

# **Fighting against COVID-19: A computational biophysics approach**

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Previously it was reported that cell-surface Glucose Regulated Protein 78 (CS-GRP78), also termed heat shock protein A5 (HSPA5), could be a possible route for SARS-CoV-2 internalization. The binding site on the spike protein of SARS-CoV-2, which can recognize CS-GRP78, was predicted in a previous study. The spike glycoprotein of the SARS-CoV-2 bear many conserved motifs to the previously determined human coronavirus strains such as HKU1, 229E, NL63, OC43, MERS-CoV, and SARS-CoV. <sup>2</sup> However, we would like to emphasize that using a simple bioinformatics approach can suggest a possible role of the GRP78 in cross immunization against COVID-19. Additionally, different antiviral drugs have the potential to be SARS-CoV-2 inhibitors, thus can be used against COVID-19. These drugs are tested *in silico* at the beginning of the pandemic, and currently, some are approved against COVID-19.