



Covid-19: End or Fade of the Pandemic?

Kareem Awad^{1,2*}

¹*Institute of Biomedicine, Faculty of Medicine, University of Turku, Turku, Finland*

²*Department of Therapeutic Chemistry, Institute of Pharmaceutical and Drug Industries Research, National Research Center, Egypt*

***Corresponding author:** Kareem Awad, Department of Therapeutic Chemistry, Institute of Pharmaceutical and Drug Industries Research, National Research Center, Egypt

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Opinion

Since the identification of SARS-CoV-2 in Wuhan, China towards the end of 2019 and the following millions of confirmed cases, deaths and huge vaccination campaigns, scientists, politicians and all health concerned leaders are hoping or eager for a widely accepted definition, procedure or solution for the end of this pandemic.

In spring 2020, SARS-CoV-2 became more transmissible to mutations in its spike (S) protein and in the RNA-dependent RNA polymerase (RdRp) developing to more infectious variants [1,2]. Hundreds of variants have been evolved which has affected the outcome of the Covid-19 pandemic. These variants include Alpha, Beta, Delta, Kappa and Omicron [3-7]. The omicron wave with its many sub-lineages relentless and merciless spread from continent to a continent [8], leading to rapid transmissibility increasing cases that the World Health Organization (WHO) has categorized this strain as a variant of concern [9]. Over 60 mutations have been identified in Omicron with three sub-lineages (BA.1.1, BA.2, and BA.3) have also been found with additional mutations and pathogenicity, all raised worries from high infectivity and pathogenicity and vaccine resistance [9,10].

The characterization and identification of the Omicron variant and the observation that this variant replicates less effectively compared to the early pandemic strains initiated a debate regarding the natural vaccines [9,11,12]. This variant can be similar to live attenuated vaccines in ways lead experts to believe that Omicron can work as a natural vaccine [9]. Although Omicron has shown high infection rates and health effects, it was also highlighted the high rate of antibody generation in individuals cured from Omicron supporting the claim Omicron can act as natural vaccine [9,11,12].

This Omicron variant can be a way to “trained immunity” solution to overcome the worries towards nucleic acid based COVID-19

vaccines as some scientist claim the pro-coagulative power carried-in by the spike proteins of the virus or the prion itself [13]. Questions however, remain and concern the eruption of the weak variants. Does it happen because of the heavy mostly mRNA vaccine campaigns that in reality lead through a form of “trained innate immune cells” or “trained specific response” to these variants of concern and may signal the end of the pandemic? Nucleic acid based COVID-19 vaccines show efficacy towards multiple variants [7] suggesting possibility to virus adaptation. When longing for a past era, no need to mislead ourselves by suggesting a quick back to normal as there are too many we need to consider before anticipating what will happen in the coming months. This cautious is important to avoid blackness that may not fade after the pandemic.

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