

Supplementary appendix

A formal sample size study was not conducted for the training cohort due to sample size limitations. It was considered that a size above 200 could be sufficient if external validation was subsequently obtained. For the external validation, there were also sample size limitations. This was tested using the formula for the precision of estimation of the c-statistic in an external cohort (<https://onlinelibrary.wiley.com/doi/full/10.1002/sim.9275>) with the data obtained in the training cohort. An interval width of 0.14 (slightly higher than the optimal width of 0.1) was obtained.