

**HEALTH TECHNOLOGY APPRAISAL on Pemetrexed for the
treatment of malignant pleural mesothelioma
Appraisal Consultation Document (ACD)**

To: NICE

**FROM: NHS Quality
Improvement Scotland**

Reviewer 1

Whether all the relevant evidence has been taken into account?

I think it has but the economic model used is flawed. They should not have used a BSA of 2.0m² to perform the pharmaco economic analyses. Also it assumes that patients will get 5 cycles of pemetrexed and cisplatin. This would be unusual in UK practice. In West of Scotland no patient receives more than 4 cycles.

Whether the summaries of clinical and cost effectiveness are reasonable interpretations of the evidence and that the preliminary views on the resource impact and implications for the NHS are appropriate?

I think the summary is accurate but I think the QALY calculations will be flawed because of the above

Whether the provisional recommendations of the Appraisal Committee are sound and constitute a suitable basis for the preparation of guidance to the NHS?

Only if the cost modelling is changed. The trials demonstrate a survival and QOL advantage in a disease for which there is no other systemic therapy. There will be an outcry from patient groups. Also the SMC have approved this drug in combination. NICE guidance will supercede SMC so it will be withdrawn. This will be a huge political issue.

Reviewer 2

Whether you consider that all the relevant evidence has been taken into account.

Yes , I consider all relevant evidence has been considered

Whether you consider that the summaries of clinical and cost effectiveness are reasonable interpretations of the evidence and that the preliminary views on the resource impact and implications for the NHS are appropriate.

By coincidence I recently refereed a paper [bjc] relating to a cost /effectiveness model for Pemetrexed in MPM. I agree with the comments paragraph 4.3.6 regarding the high degree of uncertainty surrounding the assumptions underpinning the model

Reviewer 3

Reviewer 4

This ACD concludes that pemetrexed is not cost effective in the treatment of mesothelioma. Only one randomised trial has compared pemetrexed with platinum versus platinum alone, and while there may be reservations about the appropriateness of single-agent platinum as a control, there was only a survival advantage of three months. Treatment lasted an average of 18 weeks to gain this three month advantage, and symptom control and quality of life measures were also said to be statistically superior. Although statistically significant, I would doubt the clinical significance of prolonging death in this extremely unpleasant cancer. Given the costs of the drug, the cost effectiveness was unsurprisingly high, and I am quite certain that the right conclusion is that this agent should not be used outside clinical trials unless or until appropriately designed clinical trials have verified its utility.