Annals of Oncology 27 (Supplement 6): vi351–vi358, 2016
doi:10.1093/annonc/mdw377.24

health economics

1045P An Italian cost-effectiveness analysis of paclitaxel albumin (nab®-paclitaxel) + gemcitabine vs gemcibatine alone for metastatic pancreatic cancer patients: The APICE study

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Background: In a Phase III clinical trial, nab-paclitaxel + gemcitabine (G) significantly improved overall survival, time to progression and response rate compared to G monotherapy in MPC. The aim of APICE study was to evaluate the cost-effectiveness of nab-paclitaxel + G vs G in the treatment of MPC patients in Italy.

Methods: A Markov model with four health states (progression-free, progressed, end of life and death) was developed to estimate costs, outcomes and quality-adjusted life-years (QALYs) over 4 years from the Italian National Health Service (INHS) perspective. Patients were assumed to receive G 1000mg/m^2 weekly or nab-paclitaxel 125mg/m^2 + G 1000mg/m^2 weekly. Data on efficacy was derived from MPACT trial, while data on health care resource consumption was collected from a survey performed on nine Italian centres. Resources were valued at Euro (€) 2015. Published utility weights were applied to health states to estimate the impact of response, disease progression and adverse events on QALYs. Two sensitivity analyses tested the robustness of the base case incremental cost-effectiveness ratio (ICER).

Results: Compared to G in monotherapy, nab-paclitaxel + G gains an extra 0.154 QALYs (0.196 life-year saved) and incurs additional costs of €7088 per patient treated. This translates to an ICER of €46,022 (95%CI: €33,292; €78,960). One-way sensitivity analysis underscores ICER for nab-paclitaxel + G to be robust. Probabilistic sensitivity analysis highlighted that nab-paclitaxel has a 0.98 probability to be cost-effective for a threshold-value of €80,000 and is the optimal alternative from a threshold-value of €46,746 onwards.

Conclusions: Based on those findings, nab-paclitaxel + G can be considered cost-effective when compared to the informal acceptability threshold-value for ICER adopted for reimbursing other oncology drugs in Italy (€87,330; 95%CI: €37,024; €137,636).

Legal entity responsible for the study: Celgene Italia srl, Milan, Italy

Funding: Celgene Italia srl, Milan, Italy

Disclosure: All authors have declared no conflicts of interest.