

SPECT Economic Model Results using a cost for CABG of £6275 instead of £4397

Tables 1 and 2 show the results for the base case analysis for a range of prevalence rates using a cost for CABG of £6275 instead of £4397. All other input data in the analysis remain the same.

The results of this sensitivity analysis are similar to the results presented in the submission. Namely, “The results indicate that at lower levels of prevalence it is possible that the incremental costs per unit of output (true positive diagnosed, accurate diagnosed, QALYs) for the movement from stress ECG-SPECT-CA to stress ECG-CA and from stress ECG-CA to SPECT-CA might be considered worthwhile. Furthermore, stress ECG-CA is extendedly dominated by a combination of stress ECG-SPECT-CA and SPECT-CA¹.” If stress ECG-CA is removed from the comparison then the incremental cost per unit of output at a 10.5% prevalence level for SPECT-CA versus stress ECG-SPECT-CA would be: £10,302 per true positive diagnosed; £10,381 per accurate diagnosis and £11,185 per QALY. These incremental cost-effectiveness ratios would decrease as prevalence increases. At high rates of prevalence (e.g. 50% or 85% risk of CAD) the stress ECG-SPECT-CA strategy is the one with lower cost. At these levels of prevalence the SPECT-CA strategy is extended dominated by the stress ECG-CA and CA strategies for the three different types of outputs presented (true positives diagnosis, accurate diagnosis and QALY)².”

¹ Over a defined range allowing some patients to receive stress ECG-SPECT-CA with the rest receiving SPECT-CA would be less costly and result in more benefits overall than using stress ECG-CA alone.

² Over a defined range allowing some patients to receive stress ECG-CA with the rest receiving CA would be less costly and result in more benefits overall than using stress SPECT-CA alone

Table 1 Estimated costs and outcomes for each diagnostic strategy

| | Diagnostic cost | Cost | True Positives | Accurate Diagnosis | QALYs |
|---|-----------------|--------|----------------|--------------------|--------|
| <i>Prevalence level: Baseline 10.5%</i> | | | | | |
| ECG (SPECT - CA) | £628 | £5,589 | 9.13% | 94.09% | 12.298 |
| ECG (CA) | £812 | £5,795 | 10.80% | 95.73% | 12.311 |
| SPECT (CA) | £943 | £5,953 | 12.66% | 97.60% | 12.330 |
| CA | £1,310 | £6,349 | 14.98% | 99.85% | 12.346 |
| <i>Prevalence level: 30%</i> | | | | | |
| ECG (SPECT - CA) | £710 | £6,230 | 18.26% | 88.23% | 11.701 |
| ECG (CA) | £854 | £6,419 | 21.60% | 91.55% | 11.732 |
| SPECT (CA) | £1,018 | £6,636 | 25.32% | 95.27% | 11.770 |
| CA | £1,310 | £6,989 | 29.96% | 99.85% | 11.811 |
| <i>Prevalence level: 50%</i> | | | | | |
| ECG (SPECT - CA) | £819 | £7,083 | 30.43% | 80.41% | 10.905 |
| ECG (CA) | £910 | £7,251 | 36.00% | 85.96% | 10.960 |
| SPECT (CA) | £1,119 | £7,547 | 42.20% | 92.16% | 11.023 |
| CA | £1,310 | £7,844 | 49.93% | 99.85% | 11.097 |
| <i>Prevalence level: 85%</i> | | | | | |
| ECG (SPECT - CA) | £1,010 | £8,577 | 51.74% | 66.73% | 9.513 |
| ECG (CA) | £1,007 | £8,707 | 61.21% | 76.19% | 9.609 |
| SPECT (CA) | £1,294 | £9,140 | 71.74% | 86.73% | 9.716 |
| CA | £1,310 | £9,339 | 84.87% | 99.85% | 9.849 |

Table 2 Stepwise incremental cost-effectiveness

| | Per True Positive Diagnosed | Per Accurate Diagnosis | Per QALY |
|---|-----------------------------|------------------------|----------|
| <i>Prevalence level: Baseline 10.5%</i> | | | |
| ECG (SPECT - CA) | | | |
| ECG (CA) | £12,327 | £12,572 | £16,020 |
| SPECT (CA) | £8,481 | £8,455 | £8,021 |
| CA | £17,074 | £17,560 | £25,691 |
| <i>Prevalence level: Baseline 30%</i> | | | |
| ECG (SPECT - CA) | | | |
| ECG (CA) | £5,672 | £5,718 | £6,182 |
| SPECT (CA) | £5,830 | £5,822 | £5,636 |
| CA | £7,627 | £7,715 | £8,724 |
| <i>Prevalence level: Baseline 50%</i> | | | |
| ECG (SPECT - CA) | | | |
| ECG (CA) | £3,010 | £3,021 | £3,081 |
| SPECT (CA) | £4,769 | £4,767 | £4,652 |
| CA | £3,848 | £3,867 | £4,016 |
| <i>Prevalence level: Baseline 85%</i> | | | |
| ECG (SPECT - CA) | | | |
| ECG (CA) | £1,366 | £1,367 | £1,348 |
| SPECT (CA) | £4,114 | £4,114 | £4,035 |
| CA | £1,514 | £1,515 | £1,499 |

This can be seen in Figures 1a to 5b, where a) corresponds to the results presented previously (CABG cost £4397) while b) corresponds to the £6275 cost for CABG. When the cost of CABG is £6275 was used (Figures 1b to 5b) the cost of every strategy is higher when compared to the costs of strategies obtained when a CABG cost of £4397 was used. Overall, the results in terms of cost-effectiveness were similar.

Figure 1a)

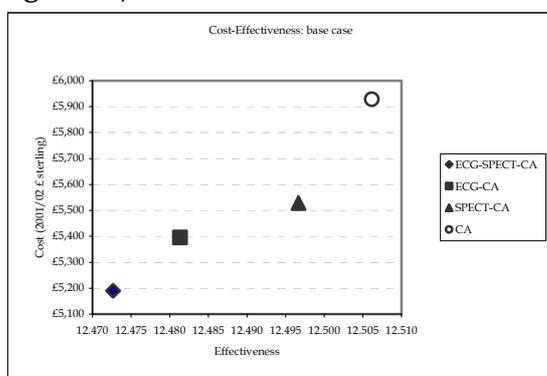


Figure 1b)

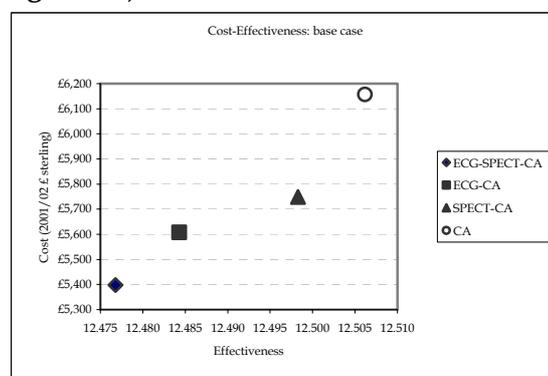


Figure 2a)

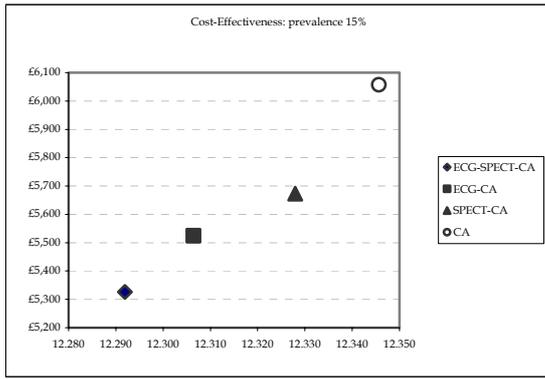


Figure 2b)

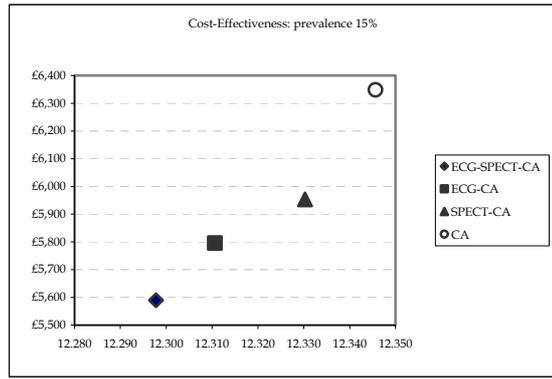


Figure 3a)

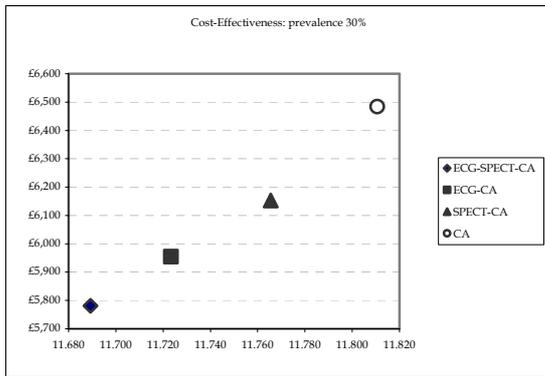


Figure 3b)

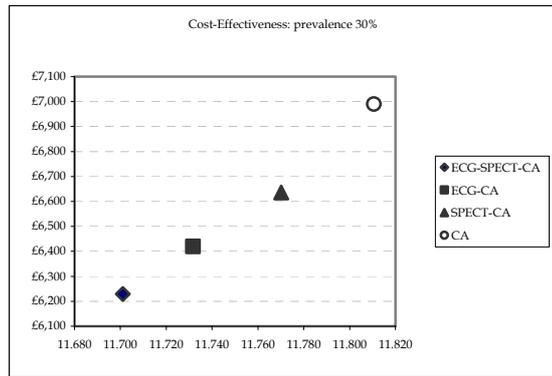


Figure 4a)

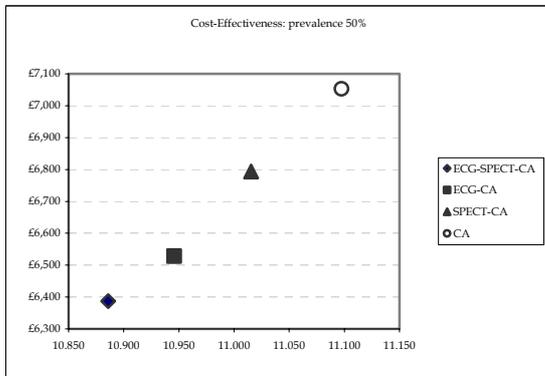


Figure 4b)

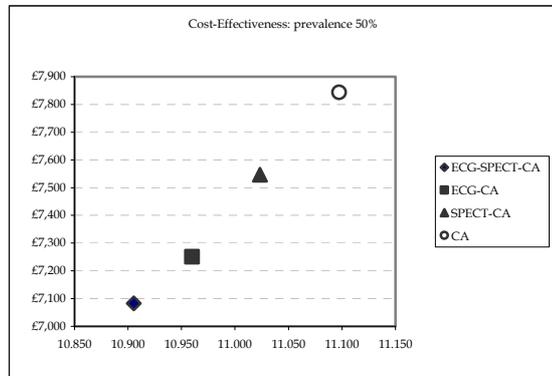


Figure 5a)

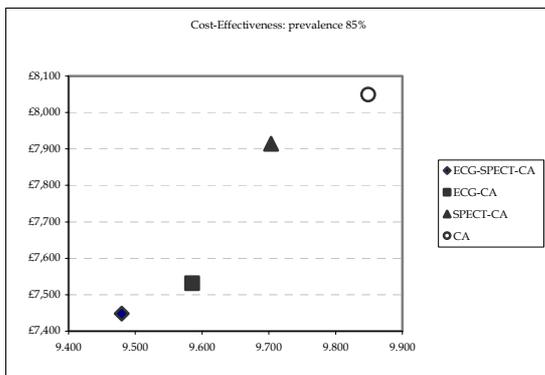


Figure 5b)

