**RESULTS**

Tacrolimus compared with CsA demonstrates an incremental cost-effectiveness ratio (ICER) of €31,703/QALY gained over a 20-year time horizon (Table 5). Both calcineurin inhibitors bring in total 15.924 UTs and 8.890 QALYs, however, complications associated with tacrolimus-based therapy and CsA-based therapies decrease UTs by 0.37 and 0.57, respectively (i.e. incremental QALYs: 0.21, Table 4).

Total costs of tacrolimus-based therapy and CsA-based therapy are €161,219 and €153,434 (i.e. incremental costs: €6,784), of which only 0.1% and 20.6%, respectively, are costs of immunosuppressive drugs (Table 4).

Primary prevention of graft rejection with tacrolimus-based therapy leads to the highest net monetary benefit compared to CsA-based therapy (i.e. incremental MNB: €13,508, Table 5).

PSA showed that probability of tacrolimus being cost-effective is 83.4% at selected WTP threshold (Figure 6). Average probabilistic decision curve analysis (DCA) of 9 and 54 also confirmed the robustness of the base-case analysis and formulae.

**CONCLUSIONS**

Tacrolimus is a cost-effective immunosuppressive therapy in lung transplant recipients, protecting them from chronic lung graft dysfunction, which manifests as bronchiolitis obliterans syndrome. Deterministic ICER of €31,703/QALY is well below WTP threshold equal to €45,000.

As tacrolimus results in the highest net monetary benefit, this is rank as the most cost-effective strategy in primary prevention of lung transplant rejection.

To our knowledge, this is the first cost-effectiveness analysis of tacrolimus as primary immunosuppression after lung transplantation.