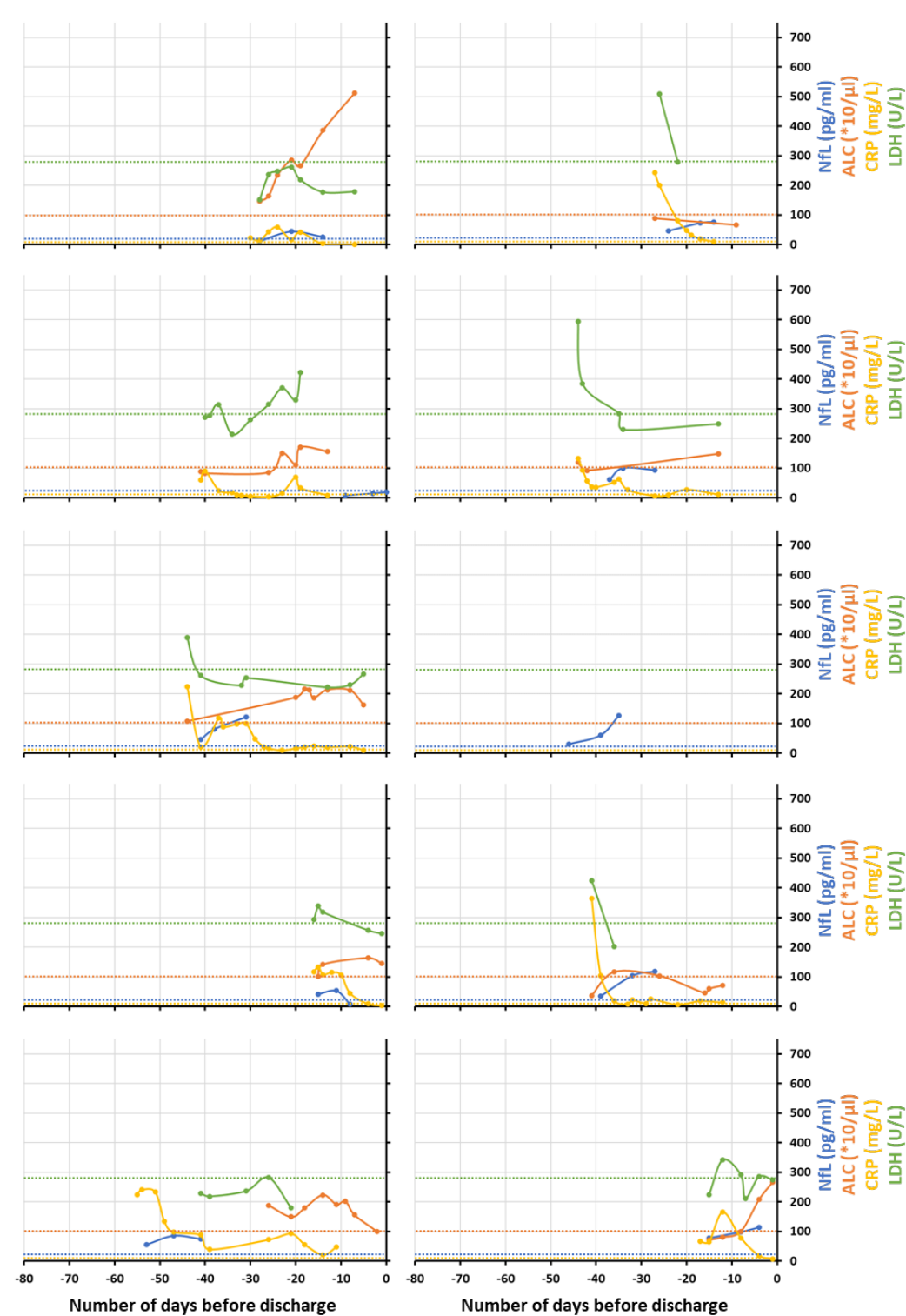


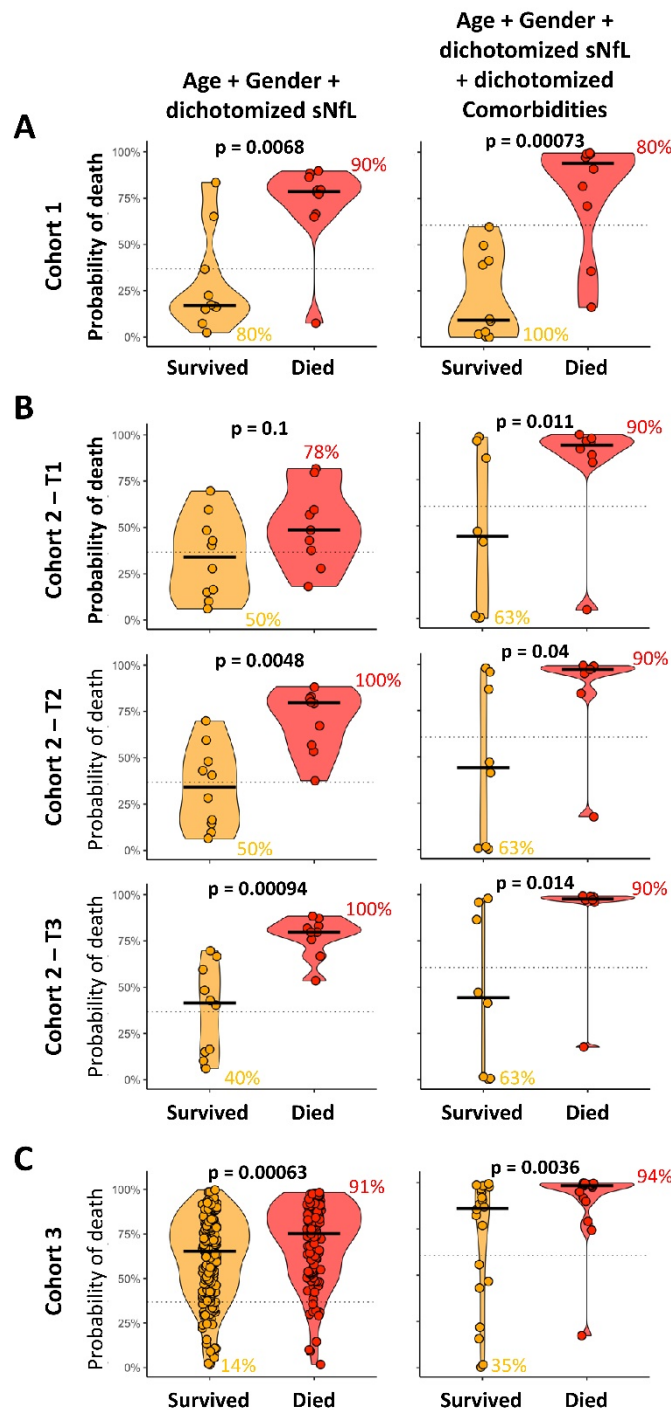
393 SUPPLEMENTARY FIGURES



395 **Supplementary Figure 1:** In cohort 2, longitudinal NfL (blue), ALC (orange), CRP (yellow)  
396 and LDH (green) levels in critically ill COVID-19 patients those who died, plotted with respect  
397 to number of days before death. Each plot represents an individual patient data. The respective  
398 color dotted lines represent upper (for NfL, CRP and LDH) or lower (for ALC) limit for HC for  
399 respective biomarker (NfL: 20 pg/ml, ALC: 100 \*10<sup>6</sup>/μl, CRP: 5 mg/L and LDH: 280 U/L).



401 **Supplementary Figure 2:** In cohort 2, longitudinal NfL (blue), ALC (orange), CRP (yellow)  
402 and LDH (green) levels in critically ill COVID-19 patients those who survived, plotted with  
403 respect to number of days before discharge. Each plot represents an individual patient data. The  
404 respective color dotted lines represent upper or lower limit for HC for respective biomarker.



406 **Supplementary Figure 3:** Comparisons of 2 predictive models of COVID-19 associated  
 407 mortality: Age plus Gender plus dichotomized NfL and Age plus Gender plus dichotomized NfL  
 408 plus dichotomized comorbidities in 3 independent cohorts; **(A)** cohort 1, **(B)** cohort 2, and **(C)**  
 409 cohort 3. The dotted line on each plot represents the optimal cut-off for respective model  
 410 predictor. The numerical values beside respective subgroups (Survived or Died) on each plot  
 411 represents the percentage of correctly classified patients.

412

413 **SUPPLEMENTARY DATA FILE**

414 **Supplementary data file 1:** Cohort, demographics, disease and severity diagnosis, timeline of  
415 important events during disease, NfL – raw and HC age-adjusted measurements, comorbidities  
416 and lab test measurements for systemic markers (ALC, CRP and LDH) data for all subjects (HC  
417 = 76, Non-COVID-19 Acute = 10, MS Non-active = 35, MS Active = 35, COVID-19: moderate  
418 = 10, critical - survived = 195, and critical - deceased = 133). Patients were recoded and  
419 personally identifiable information were excluded.