

## **Response to Roche letter dated 19<sup>h</sup> May 2006 re Weekly Dosing Schedule for Trastuzumab**

### **Assumptions made by Roche for cost of weekly schedule**

#### (1) Drug administration costs

Since administration of trastuzumab is required three times as often for the weekly regimen, the cost of administration of trastuzumab presented by Roche, £8,216, seems reasonable at just below three times the cost of the three weekly schedule of £2,844.

#### (2) Cost of drug for weekly regimen

The cost of the drug estimated by Roche, £21 592, is considered to an underestimate since it has been assumed that only one vial is required per maintenance dose. This would only be the case for patients who weigh less than 75kg. In reality a proportion of patients will weigh more than 75 kg and will therefore require two vials per week instead of one. The cost for these patients will depend on whether or not vials are shared between patients. Practice varies between Trusts, but vial sharing is by no means standard practice in Trusts in the UK. Assuming that vials are not shared between patients, the drug cost is estimated to be around £28,000 (assuming that 30% of the population weigh greater than 75kg).

(3) The comparisons of disease free survival, time free of distant recurrence and in overall survival from the American trials (using the weekly schedule) and the HERA trial (using the three weekly schedule) suggest that the benefits of trastuzumab are unlikely to differ significantly using a weekly dosing schedule. Patients from the American trials have a slightly better prognosis than those from the HERA trial, although it is difficult to know whether this is due to the different regimen, the use of taxanes or the fact that trastuzumab is administered concurrently with Paclitaxel in the American trials. Given no further evidence, it does therefore seem reasonable to assume that there is little difference in effectiveness of the two schedules, although the impact on the ICER of modelling the effectiveness of trastuzumab based on the US trials is currently unknown.

## Estimated effect upon the ICER

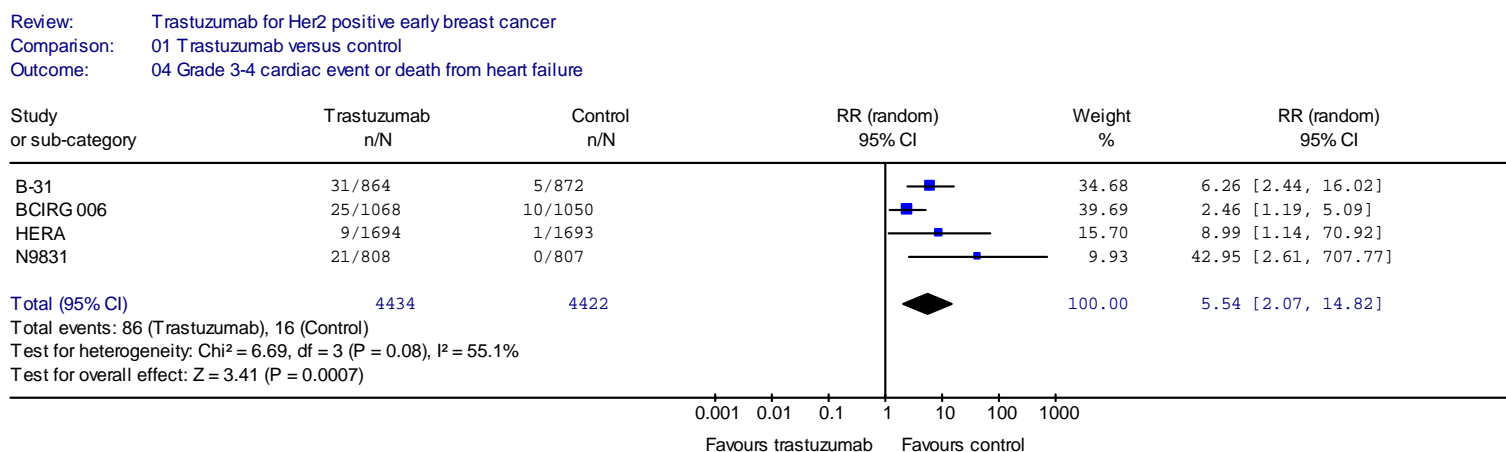
The Roche letter indicates that the impact of the increased cost of the weekly regimen would be to increase the ICER from £2,387 to £3,433. Based on the ERGs basecase of £18,449, this would become £20,351 using Roche’s cost calculations for the weekly schedule. Using the ERG’s estimated cost of weekly trastuzumab (assuming vials will not be shared) leads to an ICER of £25,103.

## Other issues

### (i) Cardiac events

Higher cardiac adverse events were reported by the American trials (See figure 1 below) compared with the HERA trial. This would result in an increase in the ICER estimates. However, again, it is difficult to know whether this is due to the different regimen, the use of taxanes or the time at which trastuzumab was administered. Therefore, it would be difficult to make any different model assumptions with regards to cardiac adverse events without further research being carried out.

Figure 1: ERG’s meta-analysis of cardiac adverse events



(ii) Capacity Issues

A weekly schedule would cause greater capacity and resource problems for the pharmacies and chemotherapy suites due to the additional drug preparation and administration required.

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