A DECISION-ANALYTIC MODEL TREATMENT VERSUS ORAL TREATMENT ALONE IN CONCOMITANT ORAL AND TOPICAL MESALAZINE EXPENSIVE INTERVENTIONS.

OBJECTIVES: The purpose of the study was to evaluate the cost-effectiveness of concomitant oral plus enema mesalazine therapy versus oral mesalazine alone in mild-to-moderate active ulcerative colitis (UC).

METHODS: Outcome data from a randomised controlled, double-blind trial comparing mesalazine 4 g oral plus 1 g enema (Oral + Enema) versus mesalazine 4 g oral plus placebo enema (Oral-Alone) were used. A deterministic decision-analytic model was constructed using trial and published data sources. Two health states were considered in the model: acute bleeding and remission. The base case evaluation assessed costs and outcomes over the trial duration (8 weeks). A second evaluation assessed cost and outcomes up to 26 weeks, taking into consideration additional treatment with steroids, ciclosporin and surgery to achieve remission. The evaluation perspective was that of the UK National Health Service and cost data were derived from published sources. Health-related quality of life data was extracted from the clinical trial to derive quality adjusted life years (QALYs) for evaluation within the model. Sensitivity analysis was carried out where appropriate.

RESULTS: Base case cost-effectiveness ratios were £9,813/QALY for Oral + Enema and £9,708/QALY for Oral-Alone, with an incremental cost per QALY of £14,094. At 8 weeks the incremental cost difference was £44 for Oral + Enema, which was less than the cost of enema therapy over the trial period, suggesting that Oral + Enema results in cost-savings elsewhere in the health system. At 26 weeks Oral + Enema was both cost-saving and more efficacious. The model suggests that adopting a Oral + Enema treatment strategy in this population can save £82 per person. CONCLUSION: Oral + Enema treatment was more cost-effective at 8 weeks than Oral-Alone based on accepted cost-effectiveness thresholds in the UK of £20,000/QALY. At 26 weeks Oral + Enema therapy was cost-saving and more efficacious compared with Oral-Alone because of improved remission rates, which prevents UC patients from progressing to more advanced disease.

COST-EFFECTIVENESS ANALYSIS OF TREATING CHRONIC HEPATITIS C (CHC) PATIENTS WITH PEGINTERFERON ALFA-2a (40KD) PLUS RIBAVIRIN EARLY VS DELAYED TREATMENT.

METHODS: To estimate the cost-effectiveness of treating interferon-naive CHC patients with peginterferon alfa-2a (180 mcg/week) plus ribavirina (1200 mg/day) early before progression to more advanced disease. METHODS: A published Markov lifetime model was used to estimate the costs and benefits associated with early versus delayed treatment for HCV. The target population consisted of treatment-naive HCV-1 patients with mild liver disease. The interventions were either early treatment or regular monitoring (delayed treatment) for evidence of progression to moderate or cirrhosis stage. Fibrosis progression rates came from published longitudinal cohort studies. The analysis was conducted from the perspective of the Italian NHS. Life Years Gained (LYGs) were considered, as well as Quality-Adjusted Life-Years (QALYs) and direct medical costs. LYGs and QALYs were based on the results of an international clinical trial. Benefits and costs were discounted at 3%. Sensitivity analyses were performed. RESULTS: Early treatment is expected to reduce the risk of cirrhosis at 30 years by 13.5% (23.7% early vs. 37.2% delayed), to increase mean overall survival by 0.48 years (29.77 LY early vs. 29.29 LY delayed) and to increase mean survival adjusted for quality of life by 0.75 years (14.83 QALY early vs. 14.08 QALY delayed). The expected cost (per patient) is €37,313.26 with early treatment and €22,965.37 with regular monitoring. The study calculated for early treatment versus delayed treatment the incremental cost per quality of life year gained and per QALY gained. It was €9114.16 and €5823.92, respectively.

CONCLUSION: Early treatment with peginterferon alfa-2a (40KD) plus ribavirina of CHC when this at a mild stage is expected to reduce risk of cirrhosis, to increase life expectancy, and to be cost-effective when compared with monitoring for evidence and subsequent treatment of advanced disease.