ANGIOEDEMA TYPES I AND II
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OBJECTIVES: Hereditary angioedema (HAE) is a rare and potentially life-threatening condition. The efficacy of acute HAE treatments has not been assessed in head-to-head comparative studies. This study aims to determine the relative cost of icatibant [Shire HGT] versus C1-esterase inhibitor concentrate (C1-INH) [CSL Behring], C1-INH [ViroPharma], rh-C1-INH [Pharring], and ecallantide [Dyax].

METHODS: A systematic literature review identified nine relevant randomised clinical trials. Indirect comparison (IC) hazard ratios (HR) between treatments were calculated using multivariate meta-regression models of Baker et al (2010) and Seng et al (2011). To account for trial heterogeneity, five sets of icatibant data were considered separately; three clinical end-point definitions (time to onset of primary symptom relief, time to initial symptom improvement [subject-assessed], and time to onset of symptom relief based on composite VAS score); and three rescue medication (RM) censoring methods (no censoring [RMs ignored], censoring subjects who took RMs prior to onset of symptom relief, and resetting time to onset of symptom relief to 24 h for censored subjects) were considered separately in the ICs.

RESULTS: The IC considered each of the 45 icatibant data/endpoint definition/RM censoring combinations. HR estimates favoured (H = 37/45 icatibant combinations versus C1-INH [CSL Behring] 20 IU/kg [Median HR = 1.39 [minimum 0.72, maximum 2.10], 45/45 (29 statistically significant) versus C1-INH [CSL Behring] 10 IU/kg [Median HR = 2.19 [minimum 0.51, maximum 14.14] and 45/45 versus ViroPharma [Median HR = 1.36 [minimum 0.63, maximum 2.22], 24/45 versus rh-C1-INH 50 IU/kg [Median HR = 1.04 [minimum 0.48, maximum 1.70], and 43/45 versus ecallantide [Median HR = 1.67 [minimum 0.75, maximum 2.66]].

CONCLUSIONS: Icatibant showed improved time to initial symptom improvement compared to rh-C1-INH, Belinysin, and ecallantide. No clear differences were evident versus either C1-INH [Behring] 20 IU/kg (SmPC dosing) or the three other HAE treatments.

PSY12 SWEDISH ADAPTATION OF CZECH PHARMAECONOMIC COMPARISON OF TREATMENTS IN HAEOMOPHIA PATIENTS WITH INHIBITORS
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OBJECTIVES: Due to limited patient population and scarcity of real-world data, performing economic analyses in haemophilia patients with inhibitors is challenging. A recent publication based on national data from the Czech Republic presented a health economic comparison of recombinant activated factor VII (rFVIIa) and plasma-derived activated prothrombin complex concentrate (pd-aPCC) in the treatment of bleedings in inhibitor patients. The objective of this study was to adapt the findings from the Czech study to a Swedish setting. METHODS: Aggregated published data were used for the analysis. Real-life resource utilization (by-passing agents and hospitalizations) were derived from the Swedish study. Swedish costs were obtained by multiplying each resource with corresponding unit costs obtained from public price lists. RESULTS: Mean dose per bleeding in the rFVIIa group was 1700 mcg, while the corresponding figure for the pd-aPCC group was 2300 IU. Mean number of hospital days was 0.9 in the rFVIIa group and 3.2 in the pd-aPCC group. The median cost per bleeding was twice as high in the pd-aPCC group (€22.972). The most frequent adverse events were anemia (n = 12, 15% of patients). Mean hospitalization cost per patient due to the treatment of adverse events is as follows: for anemia €2.193 and neutropenia of €610. The cost of treating anemia corresponds to 9.5% of the overall cost of treatment and the cost of neutropenia about 5.7%. Annual cost of newly diagnosed patients in 2011 was estimated at €8 339, 57% lower than the respective cost of patients treated in 2007 (€14 652).

CONCLUSIONS: Innovative treatments for CML have resulted in treating patients in outpatient care with lower adverse events and consequently lower cost. Under the current economic scenario, pricing as well as the recent implementation of Diagnoses Related Groups, information on treatment costs provides a tool to assess NHS hospitals’ performance.

PSY13 PILOT STUDY COST OF CHRONIC MELOID LEUKAEMIA THERAPY
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OBJECTIVES: To analyze the direct and indirect cost of therapy of chronic myeloid leukemia (CML) from the socioeconomic perspective. It is a prospective observational cost study of 36 patients treated at the University Hospital “Alexandrovka”. The pharmacotherapy cost, GP and specialists visits cost, hospitalization cost were collected as direct medical costs. National health insurance fund and hospital tariff were used as unit cost sources. Days out of work were also collected and multiplied with the average monthly income to gather the indirect costs.

RESULTS: The observed 36 patients (average age 51 years) remain 14% of all diagnosed and actively treated CML population. Average monthly cost of therapy is €3130 (SD 775 Euro) thus reaching €37 560 Euro per year per patient. On imatinib therapy were found 20 of the observed patients, 8 on dasatinib, and 2 on nilotinib. 6 patients were switched to different medicine during the period, out of them 5 from imatinib to nilotinib due to disease progression and 1 from imatinib to dasatinib due to intolerance development. On average 5 visits were performed per year. The average cost of the visits ranged from 4-12 to 380 10 Euro per visit. The average work time loss was 131 days compared to 120 days of the respective visits is 18 (SD 29), and 34 Euro per patient. Only 6 patients were hospitalized during the therapy switch and their cost was found to be 1098 Euro. The total number of days out of work was found to be 103 days for the employed patients thus consuming incomes for 5 months. Relative share of the direct and indirect cost is 92% to 8% respectively.

Out of the direct medical costs medicare accounts for near 93%.

CONCLUSIONS: CML consumes mainly direct medical costs where the medicines cost driver.

PSY14 LONG-TERM MEDICAL COSTS AND LIFE EXPECTANCY OF ACUTE MYELOID LEUKAEMIA: A PROBABILISTIC SIMULATION MODEL
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OBJECTIVES: Acute Myeloid Leukemia (AML) can be diagnosed at any age and accounts for approximately one third of all leukemia diagnoses. Treatment, which can be given with supportive and/or curative intent, is considered expensive compared to other cancers. Despite this, no long-term predictive models have been developed for AML, mainly due to the complexities associated with this disease. Thus, the aim of this study was to develop an AML model (based on a UK cohort) that would allow cost and life expectancy results to be expressed at population level.

METHODS: The model developed in this study combined a decision tree with several Markov models. This was in order to reflect the complexity of health states and prognostic factors (such as age and response to therapy) of AML. The model was simulated over a life cycle of 60 months and results were contrasted between two age-groups and over different treatment pathways. Probabilistic modelling was also implemented in order to capture the potential uncertainties of the transition probabilities and costs were derived from the NHS Hospital Episode Statistics (HES) and a UK population-based database from the Haematological Malignancy Research Network (HMNR, www.hmnr.org)

RESULTS: The expected five year medical cost and life expectancy for the elderly patients (~60) were €22,538 and 8.5 months respectively, and for the young adult patients (18-60) €82,266 and 33.7 months respectively. The model was validated by the fact that the predicted results captured 92% of the actual costs, while it also demonstrated good fit of the actual survival outcomes. CONCLUSIONS: Costs and life expectancy of AML vary according to patient characteristics and treatment pathways. It is expected that future application of the AML model developed in this study could be used to evaluate new diagnostic tools/treatments and to support health care decision makers.

PSY15 IMPACT OF CHRONIC IMMUNE-MEDIATED INFLAMMATORY DISEASES ON WORK PRODUCTIVITY: LITERATURE REVIEW
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OBJECTIVES: To evaluate the productivity loss induced by chronic immune-mediated inflammatory diseases: A systematic and computerized search was performed in the literature published in English from 2000 to 2011 in Pubmed. The search terms were: ‘chronic disease’, ‘spondyloitis’, ‘ankylosing’, ‘psoriatic arthritis’, ‘rheumatoid arthritis’, ‘productivity’, ‘absenteeism’, ‘sick leave’ and ‘employment status’. Number of days of absenteeism and presenteeism, and their estimated costs were extracted. Mean duration of work productivity loss per patient was annualized. Mean costs per patient were annualized, converted in Euros and actualized to 2010 using exchange rates and price indexes provided by the Organisation for Economic Co-operation and Development.

RESULTS: Eighteen publications were analyzed: 4 for rheumatoid arthritis, 6 for ankylosing spondylitis,