UPO BIOBANK
UNIVERSITA' DEL PIEMONTE ORIENTALE
biobanca@med.uniupo.it
https://www.uniupo.it/upobiobank

Project title:

Early diagnosis of comorbidity and assessment of the effective immunization in COVID-19 patients

Acronym/working title:

No-more COVID-19

Principal Investigator

Dott. Mattia Bellan, DIMET UPO; SC Medicina Interna 1, AOU Maggiore della Carità, 28100 Novara
mattia.bellan@med.uniupo.it

Registration number of the Ethical approval

Comitato Etico Interaziendale di Novara N° 117/20

Project summary

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is the pathogen responsible for Coronavirus Disease 2019 (Covid-19); the severity of the clinical picture is highly variable, ranging from asymptomatic to severe and potentially fatal disease.

Italy was the first Western country facing the pandemic; Italian clinicians and researchers already had a central role in the description of the acute phase of the disease. However, less is known about the long-term consequences of the infection. Previous coronaviruses outbreaks (i.e. SARS and MERS) were associated with persistent symptoms and functional impairment over time; it is therefore reasonable to postulate that SARS-CoV-2 infection may be associated with mid-term or even long-term sequelae. We previously described the persistence of respiratory functional alterations in a not negligible proportion of subjects 4 months after Covid-19 hospitalization.

In the present study, we aim to assess whether respiratory, radiological, motor and psychological sequelae may persist after 1 year from hospital discharge.

We will collect data from a prospective cohort of survivors to Covid-19 pneumonia; all the patients will undergo to: clinical assessment, chest computed tomography, pulmonary function tests, motor function assessment, psychiatric assessment, blood sampling, endpoints of the study:

1- Evaluation of mortality and morbidity one year after Covid-19 pneumonia; 2- Evaluation of the proportion of patients with persistent lung function impairment (defined by a reduction of diffusing capacity for CO, DLCO < 80% and < 60%); identification of long-term impairment predictors; 3- Evaluation of the proportion of patients with persistent motor function impairment; identification of long-term impairment predictors; 4- Evaluation of the proportion of patients with persistent psychological impairment; identification of long-term impairment predictors;

Duration of Study

Total duration of the study: 1 year
Study start: 15th March 2021
Study end: 15th March 2022

Total number of participants involved:

280

Biological samples collected:

- ✔ serum
- ✔ plasma sodium-citrate
- ✔ plasma lithium -heparin
- ✔ plasma EDTA
- ✔ buffy coat
- ✔ saliva
- ✔ urine