

Supplementary Information S6 - Marginal trends

We computed median (Q1-Q3) survival predictions in the validation population for the 3 age categories and for baseline SOFA splits in 3 categories, for landmark times 0 and 6. Baseline SOFA cutoffs were chosen to have initially about one third of the patients in each category.

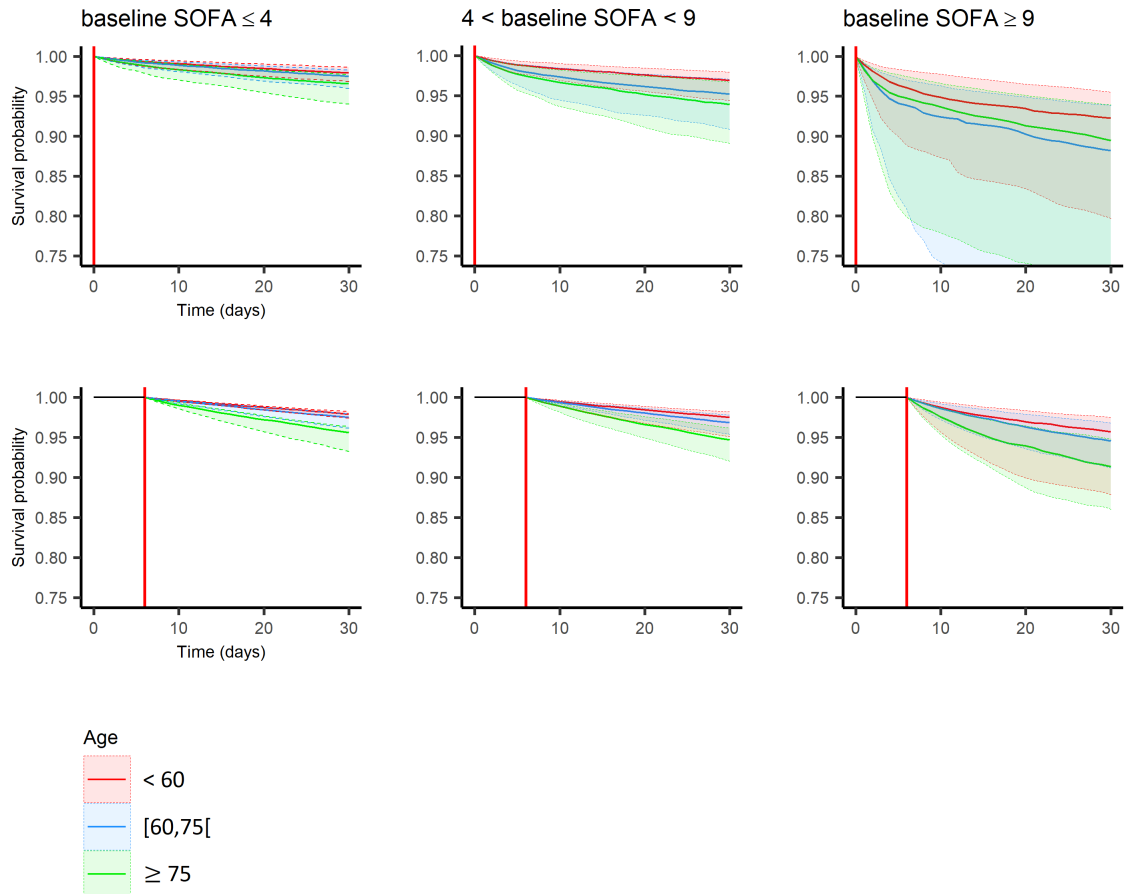


Figure: Median (line) and Q1-Q3 (bands) population survival predictions given different age categories and different baseline SOFA. Survival predictions were computed at landmark time 0 (top) and landmark time 6 (bottom) for each individual of the validation data set (number of subjects at risk in each group is given in table below).

For landmark time 0, the uncertainty on predictions is more important than for landmark time 6. For both landmark times and all the initial SOFA categories, older patients tend to have a lower survival probability than younger ones. This difference is exacerbated for high initial SOFA.

Baseline SOFA	Age (y)	Landmark 0	Landmark 6
		N	N
low (≤ 4)	<60	300	154
	$60 \leq \text{age} \leq 75$	222	131
	≥ 75	154	96
medium ($4 < \text{SOFA} < 9$)	<60	285	186
	$60 \leq \text{age} \leq 75$	241	166
	≥ 75	228	161
high (≥ 9)	<60	197	139
	$60 \leq \text{age} \leq 75$	219	159
	≥ 75	150	93
Total		1996	1285

Table: Number of at-risk patients in the validation set for landmark 0 and 6, for different age categories and different baseline SOFA.