

3%. The cost-effectiveness ratio was expressed as cost of life year gained with RSV prophylaxis. Sensitivity analyses were performed for the key probabilities. **RESULTS:** Palivizumab prophylaxis was estimated to cost €8903 per life gained as compared to €6594 for no preventive treatment. The incremental cost-effectiveness ratio of one life year gained amounted to €13,246 (PPP: €1 = 1.9 PLN). The sensitivity analysis indicated that the results were sensitive to the probability of hospitalization for RSV for no prophylaxis. **CONCLUSIONS:** Palivizumab, as compared to other widely accepted medical procedures, appeared to be cost-effective prophylaxis for the prevention of serious lower respiratory-tract infection caused by RSV in infants born at less than 32 weeks gestation in Poland.

PIN37

INTRODUCTION OF A NEW HEALTH TECHNOLOGY, POTENTIAL BEHAVIOURAL AND ORGANISATIONAL CHANGES AND POLICY IMPACT—ASSESSMENT OF NEW INFLUENZA TREATMENTS

Gyldmark M¹, Sander B²

¹F. Hoffman-La Roche Ltd, Basel, Switzerland; ²Institute for Medical Outcome Research, Loerrach, Germany

OBJECTIVES: The objective is to discuss and evaluate potential changes in patient, physician, and organisational behavior related to the introduction of a new health care technology (treatment of influenza with the anti-viral neuraminidase inhibitors). The changes evaluated are: 1) increased health care seeking by patients, due to the availability of antivirals for influenza; 2) Crowding out of inappropriate anti-biotic prescribing for influenza by antivirals; and 3) System change to allow telephone nurse prescribing rather than GP consultation. **METHODS:** Some unique characteristics of neuraminidase inhibitors has important implications for their cost-effectiveness in any given health care systems. A health economic decision model is employed in order to evaluate some of these potential changes when introducing treatment of influenza with neuraminidase inhibitors. The impact on cost-effectiveness and cost-utility of three different behavioural changes are investigated with the model as well as the base line cost-effectiveness and cost-utility of treating healthy adults in UK. **RESULTS:** The results of the economic modeling show that treatment of influenza in healthy adults with the anti-viral oseltamivir has incremental cost-utility ratios between £4,775/QALY (baseline) and £15,772/QALY (increased health care seeking by patients). **CONCLUSION:** In order to make a decision regarding introduction of influenza treatment with the new technology a number of issues ought to be addressed. These may be best dealt with in a full HTA where all aspects of introducing a new technology are investigated. By only evaluating certain aspects of the introduction of the technology, decision makers are likely to make decisions based on incomplete information. This

may result in sub-optimal patient treatment and resource use in society.

PIN38

COST-EFFECTIVENESS ANALYSIS OF PEGYLATED INTERFERONS COMBINED WITH RIBAVIRIN IN THE TREATMENT OF HEPATITIS C

Mar J¹, Antonanzas F², Velasco M³, Bendeck M³, Sola R⁴, Planas R⁵, Alvarez C⁶

Hospital Alto Deba, Mondragon, Guipuzcoa, Spain; ²University of La Rioja, Logroño, Spain; ³Soikos, Barcelona, Barcelona, Spain; ⁴Hospital del Mar, Barcelona, Spain; ⁵Hospital Germans Trias y Pujol, Badalona, Barcelona, Spain; ⁶Roche Farma SA, Madrid, Spain

OBJECTIVE: The hepatitis C treatment with conventional interferon monotherapy has been under discussion because of its low response rate (10–20%). However, combination therapies involving ribavirin and the new two pegylated interferons have raised the response rates beyond 50%. This study analyses the cost-effectiveness ratios for two different peginterferons (peginterferon alfa-2a and peginterferon alfa-2b) plus ribavirin compared with interferon-alfa 2b plus ribavirin. **METHOD:** A Markov model was developed to represent the natural history of hepatitis C and to estimate the incremental cost-effectiveness ratios for the two different peginterferons plus ribavirin compared with interferon-alfa 2b plus ribavirin. The results of two independent clinical trials comparing these treatment alternatives in naive patients with HCV infection and no co-morbidity have been obtained from several publications. The model was applied separately to both trials. To evaluate the natural history of decompensated cirrhosis, 200 patients with decompensated liver disease from hepatitis C etiology were studied depending on the first decompensation event in two different hospitals in Spain. **RESULTS:** The results indicate costs of €20,751/life-year gained using efficacy data from the peginterferon alfa-2b trial and €10,350/life-year gained employing the peginterferon alfa-2a trial data. When a test is used at 12 weeks to facilitate an early detection of non-responders, the figures lower to €14,037 and €6,605/life-year gained, respectively. **CONCLUSION:** The main conclusion is that the combined treatment of peginterferon plus ribavirin is cost-effective showing peginterferon alfa-2a a better cost-effectiveness ratio than peginterferon alfa-2b. Efficiency decreases with advancing age and can be increased when strategies of early selection are employed to identify those patients who, without sustained viral response, would not benefit from the treatment.

PIN39

DIRECT COST ANALYSIS OF HEPATITIS B INFECTION IN FRANCE

Colin X¹, Fagnani F¹, Iloeje U²

¹CEMKA, Bourg la Reine, France; ²Bristol-Myers Squibb, Wallingford, CT, USA

OBJECTIVE: To estimate the patterns of medical care and associated direct medical costs of managing chronic hepatitis B virus (HBV) in France. **METHOD:** Five stages were identified to describe the natural history of the disease: Chronic hepatitis B without complications, compensated cirrhosis, decompensated cirrhosis, hepatic transplantation (first and second year), and hepatocellular carcinoma. Standard care and corresponding items of medical resources for these different states of health were defined on the basis of a literature review and the conclusions of an experts panel. Resources included offices visits, procedures, laboratory tests, drugs (including antiviral drugs), and hospitalizations. For each state, the annual mean unit direct medical costs were estimated using the weighted proportion of patients using the resource. Unit costs (2001 value) were nationally available from the perspective of the French national insurance. **RESULTS:** Approximately 24% of HBV patients are managed with antivirals but these medications accounted for approximately 45% and laboratory tests for 30% of treatment costs in the chronic HBV state (€1093). The mean annual treatment costs for the more advanced disease states were: compensated cirrhosis €1134, decompensated cirrhosis €8842 (due primarily to hospital admissions), hepatic transplantation €84,568 (first year) and €9147 (second year), and hepatocellular carcinoma €9352. **CONCLUSIONS:** Treatment patterns for HBV vary across centers in France. The average treatment costs indicate a substantial financial burden of HBV that increases with advanced stages of the disease. Preventing HBV or its advance could result in lowered long-term treatment expenditures.

INFECTION—Quality of Life Studies

PIN40

PREVALENCE AND QUALITY OF LIFE OF PATIENTS SUFFERING FROM HERPES LABIALIS WITH IN FRANCE—INSTANT STUDY

Stalder JF¹, Crochard A², Mimaud V³, Wolkenstein P⁴, Lorette G⁵, El Hasnaoui A⁶

¹Hôtel Dieu Hospital, Nantes, France; ²GlaxoSmithKline, Marly Le Roy, France; ³CEMKA, Bourg la Reine, France; ⁴Henri Mondor Hospital, Créteil, France; ⁵Trousseau Hospital, Tours, France; ⁶Laboratory GSK, Marly Le Roi, France

OBJECTIVES: To estimate the prevalence and the quality of life of subjects suffering from Herpes labialis (HL) in the French population of adults above 17 years old. **METHODS:** A population-based survey was conducted among 10,000 adults through personal face to face interviews by using the quota sampling method (applied on age, sex, economic working class and woman working status). The screening was made by asking the subjects if they have suffered from HL or if they have experienced a fever blister, within the past 12 months. The quality of life was assessed with the SF-36 questionnaire among

the HL subjects identified and a control group of subjects not suffering from HL (361 subjects). **RESULTS:** The population surveyed was representative of the French population in terms of age, sex, and geographic living area. The annual prevalence of HL was estimated: 15.1%, IC95%[14.1%; 16.1%]. The sex ratio women/men was 2/1 and the mean age was 41 years at the time of the study versus 47.4 years in the control group ($p < 0.01$). Among the HL population 14.2% experienced at least 6 recurrences in the past 12 months with a sex ratio women/men at 3/1. The quality of life was worse in the HL population with at least 6 recurrences in the past 12 months than in the control group for both physical and mental health. After adjustment on age and sex, SF 36-scores were respectively 47.6 vs. 50.8 for physical health ($p < 0.05$) and 45.3 vs. 47.9 for mental health ($p < 0.05$). **CONCLUSIONS:** Herpes Labialis is a common disease in France with an annual prevalence of 15% in France. When occurring with at least 6 recurrences in the past 12 months, Herpes Labialis has a significant impact on quality of life, as measured by the SF-36 questionnaire.

PIN41

DEVELOPMENT OF THE HERPES OUTBREAK IMPACT QUESTIONNAIRE (HOIQ)

Doward LC, McKenna SP, Meads DM

Galen Research, Manchester, United Kingdom

OBJECTIVES: No measure has been available to assess the impact of recurrent genital herpes (RGH) outbreaks. Some herpes interventions attempt to abort an outbreak or reduce its length and/or severity. An instrument was required to determine the benefit of such interventions from the patients' perspective, in the context of a clinical trial. The objective was to develop a measure of the impact of outbreaks using items representing functional limitations of specific importance to RGH patients. **METHODS:** Content was derived via interviews with RGH patients ($n = 40$). Face & content validity of the draft HOIQ were assessed by cognitive de-briefing interviews with RGH patients ($n = 19$). Scaling/psychometric properties were assessed via a web-survey, whereby participants ($n = 158$) completed the HOIQ on two occasions during an outbreak, with 24 to 72 hours between administrations. **RESULTS:** Interviews revealed areas of functioning affected during an outbreak to include; social, work and other activities, relationships, personal hygiene, choice of clothing, need to avoid becoming tired, worry/anxiety and fear of discovery. De-briefing interviews indicated that content was appropriate and the measure easy to understand and complete. Rasch analysis of survey data yielded a 12-item unidimensional measure. Assessment of test-retest reliability was not possible due to rapid change in health status during an outbreak. However, item stability testing indicated that no items exhibited time-related differential item functioning,