Dear Editor of Scientific Reports, please find enclosed the revised manuscript entitled:

"Enhancing diagnostic of stochastic mortality models leveraging contrast trees. An application on Italian data",

co-authored by S.Levantesi, M.Lizzi, and A. Nigri, that we would like to submit for consideration for publication in *Scientific Reports*.

The file "Revision Checklist_14-11-2022" provides the point-by-point reply to reviewers.

We sincerely hope that you will find our revised manuscript of interest for the readers of *Scientific Reports* and that it may fit the purpose and the scope of this esteemed Journal.

Thank you for your consideration. Sincerely,

Andrea Nigri (on behalf of all co-authors) University of Foggia, Italy andrea.nigri@unifg.it