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CORRESPONDENCE

Correspondence regarding: TLR4 as a therapeutic target for respiratory and neurological complications of SARS-CoV-2

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To the Editor

In response to the query in the Letter to Editor regarding the paper ***'TLR4 receptor as the therapeutic target for respiratory and neurological complications of SARS-Cov2 virus'*** [1], we wish to clarify our viewpoint. This review article was written in 2020 when research regarding coronavirus was still in the initial phases. At that time, the existing literature revealed the presence of Hemagglutinin Esterase (HE) in the structure of SARS-CoV-2. This was done on the basis of the fact that SARS-CoV-2 shows similarity in structure to other Coronaviruses. Some articles have reported that HE is present in SARS-CoV-2 [2–6]. In one article, authors reported that coronaviruses use HE to link to Sialic acid present on the glycoprotein surface [3]. Another article also reported the presence of HE on SARS-CoV-2 [2]. One research article also examined the activity of Arbidol, an antiviral drug, in inhibiting HE and spike glycoprotein of SARS-CoV-2 [5]. In another research article, the authors presented that genome of SARS-CoV-2 contains HE gene and they explored many drugs targeting HE through molecular docking [6]. As this article was written at that time, it has used the existing literature during that period.

The research on SARS-CoV-2 is still under progress and with the help of next-generation sequencing (NGS), phylogenetic analysis, and various structure elucidation techniques, many new articles have emerged that refute the presence of HE on SARS-CoV-2. Some other articles also received Letter to Editor pointing out the same fact and these are of the year 2021 [7,8]. Hence, this anomaly arose. Now the current literature documents that HE gene is absent in SARS-CoV-2 and this information can be updated in the article.

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Declaration of interest

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