STRESS ULCER BLEEDING PROPHYLAXIS WITH PROTON PUMP INHIBITORS, H2 RECEPTOR ANTAGONISTS OR SUCCRALFATE: A COST-EFFECTIVENESS ANALYSIS

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OBJECTIVES: Proton pump inhibitors (PPI), H2 receptor antagonists (H2RA) and sucralfate treatments were associated with SUB and VAP probabilities of 5.9% and 17.2%, 5.1% and 17.7%, and 1.4% and 10.3%, respectively. Lengths of stay and per diem costs were 14 days and $2,993 for NC, 24 days and $2,764 for SU, and 42 days and $3,310 for VAP. Average costs per non-rebleeding patient were $58,734 for PPI, $77,543 for H2RA, and $77,366 for sucralfate. H2RA and Suclafate treatments were dominated by PPI. These findings were robust on sensitivity and threshold analyses. Probability of complications would need to increase to 20% in the PPI group or drop to 1% in either of the other two treatment groups for PPI to remain the dominant strategy.

RESULTS: PPI prophylaxis is the dominant prophylactic strategy in patients at high-risk of developing SUB when compared to H2RA or sucralfate.

PG120 PHARMACOECONOMIC STUDY OF GLUTAMINE DIPETIDE USAGE DURING TOTAL PARENTERAL NUTRITION (TPN)

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OBJECTIVES: To undertake a comparative analysis of 2 schemes of TPN: isolated standard scheme of TPN (2 types: “all in one bag” and “1 in 1 + 1”) and scheme of TPN, which includes expenses for purchasing and usage of glutamine dipetide.

METHODS: Pharmacoeconomic analysis “cost-effectiveness” was provided. The study estimated direct costs, because appraisal from the stand point of the Russian healthcare system was chosen: expenses for drug therapy, hospitalization (intensive care and medical division) and late complications (pneumonia and sepsis). Effectiveness data was taken from clinical trial: Eandi M, Pradelli S, Lanza Z. Alanyl glutamine Dipetide (Dipetiven) in Total Parenteral Nutrition (TPN) Therapy in Critically Ill Italian Patients: A Pharmacoeconomic Simulation Model. AdRes Health Economics and Outcomes Research, Torino (Italy), 2010. Survival rate of patients was the main effectiveness criterion. Three types of TPN were compared: “3 in 1” and “1 in 1 + 1” without glutamine dipetide usage and “3 in 1” system with glutamine dipetide. Two-factor sensitivity analysis was carried out, which showed that results of our pharmacoeconomic study were stable.

RESULTS: In the course of analysis the following results were obtained: direct medical expenses for patient treatment with TPN system “3 in 1” were 1561.92 €, “1 in 1 + 1” – 1651.25 €, “3 in 1 + glutamine dipetide – 1652.66 €. Taking into account the value of effectiveness rate of 3 compared TPN systems (“3 in 1” and “1 in 1 + 1” – 0.6554 and “3 in 1 + glutamine dipetide – 0.6724) the results of Cost-effectiveness Ratio (CER) were the following: “3 in 1” – 2383.15 €, “1 in 1 + 1” – 2519.45 € and “3 in 1 + glutamine dipetide – 2167.71 €. CONCLUSIONS: According to the results of our research TPN system “3 in 1 + glutamine dipetide is a dominant alternative as at the greatest effectiveness CER result is the least of all compared systems.

PG121 COST-EFFECTIVENESS OF PEGINTERFERON AND RIBAVIRIN FOR ELDERLY PATIENTS WITH CHRONIC HEPATITIS C: RESULTS BASED ON THE JAPANESE HEPATITIS REGISTRATION IN JAPAN

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OBJECTIVES: The cost-effectiveness of peginterferon and ribavirin (PEG, IFN+RBV) for elderly patients with chronic hepatitis C (CHC) was investigated. A nationwide registration of interferon-treated hepatitis patients has been conducted in Japan since 2009. This study was based on individual patient data from the registration for investigation in a real-world setting. METHODS: PEG, IFN+ RBV-treated CHC patients 65-years or older were analyzed. All registered patients received antiviral treatment and were assessed for SVR. The incremental cost and effectiveness of treatment was estimated as the difference between actual events and the assumed long-standing disease status. The individual patient data regarding age, gender, and duration of and response to treatment was used to estimate costs (cost of RBV, costs of adverse events and quality of life [QALY]). Incremental cost effectiveness ratio (ICER) and 95% bootstrap confidence interval (CI) were calculated, and probabilistic sensitivity analysis (PSA) was done for assumptions on the distribution of uncertain data. Conservative assumptions were used throughout the analysis. RESULTS: There were a total of 1378 patients (median age 68 y; range 65 – 80 y). 1005 patients had hepatitis C virus type 1 (72.9%), and 1269 had a high viral load (92.1%). A platelet count of <100,000/mm3 was found in 152 patients (11.0%), 100,000 – 150,000/mm3 in 541 patients (39.3%), and >150,000/mm3 in 655 patients (47.5%). 1106 patients completed the planned treatment (80.6%) with a median viral response time of 54 days (29.3%) and no response in 324 cases (23.5%). Incremental cost was calculated to be 1.885 million yen (approximately 16,390 euros) for a patient, and effectiveness was 0.657 QALY. ICER was 2.869 million yen (approximately 24,950 euros)/0.657 QALY. CI: 2.665 – 3.086 million yen. PSA showed that ICER of less than 4.00 million yen/QALY. CONCLUSIONS: The ICER of peg IFN+RBV for elderly patients with CHC seemed acceptable.