## **SUPPLEMENTARY MATERIAL**

## **METHODS**

The SNB was first developed to assess the potential population-level impact of incorporating a risk prediction instrument into clinical practice. The assumption is that some patients will experience the outcome (*i.e.* cases), and some patients will not (*i.e.* controls). The SNB is defined in terms of true and false positive rates, outcome prevalence, and risk threshold. Thus, the interpretation of the SNB value depends on the risk threshold considered - 6-month mortality, in the present study. The SNB is closely related to a

Cost/Benefit (C/B) ratio in the treatment of patients. Here, we assume that treating a control has a cost (C) (e.g., side effects of treatment), whilst there is some expected benefit (B) in treating a case (e.g., life extended, morbidity reduced). As we identified four increasing risk categories for early death (i.e., 2%, 14%, 32%, and 61%), we analyzed the SNB (95% CI), and C/B at these thresholds. We then compared the decision curves with ECOG-PS, one of the most widely used measures for therapeutic decisions in oncology.