



**Figure S1. Combined bootstrapping analysis of the total ICU costs and the key underlying resource use parameter, time to extubation, in pooled population.** This analysis shows that there is a 90.9% likelihood of dexmedetomidine to shorten the time to extubation and simultaneously reduce total ICU costs, compared to standard sedatives. The average difference between the treatments (marked by the black square) in median time to extubation was 29 hours and in median total ICU costs €1,656, both lower with dexmedetomidine. ( $n$ = total number of patients sampled per round;  $k$ = number of repetitions of the sampling in the bootstrapping).