HEALTH TECHNOLOGY APPRAISAL

Bevacizumab, Sorafenib, Sunitinib and temsirolimus for renal cell carcinoma.

Short Personal Statement

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[redacted]

1. **Background and Experience**

I was diagnosed with kidney cancer in November 2003, the initial symptom being painless haematuria. Following scans and other tests the diagnosis was one of transitional cell carcinoma (TCC) also known as cancer of the renal pelvis. I underwent a radical nephroureterectomy involving removal of the left kidney, the left ureter and the associated bladder cuffs, in December 2003. Since then I have had a CT scan, two ultrasound scans, five cystoscopies and regular water and blood tests, none of which has revealed any metastatic disease. I have been told that the operation appears to have produced a curative outcome; but I have also been warned of the risk of a recurrence, which means that I shall be required to undergo periodic scans and tests for the rest of my life.

Because my disease was TCC rather than RCC I have not been prescribed any of the drugs subject to the present health technology assessment. Also because my disease has not proved to be metastatic, I have not been prescribed any kind of anti-cancer drug.

2. **Benefits and downsides of therapy being appraised**

As a patient, I do not feel medically qualified to offer comment on the available evidence of clinical efficacies, except to say that I am most impressed by it and agree with those who interpret the evidence as showing that the new targeted drugs, Bevacizumab, Sorafenib, Sunitinib and Temsirolimus, are ushering in a 'revolution' in the treatment of metastatic RCC.

The main benefit from the new drugs is one that patients value above all others, that of extending their survival. Metastatic RCC is highly resistant to chemotherapy and radiation. The two immunotherapy drugs, Interleukin 2 and Interferon Alpha do have some modest effects in prolonging survival. But one of them, Interleukin, generates some substantial side effects (and generally requires the patient to have the constitution of an Olympics-trained athlete!). Consequently Interleukin is not often prescribed in the UK. The other immunotherapy drug, Interferon, is more easily tolerated than Interleukin; but it only produces a relatively small increase in (progression-free) survival when compared with the new drugs, some of which also offer less adverse side effects than Interferon. The side effects of the new drugs are much less difficult to live with and patients are very conscious of this. Bearing in mind that many RCC patients, by reason of age, often present with other medical problems, any reduction in adverse side effect is a further most valuable benefit.

3 **Comparisons with other therapies**

I have had only very little time to study the PenTAG report, But I would like to make a number of points about the comparisons presented in this report.

First, the comparisons of the relative costs of acquiring drugs.. In all pairwise comparisons Interferon comes out massively cheaper than the new drugs. Taking just one example, Interferon vs Sunitinib, the £2,952 cost for Interferon is playing against a cost of £34,012 for Sunitinib [Table 44, pg 152]. Why such a large difference? Of course, as a drug, Interferon has been in use for a long while; but it only became

relatively inexpensive in 1980 when some technical advances permitted its mass cultivation from bacterial cultures. By contrast Sunitinb is in an entirely new class of drugs, only comparatively recently introduced and still having the burden of recovering R&D expenditures. And these expenditures have of necessity been large because of the amount of research needed to develop new ways of combating a lethal disease that has been so very difficult to treat with other medications. Huge differences in drug acquisition costs dominate the arithmetic of the incremental analysis, to such a great extent that differences in other factors have only very minor effects on calculated ICERs. It might be expected that, in the fullness of time, the costs of the new drugs will fall just as Interferon has. But it is troubling that in the meantime incremental analysis might serve to hold back unduly the march of progress in this area.

Before leaving drug acquisition costs, I have a question about how these are represented. Do they include VAT or not? If VAT is included .then the resource costs of the drugs are being overestimated, since the tax is a pure transfer payment and consequently should be omitted from any economic analysis of public expenditure. [The source of the data is given as the *British National Formulary.* But I do not have access to this: and the impending deadline for submitting this statement prevented me from finding out.]

It is noticeable that there are some big differences in extrapolations of survival rates as between the PenTAG report and the submissions made by the drug manufacturers. All the extrapolations seem to be based on robust methodologies, so that there appears nothing to suggest that one extrapolation is inherently better than another. The question I have here is with what degree of confidence does the PenTAG group put forward its extrapolations as being superior to those of the manufacturers. The differences here are such that they lead to big differences in survival data and therefore in estimated QALYs.

4 **Differences therapies made to me**

Not applicable in my case because my cancer was of the TCC type rather than RCC.

5 **Implications if therapies not made available to others**

Too awful to contemplate.

Many kidney cancer patients will die sooner than they would otherwise do.

Many kidney cancer patients will suffer greater adverse side effects with medications currently available

Many kidney cancer patients will be upset psychologically through being told they cannot receive the best therapy because it is deemed too expensive.

Many kidney cancer patients will consider it unfair that they are unable to receive an internationally recognised standard of care simply because the live in the UK.

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