**PHL4**

**COST OF CARE AND QUALITY OF LIFE IN HEMOPHILIACS DEVELOPING INHIBITORS AGAINST PRODUCTS OF COAGULATION: THE COCIS STUDY**

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**OBJECTIVE:** Bleeding and its complications cause pain, disability and lead to a dramatic impairment of the hemophiliacs’ quality of life (QoL). Problems become extreme when hemophiliacs develop inhibitory antibodies compromising the efficacy of treatment: recent therapeutic advances are likely to have improved this situation, with a sensitive increasing of health care cost. Our objective was to estimate the economic burden and QoL of hemophiliacs with inhibitors in Italy. **METHODS:** We conducted a longitudinal, prospective, prevalence-based, multicentre Cost Of Care Inhibitors Study (COCIS), observing hemophiliacs patients with inhibitors for 18 months. Costs were evaluated from the point of view of the Italian National Health Service (NHS). QoL was measured by the means of EQ-5D and SF-36 questionnaires.

**RESULTS:** Fifty-two hemophiliacs (median age 34.8, 15–64) were enrolled, almost all severe and high responding inhibitors. The orthopedic functioning resulted impaired in 98% of patients. Eighty-one percent had at least one bleeding event average (0.60/patient/month). Eleven surgical procedures (6 for joint replacements), 30 hospitalizations, 712 out patients visits and 702 physiotherapy sessions were recorded during the study period. The cost of care to the NHS was €18,000/month/patient, 99% due to treatment products. Recombinant activated factor VII represented 50% of total medical cost, one half of it used for surgical interventions. Patients showed an important impairment of physical health perception, while psychological QoL was comparable to that in the Italian general population. QoL of the COCIS patients resulted not different from that in severe hemophiliacs without inhibitors. **CONCLUSIONS:** Hemophilia with inhibitors represents an example of a rare disease that still demands large resources in spite of improved management—the cost of illness (COI) estimated from a patient survey and published epidemiological studies.

**PHL5**

**HEALTH ECONOMIC ANALYSIS OF A SILVER CONTAINING HYDROACTIVATED FOAM DRESSING IN DELAYED HEALING LEG ULCERS**

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**OBJECTIVES:** The cost-effectiveness of four different wound care dressings used in the treatment of delayed healing venous leg ulcers was analysed in the context of UK settings. I.e. three antiseptic dressings: A) a silver containing foam; B) an iodine containing paste; C) a silver/charcoal containing cloth; and D) one foam dressing without antiseptic properties. **METHODS:** Two health economic models were designed (a Markov cohort and a spreadsheet) and effectiveness data were collected from published clinical data. All analyses had the perspective of the Health care sector. The timeframes for the two analyses were four weeks for the spreadsheet model and six months for the Markov model. Endpoints used in the analyses were reduction in wound area and number of healed wounds. An independent UK clinical expert panel validated methods, cost, resource, and clinical data as well as treatment practice used in the analyses. Sensitivity analyses were undertaken. **RESULTS:** The cost of weekly treatment with dressing A was £120 compared to £146–187 for the other dressing alternatives. The cost per percentage reduction (4 weeks spreadsheet) and the cost per healed wound (6 months Markov model) were for dressing A £9 and £1228, respectively. The costs for the other dressing alternatives ranged from £12–17 and £1970–2339 respectively. Sensitivity analyses showed that the results were robust. Nursing time costs combined with the dressing frequency changes had a major effect on the results. **CONCLUSION:** Treatment of delayed healing chronic venous leg ulcers in the UK is associated with relatively large costs. Dressing A proved to be cost-effective in treatment of delayed healing venous leg ulcers, the use of which, is expected to result in actual savings in the health care sector.

**PHL6**

**TREATMENT OF LEG ULCERS IN SWEDEN STILL DEMANDS LARGE RESOURCES IN SPADE OF IMPROVED MANAGEMENT—THE COST OF ILLNESS (COI) ESTIMATED FROM A PATIENT SURVEY AND PUBLISHED EPIDEMIOLOGICAL STUDIES**

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**OBJECTIVES:** The aim of the study was to investigate resource use and type of local wound treatment in patients with venous leg ulcers (VLU) in Sweden and to estimate the annual costs for leg ulcer patients. **METHODS:** Weekly resource use data for local wound treatment and details of surgical procedures were collected from a clinical survey (138 patients) in specialist care, primary health care, and home health care. Annual costs were calculated from the weekly resource usage multiplied by unit costs and published epidemiological prevalence data for Sweden. **RESULTS:** Frequency of dressing changes was 2.7 per week and compression was used in 93% of the patients. Most dressing changes were performed in the patients home (66%) and about 80%
of all dressing changes were performed by nurses or auxiliary nurses in primary health care or home health care. Surgical procedures (pinch graft, skin grafting, venous vascular surgery) had been undertaken in 22% of the patients. The average weekly cost was €114, though it differed depending by ulcer size. For ulcers <10 cm² the weekly cost was €73, while the cost for larger ulcers was €179. The total direct annual costs for leg ulcers in Sweden could be estimated at €180 million (2002 prices) based on a point prevalence of 0.3%. CONCLUSIONS: Treatment of leg ulcers seems to have improved compared with previous reports, resulting in slightly decreased costs. Nevertheless, the costs are still substantial and the management of these patients requires large resources. Further development including a more structured management, more careful selection of dressing products and decreased frequency of dressing changes could be encouraged. Such changes could imply further improvements in wound healing and quality of life for patients and decreased costs for the health care system and for society.

**PHL7**

**COST OF TREATMENT (COT) FOR VENOUS LEG ULCERS IN SWEDEN AND THE UK—ESTIMATES FROM CLINICAL EXPERT PANELS AND MODEL SIMULATIONS**

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OBJECTIVES: The aim of the study was to estimate the costs of treating venous leg ulcers (VLU) in Sweden and the UK and to compare and discuss possible differences between the two countries. METHODS: Costs for VLU treatment were estimated with a health economic model based on resource use data obtained from prospectively collected patient data, expert panels in Sweden and the UK, and scientific publications. The model simulated costs for healing of an initial ulcer, costs for prevention of new ulcers in an ulcer free period, and costs of treating second ulcers for a period of one year. Simulations were performed for ulcers of durations <6 months or >=6 months and sizes <10 cm² or >=10 cm². RESULTS: For an initial ulcer with a duration >=6 months and a size >=10 cm² the mean total treatment costs were €2295 in Sweden and €1994 in the UK. Costs of prevention in the ulcer-free period were €127 in Sweden and €45 in the UK. Total costs for one year were €2797 in Sweden and €2138 in the UK. Labour accounted for most of the costs in both countries, while costs of dressings and other material were about 14% for the initial ulcer in Sweden and 21% in the UK. Costs of surgical procedures were low in both countries. Treatment costs decreased in patients with shorter ulcer duration and smaller ulcer size. Nevertheless, the difference in costs between the countries remained in all groups. CONCLUSIONS: The most important factor influencing treatment costs in the two countries is the frequency of dressing changes resulting in higher cost of treatment of VLU in Sweden. Other differences of importance are the organisation of treatment and management of VLU.

**PHL8**

**COST-EFFECTIVENESS OF PATHOGEN INACTIVATION VIA THE INTERCEPT BLOOD SYSTEM FOR PLATELETS IN SPAIN**

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OBJECTIVE: The residual risk of transmitting infectious blood-borne pathogens via blood transfusion persists despite recent blood safety advances. The INTERCEPT Blood System (IBS) for platelets has been developed to further reduce these pathogen transmission risks during platelet transfusions. The objective of this study was to assess the cost-effectiveness of using random-donor platelets (RDP) and single-donor platelets (SDP) processed with IBS in Spain. METHODS: A literature-based decision analysis model was used to assess the cost-effectiveness of the IBS in four patient populations that account for most of the platelet usage in Spain: 1) a 10-year-old male with acute lymphocytic leukemia (ALL); 2) a 50-year-old male with non-Hodgkin’s lymphoma (NHL); 3) a 60-year-old male undergoing heart bypass surgery (CABG); and 4) a 70-year-old female undergoing a hip arthroplasty. Pathogen exposure included HIV, HCV, HBV, HTLV-I, bacterial sepsis and emerging pathogens. The model compared projected quality-adjusted life-year saved (QALY) and costs for patients receiving untreated vs. treated platelets. RESULTS: The incremental cost per QALY gained by using RDP + IBS vs. RDP ranged from €386,525–€1,178,187. Corresponding figures for SDP + IBS vs. SDP ranged from €1,082,170–€2,805,297. Inclusion of an emerging pathogen benefit significantly improved the cost-effectiveness to €65,423–€307,311 for RDP and €300,793–€1,223,349 for SDP. The model was most sensitive to mortality from bacterial contamination and the number of additional platelet transfusions required due to IBS treatment. The model was relatively insensitive to transmission risks from currently known viruses. CONCLUSION: The cost effectiveness of IBS for platelets is comparable to that of other blood safety interventions (e.g., NAT, plasma inactivation) that are accepted as valuable in Spain. Thus, pathogen inactivation with IBS may be considered as a desirable strategy to ensure the safety of platelet transfusions and a valuable insurance against the threat of new emerging pathogens.