## A534

(composite: any DVT, non-fatal PE, all-cause mortality) by 49% and symptomatic VTE by 66% versus enoxaparin. A cost-utility model (health care perspective) assessed the cost-effectiveness over five years following TKR of rivaroxaban versus enoxaparin in the UK and Spain, two large European countries with different approaches to post-surgical prophylaxis and patient management. The model was populated using RECORD3 data. Published epidemiological and clinical data estimated risks of VTE and post-thrombotic syndrome beyond the trial period. Costs were derived from published local sources and expressed in pounds (£) for the UK and euros (€) for Spain. Utilities were taken from a systematic literature review. Potential savings from oral administration were included in the UK analysis only, as in Spain, drug administration costs are included in hospitalisation charges. **RESULTS:** The model showed rivaroxaban produced improved health outcomes and cost savings versus enoxaparin in the UK and Spain (dominance). Improved health outcomes were similar across both countries, while rivaroxaban produced cost savings of £89.15 per patient in the UK and €144.93 in Spain. Savings were driven by reduced costs of treating symptomatic VTE and associated long term complications, as well as oral outpatient administration in the UK. In both countries, probabilistic sensitivity analyses showed rivaroxaban maintained dominance versus enoxaparin in more than 99% of cases. CONCLUSIONS: Rivaroxaban is cost-effective following TKR within the different health care systems of both these two major European countries.

#### COST-EFFECTIVENESS OF RIVAROXABAN VERSUS ENOXAPARIN FOR THROMBOPROPHYLAXIS AFTER TOTAL HIP REPLACEMENT IN THE UK

PHC9

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**OBJECTIVES:** Assess cost-effectiveness of 35 days rivaroxaban, an oral direct Factor Xa inhibitor, versus 12 days and 35 days subcutaneous enoxaparin for prevention of venous thromboembolism (VTE) following total hip replacement (THR). METHODS: Rivaroxaban regimens were compared with different enoxaparin regimens following THR in two large randomized controlled trials. RECORD1 compared 35 days prophylaxis with rivaroxaban or enoxaparin, while RECORD2 compared 35 days rivaroxaban with 12 days enoxaparin. While the ACCP and NICE recommend up to 35 days prophylaxis in higher-risk patients after THR, a shorter duration is often used in the UK and elsewhere. In RECORD1, rivaroxaban reduced total VTE (composite: any DVT, non-fatal PE, all-cause mortality) by 70% versus enoxaparin after 35 days prophylaxis, although the reduction in symptomatic VTE with rivaroxaban was not statistically significant. In RECORD2, rivaroxaban reduced total VTE by 79% and symptomatic VTE by 80% versus 12 days enoxaparin. A cost-utility model (health care perspective) assessed cost-effectiveness of rivaroxaban versus both durations of enoxaparin over the five years following surgery. The model was populated by RECORD1-2 data while published epidemiological and clinical data estimated risks of VTE and post-thrombotic syndrome beyond the trial period. Costs (2008 pounds [£]) were derived from published sources. Utilities were taken from a systematic literature review. Potential savings associated with administration and monitoring were also included. RESULTS: Thirty-five days rivaroxaban dominated 35 days enoxaparin, yielding improved health outcomes (QALYs) and savings of £67.82 per patient. Savings were

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driven mainly by reduced outpatient administration costs. Rivaroxaban also dominated 12 days enoxaparin, with a QALY gain of 0.022 and savings of £22.38. Probabilistic sensitivity analyses showed dominance in 98% of cases versus 35 days enoxaparin and 55% versus 12 days enoxaparin. CONCLUSIONS: Rivaroxaban is cost-effective versus both 12 and 35 days enoxaparin, for prevention of VTE following THR in the UK.

PHC10

#### PROPHYLAXIS WITH RIVAROXABAN AGAINST VENOUS THROMBOEMBOLISM (VTE): A COST-CONSEQUENCE ANALYSIS FROM THE PERSPECTIVE OF THE ITALIAN HEALTH CARE SERVICE

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**OBJECTIVES:** Assess economic impact of rivaroxaban, an oral direct Factor Xa inhibitor, in VTE prevention following total hip and total knee replacement (THR/TKR). METHODS: Rivaroxaban regimens were compared with enoxaparin regimens for VTE prevention in three large randomized controlled trials. For THR, 35 days rivaroxaban was compared with 35 days enoxaparin (RECORD1), or 12 days enoxaparin (RECORD2). RECORD3 compared rivaroxaban and enoxaparin for 12 days following TKR. Rivaroxaban reduced total VTE (composite: any DVT, non-fatal PE, all-cause mortality) following THR by 70% versus 35 days enoxaparin and 79% versus 12 days enoxaparin. Following TKR, rivaroxaban reduced total VTE by 49% versus enoxaparin. Bleeding was similar with both agents. An economic model (health care perspective) assessed clinical and economic consequences of rivaroxaban versus enoxaparin for five years following surgery. The model was populated using RECORD 1-3 data and calculated outcomes for total VTE and symptomatic VTE. Cost results for the latter are presented here. Incidences for VTE and post-thrombotic syndrome after the trials were estimated from published data. Costs, (2008 euros [€]), were derived from published Italian sources. As the Italian rivaroxaban price is not published, rivaroxaban and enoxaparin costs were excluded. RECORD 1-3 data were combined to estimate costs and consequences of rivaroxaban versus enoxaparin for THR/TKR. RESULTS: Overall improvement in outcomes with rivaroxaban following THR and TKR was 0.021 symptomatic VTE events per patient undergoing surgery; non-drug costs were reduced by €81.32. These were consistent with individual THR and TKR results when the RECORD trials were analysed separately. In 2004, 96,000 THR and TKR were performed in Italy. Rivaroxaban could yield total annual non-drug cost savings of approximately €7.6 million. CONCLUSIONS: Rivaroxaban thromboprophylaxis following THR or TKR may improve health outcomes and reduce non-drug costs versus existing approaches. Hence rivaroxaban may represent a more efficient approach to VTE prophylaxis in Italy.

# PHCII

### THE BURDEN OF ADHESIOLYSIS DURING LAPAROSCOPIC GYNECOLOGICAL SURGERY

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**OBJECTIVES:** Previous European research has shown that laparoscopic surgery is frequently complicated by the need for adhesiolysis due to adhesions caused by previous surgery. In Europe