



### Supplemental Fig. 1

Distribution of the Richmond Agitation Sedation Scale (RASS) assessments.

Percentages of the RASS assessments in the training set, the validation set and all datasets are shown. Deep sedation occurred in 43% (113/262) in the training set, 38% (100/264) in the validation set, and 41% (213/526) in all datasets. Deep sedation was defined as the RASS levels of -3 to -5.