assumed to be a 50 year-old woman with HER2-positive metastatic breast cancer.

OBJECTIVES: To assess the cost-utility of first-line nilotinib vs imatinib in patients with chronic myeloid leukaemia (CML) eligible to start the treatment-free remission (TFR) phase in the Italian healthcare setting (NHS).

METHODS: A previous cost-utility model, taking into account a cohort of 20,000 patients individually followed, was adapted to the Italian NHS. CML patients could start treatment with nilotinib or imatinib while for both arms a second-line with nilotinib is expected according to the Italian guidelines. Patients remained on treatment for a time horizon of thirty-six months and with a BCR-ABL score less than M4.5 are considered long-term responders and may enter the treatment-free remission (TFR) phase. Model outcomes are expressed in Quality-Adjusted-Life-Years (QALY) and life-years-gained (LYG). Clinical data were derived from ENIST-nd trial. A panel of experts in CML treatment provided input on healthcare resource consumption: routine visits, laboratory/instrumental tests, adverse events management and drug consumption. Costs - Euros (€) - were updated to 2015 values and other model parameters were collected from published literature. This study was conducted from the societal perspective. Deterministic sensitivity analyses were conducted to identify key drivers of the results. RESULTS: While the cost of chemotherapy decreased considerably after the inclusion of docetaxel in the ICERs, the use of the 21-gene test is still cost-effective compared to usual care in French public and private hospitals from a societal perspective.

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COST-EFFECTIVENESS ANALYSIS OF GRANULOCYTE COLONY-STIMULATING FACTORS FOR THE PROPHYLAXIS OF CHEMOTHERAPY-INDUCED FEBRILE NEUTROPENIA IN PATIENTS WITH BREAST CANCER - A SYSTEMATIC REVIEW AND COST-EFFECTIVENESS MODELING

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OBJECTIVES: To conduct a cost-effectiveness analysis of primary and secondary prophylaxis (PP & SP) with long acting granulocyte colony-stimulating factors (G-CSFs), such as pegfilgrastim, lipegfilgrastim, and short act G-CSFs (i.e. filgrastim or leuprogamulin used in a 6-day regimen) for chemotherapy induced febrile neutropenia (FN) in patients with non-Hodgkin’s lymphoma (NHL) in Greece. METHODS: An economic model which comprises a decision tree and a Markov chain, consisting of two phases, was locally adapted to reflect outcomes from payer perspectives. Sensitivity analyses were conducted for a lifetime horizon and for two different chemotherapy schemes (CHOP and CHOP-R). Clinical inputs included baseline FN risks, efficacy of G-CSFs, mortality, effects of FN on relative dose intensity, as well as direct medical costs for drug acquisition and administration and FN management. Input values were extracted from published studies while those for costs (2015 EUR) were obtained from local resources. Model outcomes were FN events avoided, and treatment strategies were compared by calculating incremental cost-effectiveness ratios (ICERs) for FN event avoided. RESULTS: PP with pegfilgrastim provided greater health benefits in terms of FN events (calculated by combining FN risk with the efficacy of G-CSFs: 0.164) followed by PP with lipegfilgrastim (0.243) and PP with pegfilgrastim (0.522). PP with pegfilgrastim across all chemotherapy schemes (ICERs of €7,490 for CHOP and €7,781 for CHOP-R). SP with pegfilgrastim was cost-effective compared to SP with docetaxel (ICER of €1,858 for CHOP-R). The rest of the alternatives were dominated by a less expensive and more effective strategy. CONCLUSIONS: Our analysis finds PP with pegfilgrastim to be a cost-effective option for chemotherapy-induced FN in NHL patients in Greece.