**Supplementary Table 4: Cost-effectiveness outcomes for the base-case CEA analysis and sensitivity analyses – Analyses following multiple imputation**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Mean costs (95% CI)** |  | **Mean effects (95% CI)** |  |  |  | **Probability MgSO4 is** |
| **Analysis**1 |  | **MgSO4 (GBP)** | **Placebo (GBP)** | **Difference (GBP)** |  | **MgSO4(GBP)** | **Placebo (GBP)** | **Difference(GBP)** |  | **ICER (GBP)** |  | **More effective\* (%)** | **Less costly\* (%)** | **Cost-effective\*****(%)2** | **Cost-effective\*****(%)3** |
| Base-case |  | 897(762, 1031) | 882(768, 995) | 15(-161, 191) |  | 4.66(4.49, 4.83) | 4.95(4.78, 5.12) | 0.29§(0.05, 0.53) |  | 52 |  | 92.30 | 44.90 | 83.10 | 90.80 |
| Higher level inpatient care valued using NHS cost for paediatric high dependency care (GBP 886) |  | 802(704, 900) | 802(726, 879) | -1(-125, 123) |  | 4.66(4.49, 4.83) | 4.95(4.78, 5.12) | 0.29(0.05, 0.53) |  | -2 |  | 93.0 | 51.90 | 89.70 | 92.50 |
| Higher level inpatient care valued using NHS cost for paediatric intensive care (GBP 2225) |  | 1015(827, 1202) | 980(816, 1144) | 35(-214, 283) |  | 4.66(4.49, 4.83) | 4.95(4.78, 5.12) | 0.29(0.05, 0.53) |  | 119 |  | 92.40 | 40.90 | 78.90 | 90.80 |
| Exact LOS used |  | 773(649, 898) | 769(666, 873) | 4(-158, 166) |  | 4.66(4.49, 4.83) | 4.95(4.78, 5.12) | 0.29(0.05, 0.53) |  | 14 |  | 93.30 | 47.70 | 86.50 | 92.90 |
| LOS rounded up to full days |  | 1005(861, 1148) | 985(862, 1108) | 20(-169, 208) |  | 4.66(4.49, 4.83) | 4.95(4.78, 5.12) | 0.29(0.05, 0.53) |  | 68 |  | 92.90 | 48.30 | 85.50 | 91.40 |
| NHS Reference costs used to value A&E visit |  | 865(730, 999) | 849(736, 962) | 16(-159, 192) |  | 4.66(4.49, 4.83) | 4.95(4.78, 5.12) | 0.29(0.05, 0.53) |  | 55 |  | 93.80 | 42.00 | 85.50 | 92.20 |
| NHS Reference costs used to value stay on GM ward |  | 931(794, 1068) | 918(804, 1032) | 14(-165, 192) |  | 4.66(4.49, 4.83) | 4.95(4.78, 5.12) | 0.29(0.05, 0.53) |  | 47 |  | 92.90 | 47.50 | 85.70 | 92.70 |
| §The difference in effects was inverted, i.e. negative values were given a positive sign, to reflect the fact that a decrement in ASS score is synonymous with a positive health effect1Imputed case analysis included placebo N=256; MgSO4 N=2522 MgSO4 was considered to be “cost-effective” if it had positive net benefit at a GBP 1000 cost-effectiveness threshold3 MgSO4 was considered to be “cost-effective” if it had positive net benefit at a GBP 5000 cost-effectiveness threshold\* Based on 1000 bootstrap replicates of the datasetCI, confidence interval; ICER, incremental cost-effectiveness ratio; LOS, length of stay; GM general medical ward. |