

**HEALTH TECHNOLOGY APPRAISAL: NICE Health Technology  
Appraisal - Addendum**

**To**

**Drugs for the treatment of age related macular degeneration**

**TO: NICE**

**FROM: NHS Quality  
Improvement Scotland**

**Response to additional analysis commissioned by NHS R&D HTA  
Programme on behalf of the NICE**

**Ranibizumab and pegaptanib for the treatment of age-related macular  
degeneration: further analysis requested by NICE in response to  
consultation on ACD**

I have read this comprehensive and thorough analysis and comment below.

I am not an expert in health economics and found some of the analysis quite difficult to digest. My comments are those of a practicing ophthalmologist with a special interest in macular disease who is currently providing an intravitreal injection service using Ranibizumab following the Scottish Medicines Consortium advice.

1. Assumptions

These are valid and reflect experience ie

That about 30% of patients present with disease in one eye only

That 40% of people with CNV will have second eye involvement within 5 years (with an annual incidence of 10% per annum)

2. Cost implications of first and second eye presentation

The assumption that patients with first eye involvement require twice yearly monitoring for development of disease in the second eye is false. Patients with second eye involvement present as urgent cases with fresh symptoms in the second eye having noticed a rapid decline in their visual function. Such patients are told to contact the eye department if they develop symptoms and are fast tracked. Screening for second eye involvement is unnecessary.

Many patients with first eye involvement will be followed up until they stabilise however.

OCT and fluorescein angiography of the second eye is only necessary if clinically indicated and have no screening role. If the first eye is being treated it will be monitored and in that process the fellow eye is checked.

3. There is no good case for repeat fluorescein angiography on a 6 monthly basis after commencement of treatment. An initial fluorescein angiogram at presentation with suspected CNV in either eye is indicated and this has always been usual practice. Monitoring needs to be done with OCT only.
4. The experience with pegaptanib has been extremely disappointing and the tables reflect that this is a poor alternative to ranibizumab. NICE guidance should not support the introduction of pegaptanib.
5. Experience indicates that following the PRONTO protocol is sensible and should be adopted. Many patients stabilise after relatively few injections and the unpublished 2 year follow up (with an average of 9.9 injections over 2 years is encouraging). I recognise that the evidence is lacking at present, but at the least we can conclude that 24 injections over 2 years is totally unnecessary. Somewhere between the Royal College of Ophthalmologists guidance of 8 in year 1, and 6 in year 2 (total 14 injections over 2 years), and the Pronto results of 9.9 injections is probably a reasonable estimate.
6. Day case or OPD  
The service should be delivered as an outpatient procedure in a clean room. The cost of day case procedures is significant and day case provision is quite unnecessary for this service. Every encouragement should be given to setting up OPD facilities.
7. Subgroup analysis  
This is an area requiring more research. All agree that predominantly classic lesions do best. The ICERs for minimally classic and occult no classic CNV are relatively poorer. There are however many different forms of occult and some forms may respond better than others eg RAP (retinal angiomatous proliferation) cases probably do better than serous PEDs (pigment epithelial detachments).
8. Non drug costs  
I consider these to be too high. Full assessment is certainly not indicate every 3 months – the need for 3 monthly fluorescein angiography is questionable. We are performing OCT 3 monthly.

In conclusion the additional analysis is helpful in clarifying more realistic costs of introducing ranibizumab. Pegaptanib has relatively poor effectivity and having used it in practice would never advise this preparation if ranibizumab is available. The optimal frequency of Ranibizumab injections remains unknown but is certainly not 24 injections over 2 years.

The experience in Scotland may be of some assistance to NICE in terms of the number of patients receiving treatment using the SMC guidance.



25 October 2007