National Institute for Health and Clinical Excellence

Appraisal Consultation Document: Gemcitabine for the treatment of metastatic breast cancer

September 2006

Consultee comments – British Oncology Pharmacy Association (BOPA)

(1) Has all the relevant evidence been taken into account?
As stated in the ACD the only published phase III data available at present are the two interim analyses of the JHQG trial

(2) Are the summaries of the clinical and cost effectiveness reasonable interpretations of the evidence and are the preliminary views on the resource impact and implications for the NHS appropriate?
As stated in the ACD, whilst the comparator arm of this trial (paclitaxel) is a NICE approved therapy, in clinical practice this is not a commonly used regimen in the UK with most patients receiving docetaxel.

Likewise, as stated in the ACD the analyses comparing gemcitabine plus paclitaxel with docetaxel monotherapy, paclitaxel monotherapy and docetaxel plus capecitabine were based on an indirect comparison in which weighted absolute treatment outcomes (including survival data) were pooled from single arms of different trials in published literature. No assessment of heterogeneity between the characteristics of the patients in the different study populations was performed, nor was there any adjustment for differences in the baseline characteristics.

The ACD has therefore made reasonable interpretations of the evidence in the summaries of the clinical and cost effectiveness. The provisional recommendations of the Appraisal Committee to not recommend gemcitabine for the management of metastatic breast cancer as standard practice in the NHS, seems reasonable.

There is no information provided within the ACD about the potential resource impact and NHS implications of the guidance (presumably as it is negative at this stage). However we would like to highlight the potential impact on pharmacy and chemotherapy services ***if this guidance were to be positive in favour of paclitaxel:***

- In terms of the effect on chemotherapy capacity, the use of the GT regimen would **increase:**
  (a) Patient "chair" time (based on timings from Derby Cancer Centre):

Docetaxel	60-90 minutes
Paclitaxel	210-240 minutes
Docetaxel + Capecitabine	60-90 minutes
Gemcitabine + Paclitaxel (day 1)	240-270 minutes
Gemcitabine + Paclitaxel (day 8)	30-60 minutes

NB timings quoted may vary across the country according to the method of administration etc and includes drug administration, cannulation, premeds etc.

Overall chair time, as defined above, for one typical patient treatment course would be

Docetaxel	360-540 minutes
Paclitaxel	1260-1440 minutes
Docetaxel + Capecitabine	360-540 minutes
Gemcitabine + Paclitaxel (day 1)	1440-1620 minutes
Gemcitabine + Paclitaxel (day 8)	180-360 minutes
Gemcitabine + Paclitaxel (total)	*1620-1980 minutes*

With the majority of patients currently receiving single agent docetaxel this represents a significant increase in chair time per patient (approx. 2400% increase)

(b) The total number of cycles administered.
Currently most patients in the UK receive 6 cycles of Docetaxel, whilst the GT regimen is also 6 cycles it includes treatment on day 8 of each cycle. This would add an additional burden on chemotherapy treatment units and patients (see also chair times above).

(c) Pharmacy preparation time:

Docetaxel	45 minutes (of which approx. 20 mins is aseptic manipulation within a cytotoxic isolator)
Paclitaxel	45 minutes (of which approx. 20 mins is aseptic manipulation within a cytotoxic isolator)
Docetaxel + Capecitabine	45 minutes (of which approx. 20 mins is aseptic manipulation within a cytotoxic isolator)
Gemcitabine + Paclitaxel (day 1)	50 minutes (of which approx. 35 mins is aseptic manipulation within a cytotoxic isolator)
Gemcitabine + Paclitaxel (day 8) i.e. single agent gemcitabine	40 minutes (of which approx. 15 mins is aseptic manipulation within a cytotoxic isolator)

Within the context of already overburdened chemotherapy treatment units and NHS pharmacy preparation services, the adoption of GT as a standard regimen for metastatic breast cancer patients would therefore have a negative impact on workload compared to current practice

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It would be essential that additional resources (other than funding of the drug cost) be made available to expand the infrastructure to enable this technology (and other new cancer treatments) to be delivered efficiently and safely for both this patient group and other users of the chemotherapy service.

- Due to both the high cost of the prepared drug, treatment whilst it could be safely prepared in advance of the date of treatment there would remain a significant risk of treatment as a result of treatment delays due to myelosuppression. This would necessitate preparation of the dose only once appropriateness of treatment has been confirmed (on the day of treatment or at a pre-chemotherapy clinic) resulting in a "reactive" service for these patients where fluctuations in workload could result in an increased waiting time for patients awaiting treatment

(3) Are the provisional recommendations of the appraisal committee sound and do they constitute a suitable basis for the preparation of guidance to the NHS?
The provisional recommendations made by the appraisal committee seem sound, based on the evidence reviewed and the summary of clinical and cost effectiveness.

On behalf of British Oncology Pharmacy Association