Estimates of survival and costs are identical for cisplatin-paclitaxel and cisplatin-gemcitabin. There was a higher incidence of severe toxicities with cisplatin-gemcitabin, but differences in QoL are still to be determined. Gemcitabin-paclitaxel is a dominated option with higher costs and non-superior survival.

**IMMUNOTHERAPY WITH AUTOLOGOUS TUMOR CELL-BCG VACCINE (ONCOVAX®) IN PATIENTS WITH STAGE II COLON CANCER: MEDICAL AND ECONOMIC BENEFITS**

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**OBJECTIVES:** Colon cancer is one of the most common malignancies in developed countries. Surgery is the primary treatment modality for this disease. However, by the time the patient presents with recurrent symptoms, the disease is rarely curable by surgery even when combined with other therapy. The aim was to assess the clinical and economic outcomes of OncoVAX® therapy in stage II colon cancer patients.

**METHODS:** We have completed a prospectively randomized, controlled clinical trial of patients with Stage II colon cancer with active specific immunotherapy (ASI) using autologous tumor cell with an immunomodulating adjuvant bacillus Calmette-Guerin (BCG) vaccine (OncoVAX) in an adjuvant setting. Patients were randomized to either a control group or (OncoVAX) therapy, after surgical resection of the primary tumor and stratification by stage of disease. The cost analysis consisted of the direct health care costs. For the model, the costs and probabilities of the several interventions, disease stages and follow-up have been calculated. Survival and recurrence free survival were used from the clinical study. Utility values were derived from the literature. **RESULTS:** OncoVAX significantly improved survival and recurrence-free survival. The number of life years in the OncoVAX group amounted to 6.96 and in the control group 6.17. The number of recurrence-free life years gained is approximately 1.14 more in the OncoVAX group. The average costs per patient in the OncoVAX group amounted to US$20,395 and in the control group US$19,541. The costs per life year gained amounted to US$19,541 and the costs per QALY amounted to US$20,489. The total discounted cost-effectiveness ratio was US$22,660 and the discounted cost-utility ratio amounted to US$23,675 (discount rate: 4%). **CONCLUSION:** This study shows that OncoVAX is an effective treatment modality for patients with stage II colon cancer with a cost-effectiveness ratio in the range of other oncological treatments.

**COST-EFFECTIVENESS OF FONDAPARINUX VS ENOXAPARIN AS PROPHYLAXIS AGAINST VENOUS THROMBOEMBOLISM FOLLOWING ORTHOPAEDIC SURGERY**

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**OBJECTIVES:** Patients undergoing major orthopaedic surgery are at risk of deep vein thrombosis, pulmonary embolism and subsequent complications, some of which may be fatal. For this reason post-operative prophylaxis is recommended. Enoxaparin is the most frequently used chemical prophylaxis in the UK. Fondaparinux is a novel antithrombotic whose efficacy has been demonstrated, but whose cost-effectiveness has not been assessed. We evaluated the cost-effectiveness of fondaparinux relative to enoxaparin over a period of five years post-surgery.

**METHODS:** We modeled the impact of fondaparinux on patient outcomes and costs to the UK National Health Service (NHS). Outcomes are thromboembolic events (symptomatic deep vein thrombosis, pulmonary embolism) and death. Data on the incidence of thromboembolic events were derived from four randomised clinical trials comparing enoxaparin with fondaparinux, and from a review of the literature. Resource consequences were estimated from a survey of UK hospitals and discussions with a panel of clinical experts. Costs were estimated using mean national costs to the NHS.

**RESULTS:** Fondaparinux dominates enoxaparin for all of the surgery groups studied. The number of venous thromboembolic events (VTE) averted with fondaparinux is 15 per 1000 procedures (Total Hip Replacement), 19.5/1000 (Total Knee Replacement), 23.3/1000 (Hip Fracture Surgery) and 19.2/1000 (All Procedures). The number of VTE-related deaths averted is 0.8/1000 (THR), 0.8/1000 (TKR), 5.9/1000 (HFS) and 3.1/1000 (All Procedures). Fondaparinux reduces expected cost per patient by £18 (THR), £41 (TKR), £30 (HFS) and £29 (All Procedures).

**CONCLUSIONS:** Compared with current practice in the UK, fondaparinux is cost-effective. This conclusion is sensitive to the relative price difference between enoxaparin and fondaparinux, but it is robust to variations in all of the other key parameters in the model. We estimate that using fondaparinux could reduce NHS costs by £3.8 million annually.

**ESTIMATION OF EXPENDITURES FOR CORONARY HEART DISEASE (CHD) IN GERMANY**

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**METHODS:** We modeled the impact of fondaparinux on patient outcomes and costs to the UK National Health Service (NHS). Outcomes are thromboembolic events (symptomatic deep vein thrombosis, pulmonary embolism) and death. Data on the incidence of thromboembolic events were derived from four randomised clinical trials comparing enoxaparin with fondaparinux, and from a review of the literature. Resource consequences were estimated from a survey of UK hospitals and discussions with a panel of clinical experts. Costs were estimated using mean national costs to the NHS.

**RESULTS:** Fondaparinux dominates enoxaparin for all of the surgery groups studied. The number of venous thromboembolic events (VTE) averted with fondaparinux is 15 per 1000 procedures (Total Hip Replacement), 19.5/1000 (Total Knee Replacement), 23.3/1000 (Hip Fracture Surgery) and 19.2/1000 (All Procedures). The number of VTE-related deaths averted is 0.8/1000 (THR), 0.8/1000 (TKR), 5.9/1000 (HFS) and 3.1/1000 (All Procedures). Fondaparinux reduces expected cost per patient by £18 (THR), £41 (TKR), £30 (HFS) and £29 (All Procedures).

**CONCLUSIONS:** Compared with current practice in the UK, fondaparinux is cost-effective. This conclusion is sensitive to the relative price difference between enoxaparin and fondaparinux, but it is robust to variations in all of the other key parameters in the model. We estimate that using fondaparinux could reduce NHS costs by £3.8 million annually.