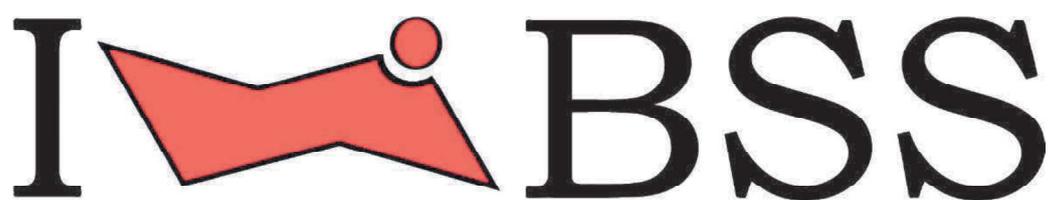


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COVID-19: NEW PERSPECTIVES THROUGH TISSUE GLYCOPROFILING

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Tissue samples are typically used in histopathology but can be used also for proteomic and glycomic analyses. Due to the fact of recurring waves of COVID-19 pandemic, it is necessary to look at the disease from different sites and learn as much as possible.

Our aim was to receive glycomic data from lung tissue samples, but not through imaging methods, that are nowadays applied, for example, in research of cancer samples (1). We focused on obtaining data from (glyco)proteins that were extracted from lung tissue samples. We optimized composition of extraction buffer and buffer for measurements, measured protein concentrations (using NanoDrop and Bradford assay and compared them) and optimized protocols for N-glycan MALDI TOF MS analysis and lectin-based microarray due to protocols that are used at our institution for serum samples (2). Finally, we measured MS and spectrophotometric data for 26 lung tissue samples from two groups, from people who died from/with COVID-19 and who died from other reasons and performed basic statistical analysis for comparing of these groups.

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