

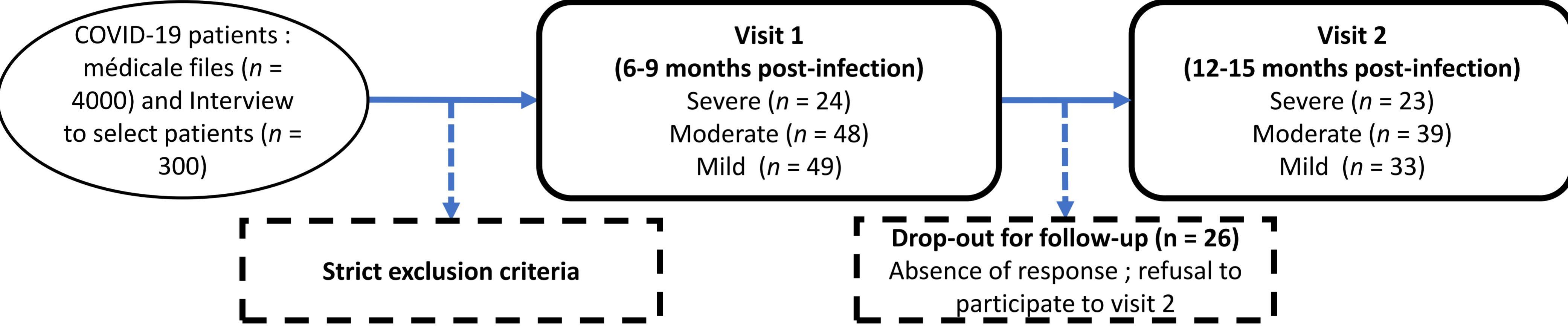
The economic burden of the post-COVID-19 condition: Underestimated long-term consequences of neuropsychological deficits - Insights from the COVID-COG project

P. Voruz^{1,2}, F. Assal^{3,4#} & J.A. Péron^{1,3#*}

Affiliations: ¹ Clinical and Experimental Neuropsychology Laboratory, Faculty of Psychology, University of Geneva, Switzerland; ² Department of Clinical Neurosciences, Neurosurgery Department, Geneva University Hospitals, Switzerland; ³ Department of Clinical Neurosciences, Neurology Department, Geneva University Hospitals, Switzerland; ⁴ Faculty of Medicine, University of Geneva, Switzerland

The World Health Organization recently defined the long-term consequences of SARS-CoV-2 infection as post-COVID-19 condition. The post-COVID-19 condition (long COVID) leads to functional impairment and low productivity at work. A recent 2021 Swiss survey conducted by the Federal Social Insurance Office found that 2.27% of new disability insurance claims were due to the post-COVID-19 condition, increasing to 2.50% in 2022 (as of November 2022).

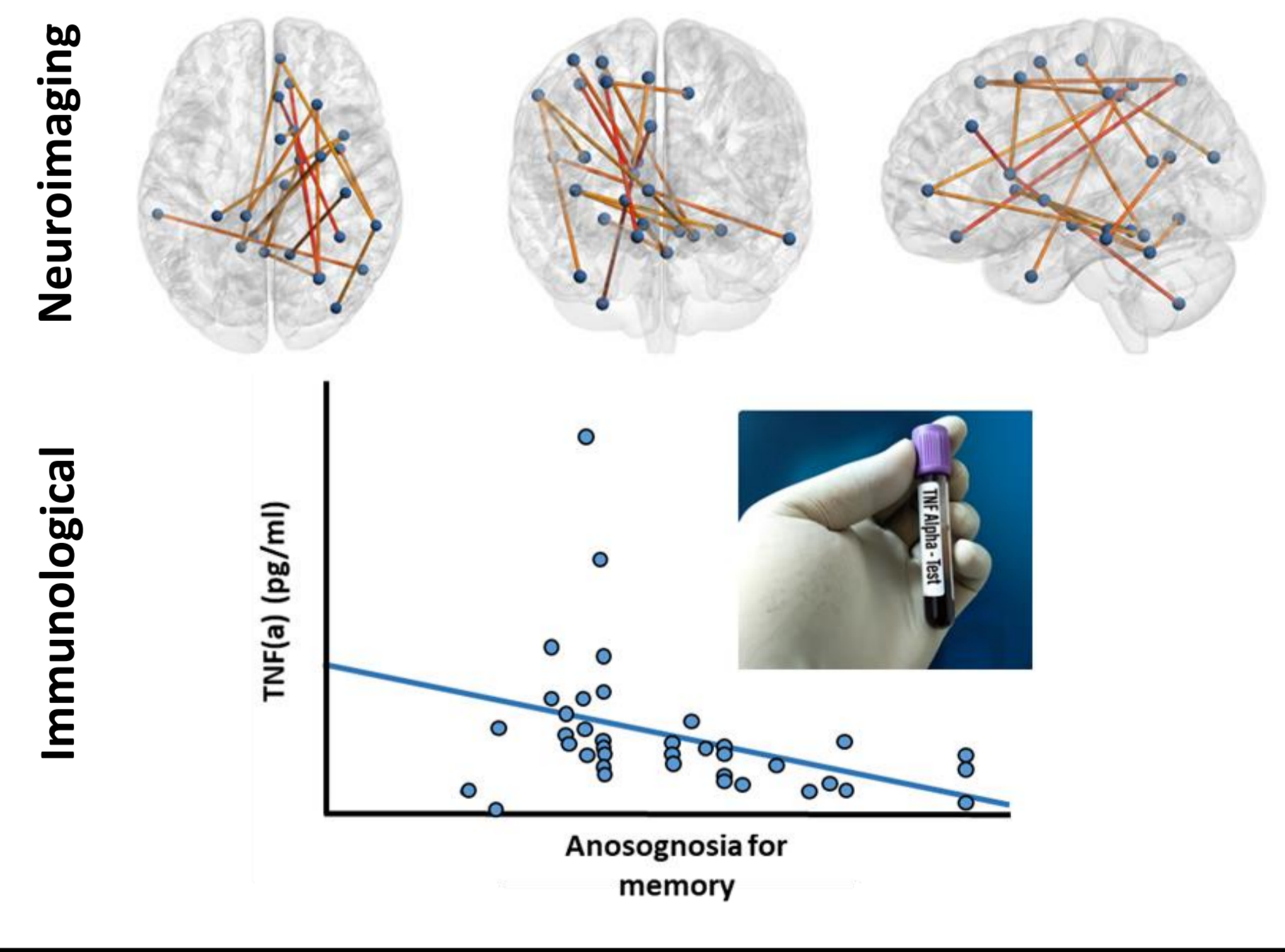
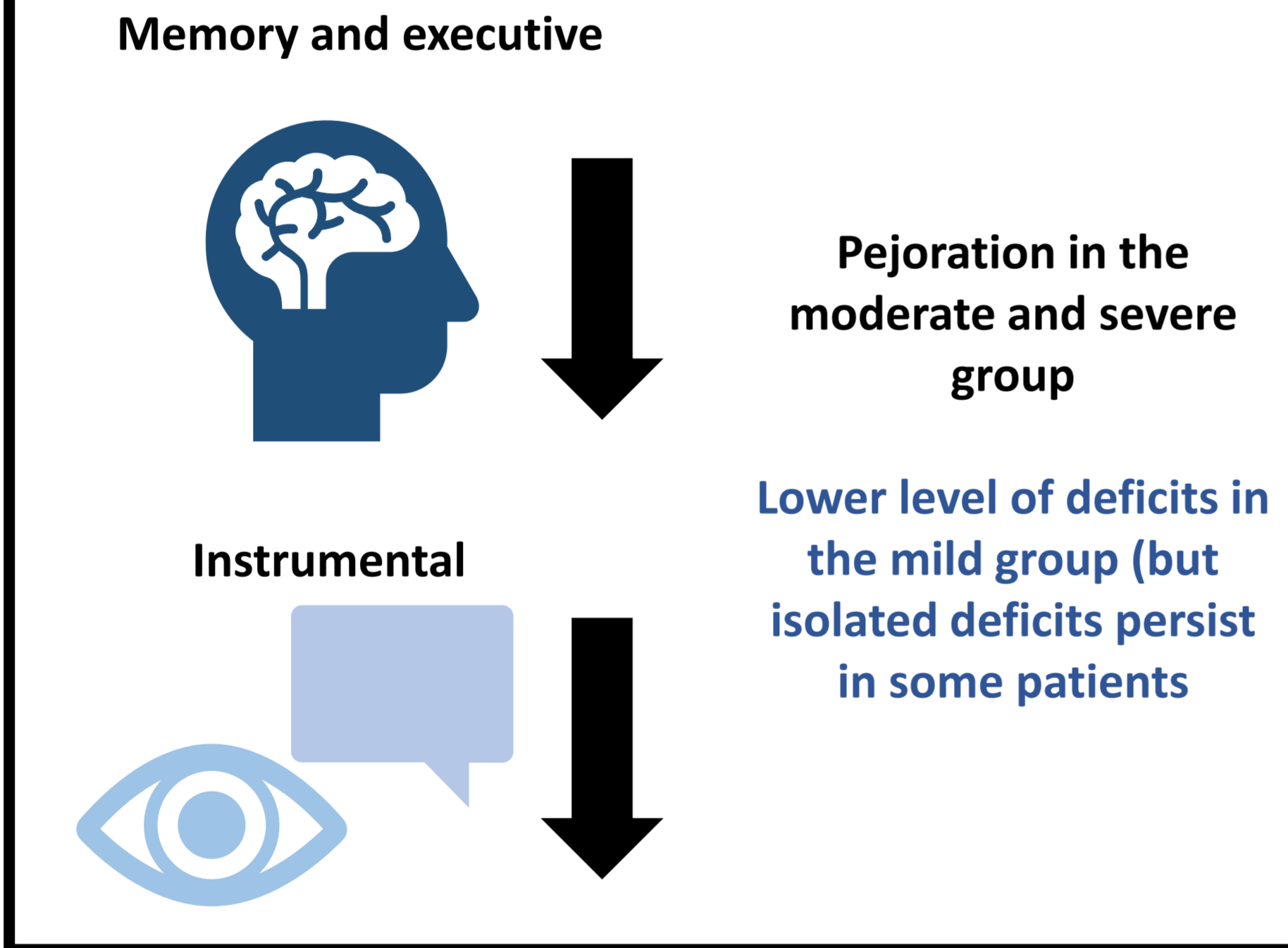
Goal
To assess the long-term evolution of the prevalence of cumulative neuropsychological following SARS-CoV-2 infection and their potential relationship with the economic burden



Progression of neuropsychological deficits
(Voruz et al., 2022a and 2024)

Brain markers
(Voruz et al., 2022b; Voruz et al., 2022c; Thomasson et al., 2023; Nuber-Champier et al., 2023)

Experimental studies



Clinical implementation and economic burden evaluation

Official clinical recommendation



Post-COVID cost estimated at \$600 billion annually in the USA
Neurocognitive disorders are among the most described in pathology

Evidences from other pathologies (Multiple sclerosis; neurodegenerative pathologies)

% explained by neuropsychological deficits?

Conclusion

The scientific community and civil society must work together to develop effective communication channels based on empirical evidence to ensure clear and unbiased transmission of scientific results to all layers of society (e.g. patients and health care professionals, employers economic entities, insurers) to mitigate the potential global impact of the neuropsychological post-COVID-19 condition. The relationship between neuropsychological deficits and economic burden can be applied to other pathologies