

XELOX versus FOLFOX6 as an adjuvant treatment in colorectal cancer: an economic analysis.

[Maniadakis N](#), [Fragoulakis V](#), [Pectasides D](#), [Fountzilias G](#).

Source

Department of Health Services Organisation and Management, National School of Public Health, Athens, Greece. nmaniadakis@yahoo.com

Abstract

OBJECTIVES:

An economic analysis (based on interim data from a long-term, randomised, multi-centre, controlled, clinical trial) to evaluate chemotherapy with XELOX (capecitabine/oxaliplatin) versus FOLFOX6 (5Fluorouracil/leucovorin/oxaliplatin) as an adjuvant treatment for high risk colorectal cancer patients in Greece.

METHODS:

As survival rate was the same in the two arms, a cost-minimisation analysis was carried out, from the perspectives of the National Health Service (NHS), Social Insurance Funds (SIF) and patients in Greece. Patient data were combined with 2008 unit prices to estimate the total cost of patient care, the patients' travelling expenditure and their productivity losses. Raw data were bootstrapped 5000 times in order to allow statistical testing.

RESULTS:

From an NHS perspective, the mean chemotherapy cost was 8762 euro with FOLFOX6 and 9713 euro with XELOX; costs of administration and hospitalisations were 5154 euro and 1050 euro, respectively. Total treatment cost with FOLFOX6 reached 17,480 euro and with XELOX 12 525 euro, a difference of 4955 euro ($p < 0.001$) in favour of the latter therapy. From an SIF perspective, the total cost of treatment was 16,240 euro with FOLFOX6 and 12,617 euro with XELOX, a reduction of 3623 euro ($p < 0.001$) with the latter therapy. Mean patient travelling cost was 184 euro with FOLFOX6 and 80 euro with XELOX, a difference of 104 euro ($p < 0.001$). Mean productivity loss was 100 euro with FOLFOX6 and 31 euro with XELOX, a difference of 69 euro ($p < 0.001$).

CONCLUSIONS:

Chemotherapy combining oral capecitabine and oxaliplatin reduces total treatment cost for the Greek National Health Service and Social Insurance Funds, mainly through a reduction in the cost of administration. From patients' perspective, it reduces travelling expenditure and productivity losses. Therefore, this combination may be a cost-effective approach for the management of colorectal cancer patients who have had surgery in Greece. This is an analysis alongside a clinical trial, and should be interpreted in this specific context in which it was undertaken.