidpdf/0091270009355814v1>
- ◆ Mismetti P, Laporte S. Rivaroxaban: clinical pharmacology. *Ann Fr Anesth Reanim.* 2008;27 (suppl)3:S16–S21
- ◆ Mueck W, Becka M, Kubitza D, et al. Population model of the pharmacokinetics and pharmacodynamics of rivaroxaban – an oral, direct Factor Xa inhibitor – in healthy subjects. *Int J Clin Pharm Ther.* 2007;45:335–344
- ◆ Mueck W, Eriksson BI, Bauer KA, et al. Population pharmacokinetics and pharmacodynamics of rivaroxaban – an oral, direct Factor Xa inhibitor – in patients undergoing major orthopaedic surgery. *Clin Pharmacokinet.* 2008;47(3);203–216
- ◆ Mueck W, Borris LC, Dahl OE, et al. Population pharmacokinetics and pharmacodynamics of once and twice-daily rivaroxaban for the prevention of venous thromboembolism in patients undergoing total hip replacement. *J Thromb Haemost.* 2008;100:453–461
- ◆ Ordovás Baines JP. Dabigatran and rivaroxaban, new oral anticoagulants for the treatment of venous thromboembolism. *Farm Hosp.* 2009;33:123–124
- ◆ Orfeo T, Butenas S, Brummel-Ziedins KE, et al. Anticoagulation by Factor Xa inhibitors. *J Thromb Haemost.* 2010 May 21 [Epub ahead of print] <http://www3.interscience.wiley.com/journal/123455679/abstract?CRETRY=1&SRETRY=0>



- ◆ Paramanathan V. Rivaroxaban: future in anticoagulation practice? *Hematology*. 2008;13:257–260
- ◆ Perzborn E, Kubitzka D, Misselwitz F. Rivaroxaban. A novel, oral, direct Factor Xa inhibitor in advanced clinical development for the prevention and treatment of thromboembolic disorders. *Hämostaseologie*. 2007;27:282–289
- ◆ Perzborn E, Roehrig S, Straub A, et al. Rivaroxaban: a new oral factor Xa inhibitor. *Arterioscler Thromb Vasc Biol*. 2010;30:376–381
- ◆ Perzborn E, Strassburger J, Wilmen A, et al. *In vitro* and *in vivo* studies of the novel antithrombotic agent BAY 59-7939 – an oral, direct Factor Xa inhibitor. *J Thromb Haemost*. 2005;3:514–521
- ◆ Piccini JP, Patel MR, Mahaffey KW, et al. Rivaroxaban, an oral direct Factor Xa inhibitor. *Expert Opin Investig Drugs*. 2008;17:925–937
- ◆ Pleiss U, Seidel D, Grosser R. Syntheses of [¹⁴C]BAY 59-7939 and its radiolabeled metabolite M-4. *J Labelled Compd Rad*. 2006;49:929–934
- ◆ Quante M, Pauschert R, Gogarten W. Oral prevention of thromboembolism with rivaroxaban and dabigatran: Are the newly approved drugs innovations in orthopaedic and trauma surgery? *Z Orthop Unfall*. 2010 Feb 5. [Epub ahead of print] <http://www.thieme-connect.com/DOI/DOI?10.1055/s-0029-1240803>
- ◆ Raju NC, Dimmitt S, Eikelboom JW. Rivaroxaban versus enoxaparin after total knee arthroplasty. *Lancet*. 2009;374:681
- ◆ Roehrig S, Straub A, Pohlmann J, et al. Discovery of the novel antithrombotic agent 5-chloro-N-((5S)-2-oxo-3-[4-(3-oxomorpholin-4-yl)phenyl]-1,3-oxazolidin-5-yl)methyl thiophene-2-carboxamide (BAY 59-7939): an oral, direct Factor Xa inhibitor. *J Med Chem*. 2005;48:5900–5908
- ◆ Rohde G. Determination of rivaroxaban – a novel, oral, direct Factor Xa inhibitor – in human plasma by high-performance liquid chromatography-tandem mass spectrometry. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2008;872:43–50
- ◆ Rosencher N, Bellamy N, Arnaout L. Total hip and knee arthroplasty: an anaesthetist's perspective. *J Bone Joint Surg (Br)*. 2008;(suppl)13–17
- ◆ Rosencher N, Arnaout L, Chabbouh T, et al. Rivaroxaban (Xarelto): efficacy and safety. *Ann Fr Anesth Reanim*. 2008;27(Suppl 3):S22–S27
- ◆ Samama M, Depasse F. From old to new anticoagulants: the role of the pathologist. *Ann Biol Clin*. 2009;67:525–534
- ◆ Samama MM, Gerotziafas GT. Newer anticoagulants in 2009. *J Thromb Thrombolysis*. 2010;29(1):92–104
- ◆ Samama MM, Martinoli JL, Leflem L, et al. Assessment of laboratory assays to measure rivaroxaban – an oral, direct factor Xa inhibitor. *J Thromb Haemost*. 2010 Feb 2 [Epub ahead of print]
- ◆ Scheen AJ. Rivaroxaban (Xarelto): new anticoagulant inhibitor of factor Xa. *Rev Med Liege*. 2009;64:538–543
- ◆ Schellong SM, Beyer J, Kakkar AK, et al. Ultrasound screening for asymptomatic deep vein thrombosis after major orthopaedic surgery: the VENUS study. *J Thromb Haemost*. 2007;5:1431–1437
- ◆ Schulman S. Rivaroxaban in Orthopedic Surgery: A Change of Paradigm? *Clin Appl Thromb Hemost*. 2009;15(6):613–20
- ◆ Schuman EP. Rivaroxaban for thromboprophylaxis. *N Engl J Med*. 2008;359:2174
- ◆ Smith SA, Morrissey JH. Polyphosphate as a general procoagulant agent. *J Thromb Haemost*. 2008;6:1750–1756



- ◆ Stevenson M, Scope A, Holmes M, et al. Rivaroxaban for the prevention of venous thromboembolism: a single technology appraisal. *Health Technol Assess.* 2009;13 (suppl 3):43-48
- ◆ Stewart RA. Underestimation of the effect of bleeding in clinical trials. *Lancet.* 2009;374(9696):1145;(author reply)1145-1146
- ◆ Stief T. Rivaroxaban versus enoxaparin after total knee arthroplasty. *Lancet.* 2009;374(9691):681
- ◆ Straub A, Roehrig S, Hillisch A. Entering the era of non-basic P1 site groups: Discovery of Xarelto (rivaroxaban). *Curr Top Med Chem.* 2010 Feb 18. [Epub ahead of print] http://www.benthamdirect.org/pages/b_viewarticle.php?3157915
- ◆ Cate H, Hamulyak K. Rivaroxaban for thromboprophylaxis. *N Engl J Med.* 2008;359:2174–2175;(author reply)2176
- ◆ The Executive Steering Committee, on behalf of the ROCKET AF Study Investigators. Rivaroxaban-once daily, oral, direct factor Xa inhibition compared with vitamin K antagonism for prevention of stroke and embolism trial in atrial fibrillation: Rationale and design of the ROCKET AF study. *Am Heart J.* 2010;159(3):340-347
- ◆ Trkulja V, Kolundzic R. Rivaroxaban vs Dabigatran for thromboprophylaxis after joint-replacement surgery: exploratory indirect comparison based on meta-analysis of pivotal clinical trials. *Croat Med J.* 2010;15;51(2):113-123
- ◆ Turpie AGG, Fisher WD, Bauer KA, et al, for the ODIxAKNEE Study Group. BAY 59-7939: an oral, direct Factor Xa inhibitor for the prevention of venous thromboembolism in patients after total knee replacement. A phase II dose-ranging study. *J Thromb Haemost.* 2005;3:2479–2486
- ◆ Turpie AGG. Oral, direct Factor Xa inhibitors in development for the prevention and treatment of thromboembolic diseases. *Arterioscler Thromb Vasc Biol.* 2007;27:1238–1247
- ◆ Turpie AGG. New oral anticoagulants in atrial fibrillation. *Eur Heart J.* 2008;29(2):155–165
- ◆ Turpie AGG. Warfarin replacements: mechanisms underlying emerging agents. *Can J Cardiol.* 2008;24:56–60
- ◆ Turpie AGG. Anticoagulants after orthopaedic surgery – where we are now? *J Bone Joint Surg (Br).* 2008;(suppl)30–32
- ◆ Turpie AG. Rivaroxaban in the prevention and treatment of Deep Venous Thrombosis (Update). Fauci AS, Braunwald E, Kasper DL, Hauser SL, Longo DL, Jameson JL, Loscalzo J. *Harrison's Principles of Internal Medicine.* 17th Edition 2008
- ◆ Turpie AGG. Thromboprophylaxis after major orthopaedic surgery: state of the art. *European Instructional Lectures.* 2009;(9):29-39
- ◆ Turpie AGG, Lassen M, Davidson B, et al. Rivaroxaban versus Enoxaparin for Thromboprophylaxis after Total Knee Arthroplasty: RECORD4. *Lancet.* 2009;373:1673–1680
- ◆ Ufer M. Comparative efficacy and safety of the novel oral anticoagulants dabigatran, rivaroxaban and apixaban in preclinical and clinical development. *J Thromb Haemost.* 2010 Feb 2. [Epub ahead of print] http://www.schattauer.de/index.php?id=1268&L=1&pii=th09-09-0659&no_cache=1
- ◆ Van Thiel DH, Kalodiki E, Wahi R, et al. Interpretation of benefit-risk of enoxaparin as comparator in the record program: rivaroxaban oral tablets (10 milligrams) for use in prophylaxis in deep vein thrombosis and pulmonary embolism in patients undergoing hip or knee replacement. *Clin Appl Thromb Hemost.* 2009;15(4):389-394
- ◆ Verma AK, Brighton TA The direct factor Xa inhibitor rivaroxaban. *Med J Aust.* 2009 Apr 6;190(7):379–383



- ◆ Walenga JM, Prechel M, Jeske WP, et al. Rivaroxaban – an oral, direct Factor Xa inhibitor – has potential for the management of patients with heparin-induced thrombocytopenia. *Br J Haematol.* 2008;143:92–99
- ◆ Weinz C, Buete Horn U, Daehler H-P, et al. Pharmacokinetics of BAY 59-7939 – an oral, direct Factor Xa inhibitor – in rats and dogs. *Xenobiotica.* 2005;35:891–910
- ◆ Weinz C, Schwarz T, Kubitz D, et al. Metabolism and excretion of rivaroxaban – an oral, direct Factor Xa inhibitor – in rats, dogs and humans. *Drug Metab Dispos.* 2009;37:1056–1064
- ◆ Wild D, Murray M, Shakespeare A, et al. Patient-reported treatment satisfaction measures for long-term anticoagulant therapy. *Expert Review of Pharmacoeconomics & Outcomes Research.* 2008;8:291–299
- ◆ Zhao X, Sun P, Zhou Y, et al. Safety, pharmacokinetics and pharmacodynamics of single/multiple doses of the oral, direct Factor Xa inhibitor rivaroxaban in healthy Chinese subjects. *Br J Clin Pharmacol.* In press
- ◆ [No author listed] Rivaroxaban: new drug. After hip or knee replacement surgery: LMWH is safer. *Prescrire Int.* 2009;18:151–153
- ◆ [No author listed] Anticoagulation with dabigatran or rivaroxaban. *Drug Ther Bull.* 2009;47:116–120
- ◆ Anderson FA, Huang W, Lieberman JR, et al. Practices in warfarin use among US surgeons performing primary total hip or knee arthroplasty: findings from a survey of US surgeons. Presented at the ATS 2010 Annual International Conference New Orleans, LA; May 14–19, 2010. <https://cms.psav.com/cAbstract/itinerary/author.html>
- ◆ Baser O, Wang L, Sengupta N, et al. Cost of venous thromboembolism events according to discharge status of medicare patients after major orthopaedic surgery. Presented at the American College of Preventive Medicine (ACPM) Annual Meeting, Washington, DC, USA; February 17–20, 2010
- ◆ Baser O, Wang L, Sengupta N, et al. Cost of venous thromboembolism events according to discharge status of medicare patients after total hip or knee arthroplasty. Presented at the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 15th Annual International Meeting Atlanta, GA, USA; May 15–19, 2010
- ◆ Baser O, Wang L, Sengupta N, et al. The impact of index in-hospital venous thromboembolism after total hip replacement and total knee replacement on costs to post-discharge medicare beneficiaries and private payors. Presented at the National Association of Orthopaedic Nurses 30th Annual Congress Seattle, WA, USA; May 15–19, 2010
- ◆ Bauer K, Homering M, Berkowitz S. Effects of age, weight, gender and renal function in a pooled analysis of four phase iii studies of rivaroxaban for prevention of venous thromboembolism after major orthopedic surgery. *Blood.* (ASH Annual Meeting Abstracts) 2008;112:436
- ◆ Borah B, McDonald H, Henk J, et al. Alignment to ACCP prophylaxis guidelines and VTE outcomes in THR and TKR patients. *Blood.* (ASH Annual Meeting Abstracts) 2008;112:170

Abstracts (BSP/J&J sponsored research)

- ◆ Alacqua M, Mazzaglia G, Filippi A, et al. Persistence of oral anticoagulation therapy in atrial fibrillation: a retrospective cohort study in primary care in Italy. *Pharmacoepidemiol Drug Saf.* 2008;17:S61



- ◆ Borris LC, Eriksson BI, Turpie AGG, et al. Pooled analysis of four clinical studies of rivaroxaban after hip and knee replacement: Lack of effect of concomitant pain medication. 14th Congress of the EAHP 2009;23:B19 Available online at: <http://www.eahp.eu/Congresses/Abstract-information/14th-Congress-of-the-EAHP-Barcelona-abstract-book>
- ◆ Brosa M, Diamantopoulos A, Forster F, et al. Cost-effectiveness of rivaroxaban versus enoxaparin for thromboprophylaxis after total knee replacement in the UK and Spain. 14th Congress of the EAHP 2009;23:K15. Available online at: <http://www.eahp.eu/Congresses/Abstractinformation/14th-Congress-of-the-EAHP-Barcelona-abstract-book>
- ◆ Büller HR. Once-Daily Oral Rivaroxaban Versus Placebo in the Long-Term Prevention of Recurrent Symptomatic Venous Thromboembolism. The Einstein-Extension Study. *Blood*. 2009;114:LBA-2
- ◆ Büller HR, Agnelli G, Lensing AWA, et al, the EINSTEIN-DVT and ODIXa-DVT Study groups. Rivaroxaban once or twice daily: similar efficacy and safety to standard therapy in dose-ranging studies for the treatment of proximal deep vein thrombosis. *J Am Coll Cardiol*. 2007;49:364A
- ◆ Büller HR, Agnelli G. Treatment of proximal deep vein thrombosis (DVT): Rivaroxaban once or twice daily had similar efficacy and safety to standard therapy in phase II studies. *J Thromb Haemost*. 2007;5(Suppl.2):Abstract O-W-052
- ◆ Cohen A, Spiro T, Büller HR, et al, on behalf of the MAGELLAN investigators. The MAGELLAN study methodology: rivaroxaban compared with enoxaparin for the prevention of venous thromboembolism in patients with medical illness. <http://www.eventure-online.com/eventure/publicAbstractView.do?id=137377&congressId=3446>
- ◆ Dahl OE, Eriksson BI, Homering M, et al. The effect of patient age, gender and weight on the efficacy and safety of rivaroxaban (BAY 59-7939) for the prevention of venous thromboembolism after major orthopaedic surgery. *J Bone Joint Surg (Br)*. 2009;91-B(Suppl IV):76
- ◆ Diamantopoulos A, Forster F, Brosa M, et al. Cost-effectiveness of rivaroxaban versus enoxaparin for thromboprophylaxis after total knee replacement in the UK and Spain. *Value Health*. 2008;11:A533
- ◆ Diamantopoulos A, Forster F, Brosa M, et al. Cost-effectiveness of rivaroxaban versus enoxaparin for thromboprophylaxis after total hip replacement in Spain. *Value Health*. 2008;11:A533
- ◆ Diamantopoulos A, Forster F, Lees M, et al. Cost-effectiveness of rivaroxaban versus enoxaparin for thromboprophylaxis after total hip replacement in the UK. *Value Health*. 2008;11:A534
- ◆ Diamantopoulos A, Forster F, Lees M, et al. Cost-effectiveness of rivaroxaban versus enoxaparin for thromboprophylaxis after total hip replacement in Canada. *Value Health*. 2008;11:A533
- ◆ Diamantopoulos A, LeReun C, Rasul F, et al. Indirect comparisons of rivaroxaban vs alternative prophylaxes for the prevention of venous thromboembolism in patients undergoing total hip or total knee replacement. *Value Health*. 2008;11:A197
- ◆ Eriksson BI, Turpie AGG, Kakkar AK, et al, on behalf of the RECORD1–4 investigators. Pooled analysis of rivaroxaban after total hip and knee replacement: effects of co-medications. <http://www3.aaos.org/education/anmeet/anmt2010/poster/poster.cfm?Pevent=P093>
- ◆ Eriksson B, Turpie A, Lassen M, et al. A pooled analysis of four pivotal studies of rivaroxaban for the prevention of venous thromboembolism after orthopaedic surgery: effects of specified co-medications. *Blood (ASH Annual Meeting Abstracts)*. 2008;112:1986



- ◆ Filippi A, Alacqua M, Shakespeare A, et al. Management of atrial fibrillation with oral anticoagulants and predictors in clinical practice in Italy. *Eur Heart J*. 2008;29(suppl):534
- ◆ Fisher WD, Lassen MR, Turpie AGG, et al, on behalf of the RECORD1–4 investigators. Bleeding events in the early phase of thromboprophylaxis: a pooled analysis of four rivaroxaban studies. *J Thromb Haemost*. 2009;7(s2):1076
- ◆ Fisher WD, Gent M, Lassen MR, et al, on behalf of the RECORD1–4 investigators. Pooled data from rivaroxaban clinical trials: timing of symptomatic VTE and bleeding events after THA. Available online at: <http://www3.aaos.org/education/anmeet/anmt2010/poster/poster.cfm?Pevent=P091>
- ◆ Fisher WD, Gent M, Lassen MR, et al, on behalf of the RECORD3 and 4 investigators. Pooled rivaroxaban clinical trial data: timing of symptomatic venous thromboembolism and bleeding events after total knee arthroplasty. Available online at: <http://www3.aaos.org/education/anmeet/anmt2010/podium/podium.cfm?Pevent=153>
- ◆ Fisher WD, Gent M, Lassen MR, et al, on behalf of the RECORD 1–4 investigators. Timing of symptomatic venous thromboembolism and bleeding events after total knee arthroplasty: A pooled analysis of rivaroxaban studies. Available online at: <http://ww1.efort.org/madrid2010/finalprogramme/FreePaperContent.asp?Pid=F159>
- ◆ Fisher WD, Gent M, Lassen MR, et al, on behalf of the RECORD 1–4 investigators. Timing of symptomatic venous thromboembolism and bleeding events after total hip arthroplasty: A pooled analysis of rivaroxaban studies. Available online at: <http://ww1.efort.org/madrid2010/finalprogramme/FreePaperContent.asp?Pid=F14>
- ◆ Friedman R, Lees M, Sengupta N, et al. Rivaroxaban for prevention of venous thromboembolism after total hip replacement: impact on healthcare costs based on the RECORD 1 study. *J Bone Joint Surg (Br)*. In press
- ◆ Friedman RJ, Turpie AGG, Lassen MR, et al, on behalf of the RECORD1–4 investigators. Oral rivaroxaban significantly reduces symptomatic VTE and death after THA and TKA. Available online at: <http://www3.aaos.org/education/anmeet/anmt2010/poster/poster.cfm?Pevent=P097>
- ◆ Gheorghiade M, Thyssen A, Nadar V, et al. Effect of rivaroxaban on biomarkers of hypercoagulability in patients with chronic HF. Poster presentation at the American Heart Association (AHA) Scientific Sessions, Orlando, FL, USA; November 15– 17, 2009
- ◆ Gerdes C, Schumacher M. Rivaroxaban suppresses platelet-rich thrombus formation in a rat arteriolar, laser- induced injury model. *J Thromb Haemost*. 2009;7(s2):287
- ◆ Gibson CM, Mega JL, Hammett CJ, et al. Randomized comparison of rivaroxaban, an oral direct Factor Xa inhibitor, with placebo in patients with acute coronary syndromes: The ATLAS ACS-TIMI 46 Trial. *Circulation*. 2008;118:2311
- ◆ Gruber A, Marzec UM, Buetehorn U, et al. Recombinant Factor VIIa reverses the effects of a high dose of rivaroxaban in baboons. *Pathophysiol Haemost Thromb*. 2007/2008;36:A39
- ◆ Gruber A, Marzec U, Buetehorn U, et al. Potential of activated prothrombin complex concentrate and activated Factor VII to reverse the anticoagulant effects of rivaroxaban in primates. *Blood* (ASH Annual Meeting Abstracts). 2008;112:3825
- ◆ Haas S, Turpie, AGG, Lassen, MR, et al. Prothrombin time and bleeding events in patients undergoing total hip or knee replacement surgery receiving 10 mg rivaroxaban. *Blood*. 2009;114:828
- ◆ Haertlein B, Parry TJ, Chen C, et al. Rivaroxaban An Oral, Direct Factor Xa Inhibitor Prevents Arterial Thrombotic Occlusion in Electrolytically Injured Rat Carotid Arteries. *Blood*. 2007;110(11):Abstract:3-a-4003



- ◆ Halabi A, Kubitzka D, Zuehlsdorf M, et al. Effect of hepatic impairment on the pharmacokinetics, pharmacodynamics and tolerability of rivaroxaban – an oral, direct Factor Xa inhibitor. *J Thromb Haemost.* 2007;5(suppl):Abstract P-M-635
- ◆ Halabi A, Maatouk H, Klause N, et al. Effects of renal impairment on the pharmacology of rivaroxaban (BAY 59-7939) – an oral, direct Factor Xa inhibitor. *Blood.* 2006;108:Abstract 913
- ◆ Hoppensteadt D, Neville B, Cunanan J, et al. Comparison of the anticoagulant properties of BAY 59-7939 – an oral, direct Factor Xa inhibitor – with fondaparinux and enoxaparin. *J Thromb Haemost.* 2005;3(suppl): Abstract P1120
- ◆ Hoppensteadt D, Neville B, Schultz C, et al. Interaction of BAY 59-7939 – a novel, oral, direct Factor Xa inhibitor – with antiplatelet agents: monitoring and therapeutic applications. *J Thromb Haemost.* 2005;3(suppl):Abstract P1717
- ◆ Kachroo S, Nordstrom B, Nutescu E, et al. Risk of venous thromboembolism as a function of international normalized ratio (INR) in total hip replacement. Poster presented at: Annual Spring Practice and Research Forum of the American College of Clinical Pharmacy (ACCP); Charlotte, NC; April 23-27, 2010
- ◆ Kachroo S, Nordstrom BL, Nutescu EA, et al. Risk of Venous Thromboembolism Increases as a Function of Below-range INR Levels in Total Knee Arthroplasty Patients. Presented at the Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke 2010 Scientific Sessions, Washington, DC, USA; May 19–21, 2010
- ◆ Kachroo S, Nordstrom BL, Nutescu EA, et al. Warfarin International Normalized Ratio Patterns Following Total Hip Arthroplasty. Presented at the Quality of Care and Outcomes Research in Cardiovascular Disease and Stroke 2010 Scientific Sessions, Washington, DC, USA; May 19– 21, 2010
- ◆ Kakkar AK, Lees M, Sengupta N, et al. Prevention of venous thromboembolism with rivaroxaban after total hip replacement: economic impact of extended thromboprophylaxis. *J Bone Joint Surg (Br).* In press
- ◆ Karst A, Bakowski-Enzian B, Perzborn E. Monitoring of rivaroxaban: suitability of a well-established chromogenic anti-Factor Xa assay. *J Thromb Haemost.* 2009;7(s2):372
- ◆ Klein M, Perzborn E, Laux V, et al. The oral, direct factor Xa inhibitor rivaroxaban prevented right ventricular pressure increase and hypertrophy without increasing bleeding in a pulmonary artery hypertension model in rats. *Eur Heart J.* 2008;29(suppl):564
- ◆ Kubitzka D, Becka M, Mueck W, et al. Co-administration of rivaroxaban – a novel, oral, direct Factor Xa inhibitor – and clopidogrel in healthy subjects. *Eur Heart J.* 2007;28(suppl):189
- ◆ Kubitzka D, Becka M, Mueck W, et al. The effect of age, gender and weight on the safety and pharmacology of rivaroxaban (BAY 59-7939) – a novel, oral direct Factor Xa inhibitor. *J Bone Joint Surg (Br).* 2008;(suppl)90-B
- ◆ Kubitzka D, Becka M, Mueck W, et al. The effect of extreme age, and gender, on the pharmacology and tolerability of rivaroxaban – an oral direct Factor Xa inhibitor. *Blood.* 2006;108: Abstract 905
- ◆ Kubitzka D, Becka M, Voith B, et al. Effect of enoxaparin on the safety, tolerability, pharmacodynamics, and pharmacokinetics of BAY 59-7939 – an oral, direct Factor Xa inhibitor. *J Thromb Haemost.* 2005;3(suppl):Abstract P1704
- ◆ Kubitzka D, Becka M, Zuehlsdorf M, et al. No interaction between the novel, oral direct Factor Xa inhibitor BAY 59-7939 and digoxin. *J Clin Pharmacol.* 2006;46:702
- ◆ Kubitzka D, Mueck W, Becka M. No interaction between rivaroxaban – a novel, oral, direct Factor Xa inhibitor – and atorvastatin. *Pathophysiol Haemost Thromb.* 2007/2008;36:A40



- ◆ Kwong L, Lees M, Sengupta N. Rivaroxaban for prevention of venous thromboembolism after total knee arthroplasty: impact on healthcare costs based on the RECORD3 study. *Blood*. 2007;110(11):Abstract 1874
- ◆ Kwong L, Diamantopoulos A, Forster F, et al. Will rivaroxaban be cost-effective for prevention of venous thromboembolism after total hip replacement in us patients? *Blood* (ASH Annual Meeting Abstracts). 2008;112:1290
- ◆ Kwong L, Sengupta N, Lees M. Rivaroxaban for prevention of venous thromboembolism after total knee replacement: impact on healthcare costs based on the RECORD4 Study. *Blood* (ASH Annual Meeting Abstracts). 2008;112:1289
- ◆ Lassen MR, Turpie AGG, Kakkar AK, et al, on behalf of the RECORD1–4 investigators. Potential impact of rivaroxaban on long-term safety outcomes after total hip or knee replacement surgery. *J Thromb Haemost*. 2009;7(s2):1070
- ◆ Lassen MR, Gent M, Kakkar AK, et al, on behalf of the RECORD1–4 investigators. A pooled analysis of surgical safety outcomes in the RECORD programme. Available online at: <http://ww1.efort.org/madrid2010/finalprogramme/PosterContent.asp?Pid=P137>
- ◆ Lassen MR, Gent M, Kakkar AK, et al, on behalf of the RECORD1–4 investigators. A Pooled Analysis of Surgical Safety: Results from the RECORD1–4 Program. Available online at: <http://www3.aaos.org/education/anmeet/anmt2010/poster/poster.cfm?Pevent=P096>
- ◆ Laurent M, Varin R, Joimel U, et al. A novel mechanism of action of rivaroxaban: Inhibition of monocyte and macrophage procoagulant activity and consequence on inflammatory process. Presented at 51st ASH annual meeting, New Orleans, USA. Available online at: <http://ash.confex.com/ash/2009/webprogram/Paper20562.html>
- ◆ Lefebvre P, Vekeman F, Nutescu EA, et al. Risk and Costs of Bleeding Events versus Risk and Costs of VTE for Patients Undergoing Total Hip or Total Knee Arthroplasty. Presented at the National Association of Orthopaedic Nurses 30th Annual Congress, Seattle, WA, USA; May 15–19, 2010
- ◆ Lefebvre P, Vekeman F, Nutescu EA, et al. Incidence rate of venous thromboembolism and hemorrhage in patients undergoing total hip or knee arthroplasty: a managed-care perspective. Presented at the Academy of Managed Care Pharmacy (AMCP) 22nd Annual Meeting and Showcase, San Diego, CA; April 7–10 2010
- ◆ Levitan B, Yuan Z, Turpie AGG, et al. Quantitative benefit–risk assessment of rivaroxaban for the prevention of venous thromboembolism. Presented at 51st ASH annual meeting, New Orleans, USA. Available online at: <http://ash.confex.com/ash/2009/webprogram/Paper23356.html>
- ◆ Maclaine G, Wild D, Reaney M. Patient satisfaction with long-term warfarin for the treatment and secondary prevention of venous thromboembolism. *Pathophysiol Haemost Thromb*. 2006;35(1–2):A44
- ◆ Mueck W, Agnelli G, Büller H, (Intr. by Misselwitz F). Rivaroxaban has predictable pharmacokinetics (PK) and pharmacodynamics (PD) when given once or twice daily for the treatment of acute, proximal deep vein thrombosis (DVT). *Blood*. 2007;110:Abstract 1880
- ◆ Mueck W, Eriksson BI, Borris LC, et al. Rivaroxaban for thromboprophylaxis in patients undergoing total hip replacement: comparison of pharmacokinetics and pharmacodynamics with once- and twice-daily dosing. *Blood*. 2006;108:Abstract 903
- ◆ Murray M, Friedman H. A retrospective study of current anticoagulant use in patients with atrial fibrillation: results from a managed care database. *Blood*. 2005;106:Abstract 2246
- ◆ Murray M, Wild D, Reaney M. Exploring patient satisfaction with long-term warfarin for the treatment of atrial fibrillation. *Blood*. 2005;106(11):Abstract 2245
- ◆ Negrini C, Diamantopoulos A, Forster F, et al. Prophylaxis with rivaroxaban against venous thromboembolism (VTE): a cost-consequence analysis from the perspective of the Italian Healthcare Service. *Value Health*. 2008;11:A534



- ◆ Nordstrom B, Kachroo S, Nutescu E, et al. Warfarin INR patterns following total knee arthroplasty. Poster to be presented at the Society for Vascular Medicine (SVM) 21st Scientific Sessions 6th Board Review Course; Cleveland, OH; April 28-May 2, 2010
- ◆ Nordstrom BL, Kachroo S, Nutescu EA, et al. Different measures to determine time in therapeutic INR range among warfarin-treated patients following total hip or knee replacement. Presented at the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 15th Annual International Meeting, Atlanta, GA, USA; May 15–19, 2010
- ◆ Patel M, Becker R, Breithardt G, et al, on behalf of the ROCKET AF Study Investigators. Rationale and design of the ROCKET AF study: comparison of rivaroxaban with warfarin for the prevention of stroke and systemic embolism in patients with atrial fibrillation. *Eur Heart J* 2009;30 (ESC Abstract Suppl):705
- ◆ Patel MR, Becker RC, Breithardt G, et al. Baseline characteristics of the ROCKET AF study: comparison with recent atrial fibrillation studies. Abstract OAI D5. Available online at: http://www.eurostroke.eu/pub_ongoings.asp
- ◆ Perzborn E, Arndt B. Antithrombotic effects of concomitant administration of BAY 59-7939 with enoxaparin or heparin – interaction study. *Blood*. 2004;104:Abstract 1863
- ◆ Perzborn E, Arndt B, Fischer E, et al. Antithrombotic effects of rivaroxaban – an oral, direct Factor Xa inhibitor – in animal models of arterial and venous thrombosis: comparison with enoxaparin, an antithrombin-dependent anticoagulant. *Eur Heart J*. 2006;27(suppl):762
- ◆ Perzborn E, Arndt B, Fischer E, et al. Antithrombotic efficacy of rivaroxaban – an oral, direct Factor Xa inhibitor – and fondaparinux in animal models. *Pathophysiol Haemost Thromb*. 2006;35(1–2):A34
- ◆ Perzborn E, Arndt B, Fischer E, et al. An *in vivo* risk – benefit comparison of the effects of rivaroxaban – an oral, direct Factor Xa inhibitor – with thrombin inhibitors, warfarin and clopidogrel. *J Thromb Haemost*. 2007;5(suppl 2):Abstract P-W-638
- ◆ Perzborn E, Arndt B, Harward M, et al. Antithrombotic efficacy of BAY 59-7939 – an oral, direct Factor Xa inhibitor – compared with fondaparinux in animal arterial thrombosis and thromboembolic death models. *Eur Heart J*. 2005;26(suppl):481
- ◆ Perzborn E, Buetehorn U, Lampe T, et al. Antithrombotic effects of BAY 59-7939, an oral, direct Factor Xa inhibitor, in models of thrombosis and bleeding time in rats and rabbits. *Pathophysiol Haemost Thromb*. 2004;33(suppl. 2):Abstract PO053
- ◆ Perzborn E, Fischer E, Lange U. Combining rivaroxaban with acetylsalicylic acid increases antithrombotic potency without affecting bleeding times in animal models. *J Thromb Haemost*. 2007;5(suppl 2):Abstract P-W-639
- ◆ Perzborn E, Fischer E, Lange U. Rivaroxaban – a novel, oral, direct Factor Xa inhibitor – enhanced the antithrombotic effects of clopidogrel in rats. *J Thromb Haemost*. 2007;5(suppl. 2):Abstract P-W-641
- ◆ Perzborn E, Fischer E, Lange U. Rivaroxaban, a novel, oral, direct Factor Xa inhibitor, enhanced the antithrombotic effects of clopidogrel and acetylsalicylic acid in rats. *Eur Heart J*. 2007;28(suppl 1):189
- ◆ Perzborn E, Fischer E, Lange U, et al. Concomitant administration of low-dose rivaroxaban – an oral, direct Factor Xa inhibitor – with clopidogrel and acetylsalicylic acid enhances antithrombotic efficacy in rats. *Eur Heart J*. 2009;30 (ESC Abstract Suppl):331
- ◆ Perzborn E, Harwardt M. Recombinant Factor VIIa partially reverses the effects of the Factor Xa inhibitor rivaroxaban on thrombin generation, but not the effects of thrombin inhibitors, *in vitro*. *J Thromb Haemost*. 2007;5(Suppl 2):Abstract P-W-640
- ◆ Perzborn E, Hirth-Dietrich C, Fischer E, et al (Intr. by Misselwitz F). Protective effects of rivaroxaban – an oral, direct Factor Xa inhibitor – in a model of disseminated intravascular coagulation (DIC) in rats. *Blood*. 2007;110(11):Abstract 935



- ◆ Perzborn E, Lange U. Rivaroxaban – an oral, direct Factor Xa inhibitor – inhibits tissue factor-mediated platelet aggregation. *J Thromb Haemost.* 2007;5(suppl. 2):Abstract P-W-642
- ◆ Perzborn E, Strassburger J, Wilmen A, et al. Biochemical and pharmacologic properties of BAY 59-7939, an oral, direct Factor Xa inhibitor. *Pathophysiol Haemost Thromb.* 2004;33(suppl. 2):Abstract PO079
- ◆ Perzborn E, Tinel H. FEIBA reverses the effects of a high dose of rivaroxaban in rats. *Pathophysiol Haemost Thromb.* 2007/2008;36:A40
- ◆ Perzborn E, Buetehorn U, Fischer E, et al. Hypercoagulability in rats is increased by low doses of the direct thrombin inhibitor melagatran, but is reduced by the direct factor Xa inhibitor rivaroxaban. *Eur Heart J.* 2008;29(Abtract Supplement):825
- ◆ Perzborn E, Harwardt M. Direct thrombin inhibitors, but not Factor Xa inhibitors, enhance thrombin formation in human plasma by interfering with the thrombin–thrombomodulin–protein C system. *Blood* (ASH Annual Meeting Abstracts). 2008;112:528
- ◆ Perzborn E, Trabandt A, Selbach K, et al. Prothrombin complex concentrate reverses the effects of high-dose rivaroxaban in rats. *J Thromb Haemost.* 2009;7(s2):379
- ◆ Perzborn E, Harwardt M, Samama MM. Assessment of Factor Xa chromogenic assays for measuring the pharmacodynamics of rivaroxaban – an oral, direct Factor Xa inhibitor. *J Thromb Haemost.* 2009;7(s2):379
- ◆ ROCKET AF Executive Committee, Nessel C, Hacke W. Rivaroxaban – Once-daily, oral, direct Factor Xa inhibition Compared with vitamin K antagonism for prevention of stroke and Embolism Trial in Atrial Fibrillation: Rationale and Design of the ROCKET AF study. Available online at: <http://strokeconference.americanheart.org/scincludes/pdfs/ogctAbstracts.pdf>
- ◆ Samama MM, Le Flem L, Guinet C, et al. Effects of rivaroxaban and fondaparinux on clotting assays. *Pathophysiol Haemost Thromb.* 2007/2008;36:Abstract 173
- ◆ Samama MM, Le Flem L, Guinet C, et al. Measuring rivaroxaban pharmacodynamics: prothrombinase induced clotting time (PiCT[®]) and Heptest[®]. *Pathophysiol Haemost Thromb.* 2007/2008;36:Abstract 174
- ◆ Samama MM, Le Flem L, Guinet C, et al. Suitability of chromogenic anti-Factor Xa methods to measure rivaroxaban in human plasma. *J Thromb Haemost.* 2009;7(s2):693
- ◆ Samama MM, Martinoli JL, Perzborn E, et al, for the Rivaroxaban Prothrombin Time Field Trial Laboratories. Rivaroxaban calibrator and control sets measuring rivaroxaban plasma concentrations using the prothrombin time. Available online at: <http://www.eventureonline.com/eventure/publicAbstractView.do?id=136591&congressId=3446>
- ◆ Samama MM, Martinoli JL, Perzborn E, et al, for the Rivaroxaban Prothrombin Time Field Trial Laboratories. Evaluation of rivaroxaban calibrators and controls and the prothrombin time for measuring rivaroxaban plasma concentrations. Available online at: <http://www.gth-online.org/home/jahrestagung/GTH2010-Abstractband.pdf>
- ◆ Sengupta N, Kwong LM, Supina D, et al. Burden of VTE ‘Never Events’ for Medicare patients undergoing THA/TKA. Oral presented at 28th Annual Meeting of the Mid-America Orthopaedic Association (MAOA); Lost Pines, TX; April 21-25, 2010
- ◆ Smith SA, Morrissey JH. Thromboplastin composition affects the sensitivity of prothrombin time (PT) clotting tests to direct Factor Xa inhibitors. *Blood.* 2007;110(11):Abstract 928
- ◆ Steinle T, Ruppert A, Lees M. Economic burden of venous thromboembolism in the general population and after major orthopedic surgery – results of a systematic literature review. *Value Health.* 2008;11:A201
- ◆ Tersteegen A, Burkhardt N. Rivaroxaban – an oral, direct Factor Xa inhibitor – binds rapidly to Factor Xa. *J Thromb Haemost.* 2007;5(suppl. 2):Abstract P-W-651



- ◆ Tinel H, Huetter J, Perzborn E. Partial reversal of the anticoagulant effect of high-dose rivaroxaban – an oral, direct Factor Xa inhibitor – by recombinant Factor VIIa in rats. *Blood*. 2006;108:Abstract 915
- ◆ Turpie AGG. New anticoagulant drugs in venous and arterial thrombosis. *Haematologica Reports*. 2006;2:9–10
- ◆ Turpie AGG, Eriksson BI, Mueck W, et al. Pharmacokinetic and pharmacodynamic analyses of rivaroxaban in patients undergoing orthopaedic surgery. *Pathophysiol Haemost Thromb*. 2006;35(1–2):A2
- ◆ Turpie A, Lassen M, Kakkar A, et al. A pooled analysis of four pivotal studies of rivaroxaban for the prevention of venous thromboembolism after orthopaedic surgery: effect on symptomatic venous thromboembolism, death, and bleeding. *Blood* (ASH Annual Meeting Abstracts). 2008;112:36
- ◆ Turpie AGG, Lassen MR, Kakkar AK, et al. A pooled analysis of three rivaroxaban studies: Effects on symptomatic events and bleeding. Abstract 323 presented at the European Society of Regional Anaesthesia (ESRA) XXVIII Annual Congress, Salzburg, Austria; September 9–12 2009
- ◆ Turpie AGG, Lassen MRR, Kakkar AK, et al. A pooled analysis of four pivotal studies of rivaroxaban for the prevention of venous thromboembolism after orthopaedic surgery: effect on symptomatic venous thromboembolism and death, and bleeding. Available online at: http://www.sicot.org/resources/File/Pattaya/abstract%20cdrom_oral.pdf Abstract 21764
- ◆ Varin R, Mirshahi S, Mirshahi P, et al. Effect of rivaroxaban, an oral direct Factor Xa inhibitor, on whole blood clot permeation and thrombolysis: critical role of red blood cells. Presented at 51st ASH annual meeting, New Orleans, USA. Available online at: <http://ash.confex.com/ash/2009/webprogram/Paper20554.html>
- ◆ Varin R, Mirshahi S, Mirshahi P, et al. The effects of rivaroxaban – an oral, direct Factor Xa inhibitor – on clot structure and degradability. *Journal of Heart Disease*. 2008; in press
- ◆ Varin R, Mirshahi S, Mirshahi P, et al. Improvement of Thrombolysis by Rivaroxaban, an Anti Xa Inhibitor. Potential Therapeutic Importance in Patients with Thrombosis. *Blood* (ASH Annual Meeting Abstracts). 2008;112:3031
- ◆ Vekeman F, Bookhart B, Lefebvre P, et al. Incidences and associated costs for venous thromboembolism and bleeding events in patients undergoing total hip or knee arthroplasty. Presented at the American Society of Health-System Pharmacists (ASHP), Tampa, FL; June 6-9, 2010
- ◆ Vekeman F, Bookhart B, Lefebvre P, et al. Length of hospitalization and cumulative inpatient costs associated with incidences of venous thromboembolisms and bleeding in patients undergoing total hip or knee arthroplasty. Presented at the American Society of Health-System Pharmacists (ASHP), Tampa, FL; June 6-9, 2010
- ◆ Walenga JM, Hoppensteadt D, Iqbal O, et al. The oral, direct Factor Xa inhibitor BAY 59-7939 does not cross-react with anti-heparin/PF4 (heparin-induced thrombocytopenia) antibodies. *Blood*. 2005;106:Abstract 1883
- ◆ Wells P, Diamantopoulos A, Forster F, et al. Cost-Effectiveness of Rivaroxaban as VTE Prophylaxis after Total Hip Replacement in Canada. *Blood* (ASH Annual Meeting Abstracts). 2008;112:1291
- ◆ Woodward T, Kachroo S, Bookhart BK, et al. Systematic review of the economic burden of venous thromboembolism treatment. Presented at the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 15th Annual International Meeting, Atlanta, GA, USA; May 15–19, 2010



About Rivaroxaban

Rivaroxaban is a novel oral anticoagulant that was invented in Bayer Schering Pharma's Wuppertal laboratories in Germany, and is being jointly developed by Bayer HealthCare and Johnson & Johnson Pharmaceutical Research & Development, L.L.C. In clinical studies, rivaroxaban has been shown to be effective in preventing VTE in adult patients following elective hip or knee replacement surgery. It has a rapid onset of action with a predictable dose response and high bioavailability, no requirement for coagulation monitoring, as well as a limited potential for food and drug interactions. Rivaroxaban is marketed under the brand name Xarelto® for VTE prevention in adult patients following elective hip or knee replacement surgery, and it is the only new oral anticoagulant that has consistently demonstrated superior efficacy over enoxaparin for this indication. Xarelto® is approved in more than 100 countries worldwide and has been successfully launched in more than 75 countries by Bayer Schering Pharma achieving the market leader position among the new oral anticoagulants.

The extensive clinical trial program supporting rivaroxaban makes it the most studied oral, direct Factor Xa inhibitor in the world today. More than 65,000 patients are expected to be enrolled into the rivaroxaban clinical development program, which will evaluate the product in the prevention and treatment of a broad range of acute and chronic blood-clotting disorders, including stroke prevention in patients with atrial fibrillation, secondary prevention of acute coronary syndrome, and VTE prevention in hospitalized, medically ill patients.

**To learn more about thrombosis please visit www.thrombosisadviser.com
To learn more about 'Xarelto' please visit www.xarelto.com**



**MEDIA BACKGROUNDER
FOR EX-US AND EX-UK USE ONLY**

RIVAROXABAN

www.bayer.com



 Bayer HealthCare
Bayer Schering Pharma

**MEDIA BACKGROUNDER
FOR EX-US AND EX-UK USE ONLY**

RIVAROXABAN

August 2010