## Abstracts

group was 92% compared with 88% for the vancomycin group (P < 0.0001). The lower costs for patients treated with linezolid were attributable to the switch to oral therapy and earlier hospital discharge. **CONCLUSIONS:** A higher cure rate in combination with lower overall treatment costs distinguishes linezolid as a dominant therapy option compared with vancomycin in patients with proven or suspected MRSA cSSTI.

### PIN4

## COST-EFFECTIVENESS ANALYSIS OF LINEZOLID VERSUS VANCOMYCIN IN THE TREATMENT OF VENTILATOR-ASSOCIATED PNEUMONIA IN SPAIN

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**OBJECTIVES:** To asses the cost-effectiveness of linezolid (600 mg IV, every 12h for 10 days), compared with vancomycin (1g IV, every 12h for 10 days) for the treatment of ventilator-associated pneumonia (VAP). METHODS: A decision model analysis was performed from the National Health System perspective. The primary outcome was the incremental cost-effectiveness of linezolid in terms of cost per added QALY gained. The secondary outcome was the marginal cost per year of life saved (YLS) generated by using linezolid. Clinical cure and survival rates estimates were derived from a retrospective analysis of two randomized, double-blind trials comparing linezolid with vancomycin. QALY were based on time-trade off study. Four subsets of VAP patients were considered: all, with Gram-positive (GP), with S. aureus (SA) and with methicillin-resistant SA (MRSA) infection. Resources use and unit costs (2003€) were obtained from Spanish VAP treatment guidelines and Spanish health costs databases. Costs were evaluated for the acquisition of antibiotic treatments, adverse reactions treatment, and antibiotic rescue, extra diagnostic tests, the intensive care unit stay and medical visits due to therapeutic failure. RESULTS: The additional QALY and YLS per linezolid-treated patients were 0.392, 0.688, 0.606, 1.805 and 0.471, 0.829, 0.729, 2.175, respectively, compared with that of vancomycin (all, GP, SA and MRSA VAP, respectively). The additional cost per QALY gained obtained with linezolid was 1803.87€, 997.25€, 1149.00€ and 348.85€, respectively. The additional cost per YLS obtained with linezolid was 1501.31€, 827.63€, 955.13€ and 289.51€, respectively. These values are well below the acceptable threshold in Spain of 30,000€ per QALY/YLS gained. The sensitivity analyses confirmed the robustness of the base case analysis. CONCLU-SIONS: According to this model, linezolid is a cost-effective alternative to vancomycin for VAP patients in Spain, with an additional cost per QALY/YLS gained below the acceptable threshold for new therapies.

#### PIN5

## MEASURING RESOURCE USE AND DIRECT COSTS IN PATIENTS WITH HEPATITIS C VIRUS MANAGED IN A GASTROENTEROLOGY AND HEPATOLOGY SERVICE Herdman M<sup>1</sup>, Casanovas T<sup>2</sup>, Rodriguez Fariña E<sup>2</sup>, Rodriguez T<sup>3</sup>, Ibarz R<sup>3</sup>, Casais L<sup>2</sup>

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**OBJECTIVES:** Hepatitis C (HCV) is a serious health problem affecting around 170 million people worldwide. A considerable health care burden is expected over the short to medium term, because of earlier peaks in incidence rates and the presence of undetected cases. The aim of the present study was to measure resource use and direct costs associated with the management of

hepatitis C patients in a hospital-based Gastroenterology and Hepatology Service (GAS). METHODS: A model of patient flow through the department was constructed, and expert opinion was used to define relevant clinical sub-groups. Hospitalizations, outpatient care and diagnostic tests for the group as a whole and for each clinical sub-categoriy were calculated for the 4 month study period using information from hospital records, department protocols, and expert opinion. Unit costs were obtained from the hospital administrative database. Antiviral treatments were not included as they are not financed from the GAS budget. **RESULTS:** Data on use of resources and costs were obtained for a total of 584 patients. The total cost of treating HCV patients in the GAS for the study period was 600,343€ (1028€ per patient). A total of 52% of these costs were attributable to diagnostic tests, 45% to hospitalization, and 3% to outpatient visits two. The most costly clinical categories in overall terms were post-transplant patients and chronic hepatitis patients, with total costs for the 4-month study period of 136,185€ and 116,502€, respectively. The two clinical categories with the highest perpatient costs were pre-transplant decompensated cirrhosis and hepatocarcinoma in decompensated cirrhosis, with per-patient costs for the study period of 4731€ and 4498€, respectively. Hospitalization was the principal cost driver in both instances. CON-CLUSIONS: The study is useful in providing resource use and cost information by clinical sub-categories which will help estimate future resource use needs for these patients.

PIN6

## CLINICAL EFFECTIVENESS AND COST-EFFECTIVENESS OF ANTIVIRAL COMBINATION THERAPY WITH PEGINTERFERON ALFA-2B AND RIBAVIRIN FOR CHRONIC HEPATITIS C ADMINISTERED ACCORDING TO THE NEW GENOTYPE-SPECIFIC GUIDELINES

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**OBJECTIVES:** To evaluate lifetime clinical effectiveness and cost-effectiveness of different antiviral treatment (AVT) strategies in patients with chronic hepatitis C (CHC) using recent German guidelines, that recommend basing drug dosage, intended treatment duration and early stopping rules on the genotype of the hepatitis C virus (HCV). METHODS: The German Hepatitis C Model (GEHMO), a validated Markov model, was used to project clinical events, life expectancy, QALYs, and lifetime costs for the following AVT strategies: 1) no AVT (NoAVT); 2) Interferon alfa-2b plus ribavirin for 48 weeks (IFN); 3) Peginterferon alfa-2b plus ribavirin for 48 weeks (PEG); and 4) Peginterferon alfa-2b plus ribavirin according to the German guidelines with genotype-dependent AVT duration, dosing and early stoppage in HCV-positive patients after 12 weeks (GUIDE). Incremental cost-effectiveness ratios (ICER) were calculated from a societal perspective. Clinical and drug utilization data were derived from a clinical trial and from a survey of German hepatologists. **RESULTS:** Combination therapy with peginterferon alfa-2b and ribavirin (PEG or GUIDE) reduced the 20-year risk for decompensated cirrhosis, hepatocellular carcinoma, liver transplantation, and liver-related death by more than 50%, compared to no antiviral treatment. PEG increased life expectancy by 5.0 life years and GUIDE increased life expectancy by 4.9 years compared to NoAVT. GUIDE dominated IFN, so compared to NoAVT, discounted ICERs were 1500€/QALY for GUIDE and