

BBMRI.at Partner's Sample Collection Profile
"COVID-19 Convalescent Cohort"

The "COVID-19 Convalescent Cohort" is a sample collection at [Biobank Graz \(Med Uni Graz\)](#), which is based on a prospective sample cohort for current research on SARS-CoV-2.

Biobank Graz recruited participants (from Austria) who had recovered from COVID-19 and grouped them into two sub cohorts (see profile table). Volunteers were invited to fill in a questionnaire and donate various types of samples at different time points (see study design and table).

This cohort serves for:

- the development and validation of new antibody tests and neutralization assays
- the investigation of antibody titres over time
- a better characterization of the course of COVID-19
- the identification of diagnostic or prognostic biomarkers

Study design:

Participants are invited five times, i.e. 1st visit (time point 0), 2nd visit (after 1 month), 3rd visit (after 2 months), 4th visit (after 5 months), 5th visit (after 12 months), where the samples are collected. At the 1st visit, donors also fill in a questionnaire concerning symptoms, comorbidities, pre-history and lifestyle.

Disease Area	COVID-19 recovered patients, SARS-CoV-2, PCR test, antibody test
Research Area	
Sample Types	serum, EDTA buffy coat, EDTA plasma, lithium heparin plasma, sodium citrate plasma, saliva and nasopharyngeal swabs (stored at -80 °C)
Cohort Size	23.739 aliquots from 364 participants as of March 10 th
Donors	<p>volunteers who recovered from COVID-19</p> <ul style="list-style-type: none"> • Sub cohort I: Persons who were officially tested positive for an infection by PCR test with the SARS-CoV-2 virus, showed symptoms of COVID-19 and recovered. (342 participants) • Sub cohort II: (22 participants) <ol style="list-style-type: none"> 1. Persons who lived together or got in contact with a person officially tested positive by PCR test for SARS-CoV-2 and showed symptoms of COVID-19 disease within 14 days, but were not tested themselves, and recovered. 2. Persons who showed leading COVID-19 symptoms (fever, dry cough, loss of smell or taste, diarrhoea, fatigue) since December 2019, but were not tested themselves, independent of whether they had contact to a person positive tested for SARS-CoV-2, and recovered.
Associated Data	<p>Data concerning symptoms, comorbidities, prehistory and lifestyle are collected via questionnaire</p> <p>PCR tests and antibody tests are performed</p>
Informed Consent	Broad Biobank IC (view template de>> ; view template en>>), sStudy specific IC
Access	As of now
Quality Standards	<ul style="list-style-type: none"> • Quality management: ISO 9001:2015 (SOPs) • CEN/TS 16945:2016 (metabolomics in urine, venous blood serum and plasma)

[View this and other cohorts from Biobank Graz in the BBMRI-ERIC Directory >>](#)

[View this cohort at Biobank Graz website >>](#)

Contact	<ul style="list-style-type: none"> • Principle investigator: Univ.-Prof. Dr. med. univ. Robert Krause • Email: biobank-pm@medunigraz.at
Publications	<p>Kral S, Banfi C, Niedrist T, Sareban N, Guelly C, Kriegl L, Schiffmann S, Zurl C, Herrmann M, Steinmetz I, Schlenke P, Berghold A, Krause R. Long-lasting immune response to a mild course of PCR-confirmed SARS-CoV-2 infection: A cohort study. J Infect. 2021 Nov;83(5):607-635. doi:</p> <p>Niedrist T, Drexler C, Torreyter PP, Matejka J, Strahlhofer-Augsten M, Kral S, Riegler S, Güllly C, Zurl C, Kriegl L, Krause R, Berghold A, Steinmetz I, Schlenke P, Herrmann M. Longitudinal comparison of automated SARS-CoV-2 serology assays in assessing virus neutralization capacity in COVID-19 convalescent sera. Arch Pathol Lab Med. 2022 Jan 27. doi:10.5858/arpa.2021-0604-SA. Epub ahead of print. PMID: 35085385</p> <p>Eva M. Matzhöld, Günther F. Körmöczi, Chiara Banfi, Marlies Schönbacher, Camilla Drexler, Helmberg, Ivo Steinmetz, Andrea Berghold, Peter Schlenke, Gabriel E. Wagner, Anja Stoisser, Barbara Kleinhapfl, Wolfgang R. Mayr and Thomas Wagner. Lower Levels of ABO Anti-A and Anti-B of IgM, IgG and IgA Isotypes in the Serum but Not the Saliva of COVID-19 Convalescents. J. Clin. Med. 2022, 11(15), 4513 doi.org/10.3390/jcm11154513</p>