

Korea develops tool for studying inflammatory diseases related to COVID-19

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A new bioinformatics pipeline helps investigate the mechanism underlying the development of autoimmune diseases following SARS-CoV-2 infection



Apart from the symptoms associated with COVID-19 infection, it has recently been reported that the coronavirus also leads to a subsequent development of autoimmune diseases like rheumatoid arthritis, lupus, or multi-inflammatory syndromes in patients.

To address this concern, a team of researchers from the Gwangju Institute of Science and Technology (GIST) in South Korea has developed a new bioinformatics pipeline. Their new tool is called cross-reactive-epitope-search-using-structural-properties-of-proteins (CRESSP).

The team hopes their new tool will facilitate comparison between studies, providing a robust framework for further investigation on molecular mimicry and autoimmune diseases. "Although autoimmune diseases affect less than 10% of the population, studying them is important since it severely impacts the quality of life. Our new tool can be used to study the possible involvement of molecular mimicry in the development of other autoimmune conditions in a systemic and scalable manner," said the researchers.

Hopefully, the new invention will help us deal with SARS-CoV-2 and other viral infections better.