

Combined Online SL for a collection of time-series

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Mock Trial: Comparison of different SLs based on the subset of data

The below results summarize a test run comparing the Combined Online SL and Regular SL at various time points.

1. Combined Online SL: consists of both global and individualized learners, as well as various variations of the global learners that differentially adjust for baseline covariates.
2. Regular SL: just global SL.

The prediction is based on the following covariates:

1. “los_icu”, “amine”, “sedation”, “ventilation”, “spo2”, “abpsys”, “abpdias”, “abpmean”.
2. “gender”, “age”, “care_unit”.

Initial training size included $n = 1000$ samples, trained at $t = \{20, 30, 60, 90, 120, 150, 180, 240\}$ minutes. For each t , we follow a gap of 30 minutes and predict the event for the following 30 minutes after the gap.

Super Learner Weights over varying Training Time

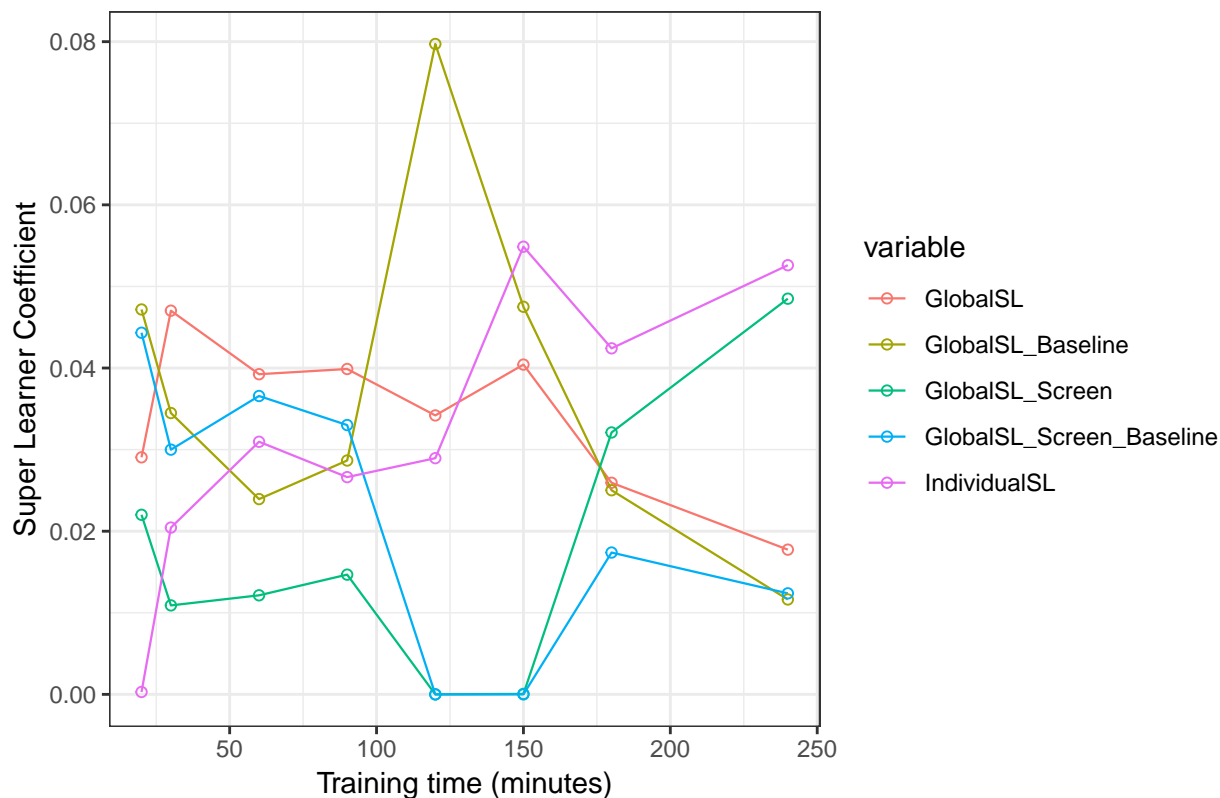


Table 1: **Risk for all different SLs considered**

	loss_online_SL	loss_regular_SL
t=20	1.4358010955	1.7482327312
t=30	0.9020006951	1.5558687024
t=60	0.7088291602	2.0244873783
t=90	0.7270133600	1.3979169927
t=120	0.7571544384	1.2040370141
t=150	1.0825190039	1.5601233110
t=180	1.1448555300	1.8287423041
t=240	0.6423328286	1.2984087398