



BBMRI.at Partner's Sample Collection Profile
"The CoVVac Study"

July 2021

The "CoVVac Study" is a sample collection at Biobank Graz (Med Uni Graz) which is based on a prospective sample cohort for current research on immune response to COVID-19 vaccines in immunocompromised and healthy individuals.

Study design:

This study will characterize and analyze the anti-SARS-CoV-2 humoral and cellular immune response before and after vaccination with a focus on the anti-spike protein response in immunocompromised patients compared to healthy controls. Participants are invited to five visits where samples are collected and one telephone interview:

- 1st visit (60-0 days before vaccination)
- 2nd "visit" is a telephone interview to get information on vaccine reactions.
- 3rd visit (+21-28 days after 2nd vaccination)
- 4th visit (+ 6 months after 2nd vaccination)
- 5th visit (+3-6 weeks after visit 4 or 3rd vaccination)
- 6th visit (+6 months after visit 4)



Disease Area	COVID-19 vaccination, immunocompromised, t-cell immunity, t-cell aging, antibodies
Research Area	
Sample Types	Serum and saliva (stored at -80 °C) PBMC (stored in the gas phase of liquid nitrogen)
Cohort Size	Samples will be collected from 189 immunocompromised and 187 healthy controls (6 visits planned) 1371 serum aliquots from 348 participants (May 2021)
Donors	<ul style="list-style-type: none"> • Healthy • Primary or secondary immunodeficiencies (M05, D38, M34, C90, C91.1, C92, D46)
Associated Data	Serology, immune status, t-cell immunity, nutritive assessment, body fat composition, BMI, date and type of COVID-19 vaccinations, vaccine reactions, medical history, current medication, smoking habits
Informed Consent	Broad Biobank IC (view template de>> ; view template en>>), Study specific IC
Access	12/2021
Quality Standards	<ul style="list-style-type: none"> • Quality management: ISO 9001:2015 (SOPs)
Contact	<ul style="list-style-type: none"> • Principle investigator: Assoz. Prof. Priv.-Doz. Dr.med.univ. Martin Stradner • Email: biobank-pm@medunigraz.at
	<p>View this and other cohorts from Biobank Graz in the BBMRI-ERIC Directory >></p> <p>View this and other cohorts at Biobank Graz website >></p> <p>Scientific publications & PR</p> <ul style="list-style-type: none"> • E Schulz et al. CD19+IgD+CD27- Naïve B Cells as Predictors of Humoral Response to COVID 19 mRNA Vaccination in Immunocompromised Patients ; Front. Immunol., 07 December 2021 https://doi.org/10.3389/fimmu.2021.803742 • ORF Report (Wissenschaft) "Wie wirkt CoV-Impfung bei Immunschwäche?" (Dec. 15, 2021) https://steiermark.orf.at/stories/3134536/

