## Appendix

Stroke cost estimation.

The absolute stroke risk difference between the two groups was estimated separately by calculating 10 year UKPDS stroke risk estimates(1) using GEE to correct for clustering and confounders (see average model outcome analyses). This difference in stroke risk was then multiplied by the mean costs of stroke and added to the total costs per patient.(2) Since the incidence of stroke is highest around 80 years, only the costs of stroke in the first year were taken into account.(3)

The difference in 10 year UKPDS stroke risk estimates between intervention and control group for the total population was -0.74% (95% CI: -1.29 to -0.19), for CVD+ patients -1.11% (95% CI: -1.83 to -0.39) and for CVD- patients -0.51% (95% CI: -1.01 to - 0.02). Stroke risks were multiplied by the first year stroke costs (€20,500, not discounted)(2), resulting in stroke costs: total population €-151, CVD+ patients €-228 and CVD- patients €-105. When the differences in stroke costs are added to the model, the incremental cost-effectiveness ratio (ICER) for the total population is €34,162 per QALY gained (i.e., €1,264/0.037), for CVD+ patients €11,557 per QALY gained, and for CVD- patients €113,785 per QALY gained (table 2).

These calculations show that the influence of stroke costs on the model is probably small and that these costs do not change the conclusions about the effectiveness and cost-effectiveness of DCP. This conclusion is also supported by the finding that stroke occurs late in life(3) and that DM2 patients have a higher mortality risk after stroke than other patients.(4)

## References

- 1. Kothari V, Stevens RJ, Adler AI, Stratton IM, Manley SE, Neil HA, Holman RR: UKPDS 60: risk of stroke in type 2 diabetes estimated by the UK Prospective Diabetes Study risk engine. *Stroke* 33:1776-1781, 2002
- 2. Struijs JN, van Genugten ML, Evers SM, Ament AJ, Baan CA, van den Bos GA: Future costs of stroke in the Netherlands: the impact of stroke services. *Int J Technol Assess Health Care* 22:518-524, 2006
- Nationaal kompas volksgezondheid, beroerte, prevalentie. [Internet]. Available from http://www.rivm.nl/vtv/object\_document/o1027n17966.htm. Accessed 1 January 2009.
- 4. Kammersgaard LP, Olsen TS: Cardiovascular risk factors and 5-year mortality in the Copenhagen Stroke Study. *Cerebrovasc Dis* 21:187-193, 2006