

APPENDIX

Economic costing method

The medical cost was calculated from a third party insurer's perspective and included the direct medical costs only. The costs were calculated per protocol in US dollars and compared with the costs when using the MARINA/ANCHOR protocol,[1] the variable dosing arm of the CATT protocol,[2] or the treat and extend protocol.[3] All of these studies included an ophthalmic examination, fluorescein angiography and an optical coherence tomography (OCT) evaluation in the baseline visit. In the MARINA and ANCHOR protocol, patients received monthly ranibizumab injections, accompanied by monthly monitoring by ophthalmic examination; angiography was repeated every 3 months. The variable dosing arm of the CATT protocol included monthly OCT examinations and a mean of 6.9 reinjections with ranibizumab.[2] For the treat and extend regimen, visits with an ophthalmic examination and OCT were always associated with an injection of ranibizumab. The mean number of injections (and visits) was reported to be 8.36 in the first year.[3]

Medicare average allowable 2009 rates in US \$*		MARINA[1]		PRN (CATT)[2]		TER[3]		Observe and plan##	
Service	US \$	n	US \$	n	US \$	n	US \$	n	US \$
Ophthalmic examination and evaluation	75.23	12	902.76	12	902.76	8.36	628.92	4.97	373.89
Fluorescein angiography, fundus photographs, both eyes	253.92	4	1,015.68	1	253.92	1	253.92	2	507.84
OCT evaluation, including technical and	45.64	1	45.64	12	547.68	8.36	381.55	4.97	226.83

professional fees, one eye									
Intravitreal injection procedure	192.32	12	2,307.84	6.9	1327.01	8.36	1,607.80	7.08	1,500.10
Cost of ranibizumab injection	2,067	12	24,804.00	6.9	14,262.30	8.36	17,280.12	7.08	16,122.60
Total per protocol			29,075.92		17,293.67		20,152.31		18,731.26
Total (real life report)							16,114.52		18,731.26

Supplemental table 1: Comparison of medical costs of different treatment regimens with ranibizumab in age-related macular degeneration.

*The Medicare average allowable 2009 rates in United States dollars (US \$) have been taken from a recent publication about the treat and extend regimen;^[3] ††Observe and plan, treatment regimen of this present study; OCT, optical coherence tomography;

References

- 1 Rosenfeld PJ, Brown DM, Heier JS, et al. Ranibizumab for neovascular age-related macular degeneration. *N Engl J Med* 2006;**355**:1419–31.
- 2 Martin DF, Maguire MG, Ying GS, et al. Ranibizumab and bevacizumab for neovascular age-related macular degeneration. *N Engl J Med* 2011;**364**:1897–908.
- 3 Gupta OP, Shienbaum G, Patel AH, et al. A treat and extend regimen using ranibizumab for neovascular age-related macular degeneration clinical and economic impact. *Ophthalmology* 2010;**117**:2134–40.