Economic evaluation of taxane-based first-line chemotherapy in the treatment of patients with metastatic breast cancer in Greece: an analysis alongside a multicenter, randomized phase III clinical trial.

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Source

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Abstract

BACKGROUND:

An economic evaluation was undertaken alongside a randomized phase III trial comparing three regimens for metastatic breast cancer (MBC).

MATERIALS AND METHODS:

Trial resource utilization and unit price data were combined to evaluate the cost of chemotherapy, concomitant medications, hospitalizations, diagnostic and laboratory tests. Treatment cost was combined with survival to estimate the incremental cost per life year saved. Quality-of-life data were used to estimate cost per quality-adjusted life year saved. Sensitivity analysis was used to compute results for various subgroups and for discounting cost and effects.

RESULTS:

The combination of gemcitabine (Gemzar, Eli Lilly, Indianapolis, USA) with docetaxel (Taxotere, Aventis Pharma, Dagenham, UK) (GDoc) is the least costly but least effective treatment. The combination of paclitaxel (Taxol) with carboplatin (Paraplatin, Bristol-Myers Squibb, Princeton, USA) is associated with higher cost and effectiveness compared with GDoc, while weekly paclitaxel (Pw), associated with the highest cost, is the most effective option. The incremental cost per life year saved of Pw versus GDoc was 3660 Euros (95% uncertainty interval dominance-9261). This result remained fairly constant in sensitivity analysis.

CONCLUSIONS:

The corresponding economic evaluation indicates that Pw represents an attractive treatment option for patients with MBC from an economic perspective in the context of the Greek National Health Service.