



## Post-Acute-Sequelae Symptoms of COVID-19 Affected by SARS-CoV-2 (COVID-19) Vaccination

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Currently, few prospective data that explore the biological mechanisms of the effect of SARS-CoV-2 (COVID-19) vaccination on the persistent symptoms, “long-COVID 19” or “post-acute sequelae of COVID (PASC)”, including compared antibody dynamics between those with and without PASC [1,2]. PASC is defined by symptoms persisting more than 4 weeks after a confirmed or probable COVID-19, without any confirmed alternative diagnosis [1]. Around 52.8% of the patients reported a global effect on symptoms after the vaccine injection, corresponding to a worsening in around 31% and an improvement in around 21.8% [1]. No differences based on the vaccine type used were detected [1]. Around 58.9% of the enrolled subjects developed PASC after at least 3 months of follow-up [2]. Among PASC participants, they revealed the median half-life of RBD- and spike-binding IgG levels of 181 (95% CI: 147-230) and 233 (95% CI: 183-324) days, whereas among those without PASC demonstrated 144 (95% CI: 113-196) and 170 (95% CI: 125-252) days, respectively [2].

In conclusion, the majority of PASC patients were well tolerated to SARS-CoV-2 (COVID-19) vaccine and have good immunogenicity. However, further investigations should be performed to confirm the COVID-19-vaccine-related strong evidence on improvement of PASC symptoms.

### Bibliography

1. Scherlinger M., et al. “Effect of SARS-CoV-2 vaccination on symptoms from post-acute sequelae of COVID-19: results from the nationwide VAXILONG Study”. *Vaccines* 10.46 (2022): 6.
2. Wynberg E., et al. “The effect of SARS-CoV-2 vaccination on post-acute sequelae of COVID-19 (PASC) : a prospective cohort study”. *Vaccine* (2022): 8.