

Biologic drugs for psoriatic arthritis: Revisions to the cost effectiveness analysis after the committee meeting of 16th February 2010

York Assessment Group

23rd February 2010

Introduction

This document presents an additional sensitivity analysis following the NICE committee meeting of 16th February 2010 to evaluate the use of biologic drugs for psoriatic arthritis (PsA). This document is an addendum to the Assessment Group (AG) reports that were presented at the Committee Meeting and should be read in conjunction with the AG report of 4th December 2009 and the corrections dated 2nd February 2010.

Methods

The Committee requested a further sensitivity analysis, in which etanercept and adalimumab are equally effective for all outcomes, while the responses for infliximab are assumed to be unchanged from those estimated in the original AG report. In this sensitivity analysis, the effectiveness of adalimumab is assumed to be the same as that estimated for etanercept. The probability of PsARC is assumed to be 0.713 for etanercept and adalimumab and 0.795 for infliximab. The HAQ change for PsARC responders is assumed to be -0.63 for etanercept and adalimumab and -0.657 for infliximab. The HAQ change for non-responders is assumed to be -0.19 for etanercept and adalimumab and -0.194 for infliximab. The probability of PASI 75 is assumed to be 0.18 for etanercept and adalimumab and 0.77 for infliximab. The costs of all the drugs are unchanged from the AG reports tabled at the Committee Meeting.

Results

Table 1. Results of the sensitivity analysis

Strategy	QALY	Cost £	Inc QALY	Inc cost	ICER	PCE 20K	PCE 30K
N	5.231	41524	-	-	NA	0.509	0.335
A or E	7.033	74489	1.802	32965	18296	0.441	0.611
I	7.338	88405	0.305	13916	45557	0.050	0.054

PCE 20K/30K: Probability that the treatment is cost-effective at a threshold of £20,000/£30,000 per QALY

ICER: Incremental cost-effectiveness ratio. QALY: Quality-Adjusted Life Year

N: Palliative care, A: Adalimumab, E:Etanercept, I:Infliximab

Conclusions

The costs and the effectiveness of adalimumab and etanercept are identical in this sensitivity analysis, and either drug would be cost-effective at a threshold of £20,000 per QALY. Infliximab (with 4 vials per administration) is unlikely to be cost-effective at a threshold of £20,000 or £30,000 per QALY.