Keeping in mind the caveats associated with cross trial comparisons, the analysis suggested increased effectiveness of LEN over BORT in MM patients with refractory/relapsed disease. These findings, along with its oral route of administration and established safety profile suggest that LEN should be the preferred agent for refractory/relapsed MM.

PSY5

COMPARING BRENTUXIMAB VEDOTIN OVERALL SURVIVAL DATA TO STANDARD OF CARE IN PATIENTS WITH RELAPSED/REFRACTORY HODGKIN LYMPHOMA (HL) POST-AUTOLOGOUS STEM CELL TRANSPLANT (ASCT)

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OBJECTIVES: Health care decision makers require estimates of the incremental health benefit of any new technology relative to existing treatments. For treatments targeting small patient subgroups, randomised controlled trial (RCT) data is often unavailable requiring alternative methods to estimate comparative efficacy. We illustrate two approaches, using the example of brentuximab vedotin. **METHODS:** Brentuximab vedotin has been studied in HL patients relapsed following ASCT (SG035-0003; Younes et al, JCO 2012). We compare 2-year survival data from the 0003 study to: (1) A systematic review in ASCT failures – carried out according to standard methods; no restrictions on study design/treatment. Percentages of patients alive at six-monthly intervals for up to five years were extracted. Comparative graphs were produced, with proportions of patients alive in each study versus time; each point sized to reflect number of patients/study (2) A large observational study, adjusted to reflect prognosis in 0003 – Martinez 2010, reported OS according to whether patients had 0, 1 or ≥2 risk factors. Results were reported for chemotherapy+/−radiotherapy and allogeneic SCT. Survival curves for these comparators were re-weighted to reflect the proportion of patients with 0, 1 or ≥2 risk factors in the 0003 trial. **RESULTS:** Thirty-one studies reported retrievable OS for radiotherapy, chemotherapy, palliative care, or allogeneic SCT or ASCT. OS for brentuximab vedotin was higher than or very similar to all but five small (n=13–38) studies. The adjusted Martinez 2010 comparison estimated 2 year OS of 48% and 65% for chemotherapy+/−radiotherapy and ASCT. OS for brentuximab vedotin at 2 years is 65% comparing favourably to Martinez 2010. **CONCLUSIONS:** Both methods suggested a favourable OS profile for brentuximab vedotin when compared to other reported data sets. If available, access to individual patient data from the Martinez 2010 study would allow use of more advanced methods to adjust for potential confounders.

SYSTEMIC DISORDERS/CONDITIONS - Cost Studies

PSY6

ECONOMIC EFFICIENCY OF FERRIC CARBOXYMALTOSE TO TREAT OR PREVENT IRON DEFICIENCY ANEMIA: VALUE TO THE PORTUGUESE HOSPITALS

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OBJECTIVES: Among the approved intravenous iron formulations, ferric carboxymaltose (Ferinject®) is the most efficacious in the treatment or prevention of iron deficiency anemia, it's less burdensome to administer (easier and shorter time administration) and it reduces the need for expensive resource utilization like erythropoietin and blood transfusions. The objective was to develop a tool to assess the relative cost-efficiency of different intravenous iron formulations in the perspective of the Portuguese hospitals. **METHODS:** A fully parameterizable Microsoft® Excel based tool was developed to compare the economic efficiency of intravenous iron formulations available to the Portuguese hospitals: ferric carboxymaltose (Ferinject®); ferric hydroxide saccharose (generic and Venofer®); ferric hydroxide dextran (Cosmofer®). Economic efficiency was calculate as the balance between hospitals incurred costs relative to the number of patients to be treated, the dose and number of administrations of intravenous iron, and the need for erythropoietin and blood transfusions. The tool default values are from a literature review used to populate the model. The tool allows studying the cost and benefits of treating/preventing chronic kidney disease, inflammatory bowel disease, chemotherapy, and orthopedic surgery related anemia. **RESULTS:** Ferric hydroxide saccharose (generic) is to the most used and lower price intravenous iron in Portugal. Relative to generic ferric hydroxide saccharose (FHS), ferric carboxymaltose (FC) is estimated to lower mean per patient annual costs in all four anemic conditions in major hospitals: 3,087.60€ (FC) vs. 3,482.20€ (FHS) for chronic kidney disease; 2,195.75€ (FC) vs. 2,427.4€ (FHS) for inflammatory bowel disease; 3,626.17€ (FC) vs. 3,793.13€ (FHS) for chemotherapy; and 3,485.74€ (FC) vs. 3,849.47€ (FHS) for orthopedic surgery. These results were consistent irrespective of the type of hospital. **CONCLUSIONS:** This is a valuable tool to inform hospital decison makers about the economic value of ferric carboxymaltose as compared to other intravenous iron formulations.

PSY7

SOCIETAL BURDEN ASSOCIATED WITH NEUROPATHIC PAIN IN EUROPE

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OBJECTIVES: Neuropathic Pain (NeP) is a common disorder that can be chronic, severe and disabling, While the burden regarding quality of life and health care costs is understood, societal costs are less researched. This analysis addresses the implications in terms of work productivity loss and caregiver needs. **METHODS:** Data were drawn from the 2012 Adelphi NeP Disease Specific Programme, a, cross-sectional survey of 121 primary care physicians and 292 specialists and their patients run in five European countries (France, Germany, Italy, Spain and the UK). Physicians provided data relating to diagnosis, treatment patterns and caregiver requirements, patients were invited to fill a self-completion questionnaire including the Work Productivity and Activity Impairment (WPAI) questionnaire. **RESULTS:** A total of 3956 patients were included, of whom 2639 were of working age and 1341 in either full or part time employment. 23% of those employed were currently on sick leave, with mean duration of absence being 10 weeks. A total of 751 patients completed the WPAI; of whom 30% reported that NeP had stopped them from working (limited periods or permanently). These patients reported absenteeism from work 23% of the time. Whilst at work, on a scale of 0 (no effect) to 10 (complete prevention from work) patients reported a mean score of 4.4, implying significantly reduced on-the-job effectiveness. Regarding regular daily activities (housework, shopping etc.) on a similar scale from 0 to 10 patients again reported a value of 4.4; 19% of patients had a caregiver responsible for their daily activities. The most common caregiver was partner/spouse (66%) while only 15% received care from a professional caregiver. The mean amount of care provided was 27 hours per week across Europe, ranging from 10 hours (France) to 48 hours (Italy). **CONCLUSIONS:** This abstract implies evidence suggesting a major societal burden within humanistic and economic societal burden associated with NeP in Europe.

PSY8

NUMBER NEEDED TO TREAT (NNT) AND COST ESTIMATION TO ACHIEVE A MAJOR MOLECULAR RESPONSE (MMR) IN NEWLY DIAGNOSED CHRONIC MYELOID LEUKEMIA PATIENTS IN GREECE

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OBJECTIVES: NNT can be a useful approach to compare treatments in the absence of direct comparative clinical trials. Imatinib, nilotinib and dasatinib are approved as first-line treatments for patients newly diagnosed with Philadelphia chromosome positive chronic myeloid leukemia in the chronic phase (CP-CML). The objective of this analysis is to compare these treatments with regards to: (1) the NNT to achieve one MMR by 12 months (2) the cost of achieving one MMR and the annual cost treatment including of adverse events (AEs) from the perspective of the Greek National Health System (NHS). **METHODS:** MMR and AE rates were taken from the CML-CP frontline trials –DASISION (dasatinib 100mg QD vs. imatinib 400mg QD) and ENESTnd (nilotinib 300mg BID vs imatinib 400mg QD). The NNT was calculated as the inverse of the MMR rate by 12 months (1/MMR). AE management costs were estimated from patient records at Evangelismos Hospital and multiplied by the incidence reported in the trials. **RESULTS:** The nilotinib NNT was 51% lower than the imatinib NNT in ENESTnd (1.8 vs. 3.7) and the dasatinib NNT was 39% lower that the imatinib NNT in DASISION (2.2 vs. 3.6). Annual cost of nilotinib including cost of AEs is estimated at €34.349, dasatinib €35.504 and of imatinib €25.040. The cost of achieving 1 MMR is €62.453 for nilotinib, €78.389 for dasatinib and €92.741 for imatinib. Therefore, the cost of achieving 1 MMR with nilotinib is lower by 20,33% vs. dasatinib and 33% vs. imatinib. **CONCLUSIONS:** The NNT findings and the differential cost of managing AEs in each treatment from this evaluation suggests that nilotinib provides better clinical outcomes and would result in lower costs for hematologic AE management from the perspective of the Greek NHS.

PSY9

REAL-LIFE COST-ANALYSES OF CHRONIC LOW-BACK PAIN PATIENTS WITH NEUROPATHIC PAIN COMPONENTS IN DENMARK

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OBJECTIVES: To evaluate the health care and productivity costs in chronic low back pain (CLBP) patients with a probable neuropathic pain (NeP) component before and after the initiation of pregabalin, gabapentin or a TCA (tricycle antidepressant). **METHODS:** Patients with primary diagnosis of CLBP (ICD-10: M43, M45-48, M50-51, M53-54) and at least two prescription claims for either pregabalin, gabapentin or a TCA were identified using data from the National Patient Registry, the Medicinal Registry, and other registries (2004-2010). Patients identified with generalized anxiety disorders or seizures were excluded. The index date was considered the first prescription for pregabalin, gabapentin or a TCA. Descriptive assessments of health care and productivity costs were conducted 12 months pre and 12 months post the index date using the full dataset. To control for selection bias, a propensity score matched cohort controlling for age, gender, socioeconomic status, education, depression, and health care resource use was also conducted. Statistical tests performed were Wilcoxon (α=0.05). **RESULTS:** A total of 6,028 of 7,282 CLBP patients with NeP met the inclusion criteria (treatment courses included: 3,507 TCA; 2,735 gabapentin; 1,293 pregabalin). Twelve months health care costs increased significantly in all 3 groups (€377 - €1,113) ($P<0.001$). Matched sub-analyses covering 1,217 patients in each group showed similar significant health care cost increases; however, the pregabalin group was the only group to result in a significant reduction in hospitalization costs ($P=0.03$). Across all three groups number of job losses was reduced, whereas long-term sickness increased; however, insignificantly so in the pregabalin group. **CONCLUSIONS:** This study showed increasing healthc are costs 12 months after the initiation of NeP drug treatment in CBLP patients with NeP. In matched analyses the increased health care costs in the pregabalin group were partly offset by significant savings in hospitalization costs. Production lost increased in all three groups; however, only significant in the TCA and gabapentin groups.

PSY10

AN INDIRECT COMPARISON OF ICATIBANT AND FOUR OTHER THERAPIES FOR THE SYMPTOMATIC TREATMENT OF ACUTE ATTACKS OF HEREDITARY