

## Supplemental File 1

Outcome variables calculation: Different ICERs were calculated. We applied the following formula for the following rating scales

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score BDI - II [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score BDI - II [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score LARS [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score LARS [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score QALY [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score QALY [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score FOGQ [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score FOGQ [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score Mini - BESTest [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score Mini - BESTest [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score FRIED [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score FRIED [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score PDSS [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score PDSS [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score MDS - UPDRS [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score MDS - UPDRS [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

$$\frac{\text{Median Total Costs [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median TotalCosts [Control Group]} (\text{Dif 4m} - \text{baseline})}{\text{Median Score EUROHIS - QOL [TM]} (\text{Dif 4m} - \text{baseline}) - \text{Median Score EUROHIS - QOL [Control Group]} (\text{Dif 4m} - \text{baseline})}$$

The incremental cost-effectiveness ratio (ICERs) were calculated for the rating scales where significant clinical differences were observed. BDI-II (Beck Depression Inventory-II); LARS (Lille Apathy Rating Scale); Quality-adjusted life-years (QALYs); FOGQ (Freezing of Gait Questionnaire); MINI-BEST (Mini Balance Evaluation Systems Test); Fried (Fried frailty phenotype); PDSS (Parkinson's Disease Sleep Scale); NMSS (Non-Motor Symptoms Scale); MDS-UPDRS-II (Movement Disorder Society-Unified Parkinson's disease rating scale, activities of daily living); European Health Interview Survey-Quality of Life 8-item index [EUROHIS-QOL8]. The same formula was applied for 8-month visit