



Fund “Nauka” Project № 22006 Resume – Competition-Based Session 2022:

“Clinical manifestations, functional disorders and computed tomography findings in long COVID-19”

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A number of studies have established that the clinical manifestations of COVID-19 are far from being ended with the acute phase, but long-lasting manifestations are present months after it, known as long COVID. The aim of the present study is to determine the clinical manifestations, functional disorders of the respiratory system and CT findings in long COVID-19.

The main tasks include:

- ❖ establishing the frequency of the various clinical manifestations of long COVID-19;
- ❖ evaluating the functional disorders of the respiratory system by measuring the lung diffusion capacity and assessing the main imaging pattern and revealing correlations between them;
- ❖ establishing the risk factors and predictors for long COVID-19;
- ❖ determining the quality of life in patients with past COVID-19 using the SF-36 questionnaire.

25 patients hospitalized in University Hospital St. Marina – Varna with different severity of the disease will be examined. Based on data from the medical records, the severity of the disease, comorbidities, biomarkers that correlate with the severity will be assessed. Within 6-12 months after hospitalization, the patients will fill out a survey aimed at revealing the most frequent clinical manifestations of long COVID-19, as well as a survey to assess the quality of life – SF-36. Functional tests of the respiratory system – lung diffusion capacity, will be carried out. Patients will undergo a lung CT scan to determine the presence of post-COVID fibrosis.

Expected results include revealing predictors of long COVID-19, which will support the development of preventive strategies to limit the late consequences of the disease.