

Review of: "Association of Dementia and Patient Outcomes among COVID-19 Patients: A Multi-center Retrospective Case-Control Study"

Efthymia Giannitsioti

Potential competing interests: The author(s) declared that no potential competing interests exist.

Very well addressed study highlighting the profile of patients during the first waves (and SARS-CoV2 wild type and first VOCs) of the pandemic and before the implementation of vaccination. Therefore, the work adds to our understanding of the disease with a special focus on dementia, through a national cohort data-base. My suggestions are summarized:

1. Patients selected as "DNRs" should be excluded from the analysis-or you could add a parallel analysis without those patients. If you include them, the lower prevalence of ICU admission- and subsequently fewer days of ICU stay- in the DM group might be biased by the fact that those patients were more eligible as "DNRs".
2. Secondary bacterial infections (eg bacteremia) could influence the outcome of patients even in non-ICU departments as we have recently shown (Microorganisms 2022). Bacteremia might be more frequent in the DM patients or vice versa. If this information is not available, you could state it as a limitation of the study.