## Review of: "[Case Report] Supplementation with Vitamin D, Zinc, and Quercetin to Treat COVID-19: A Case Report"

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Potential competing interests: No potential competing interests to declare.

This case report presents the treatment of a COVID-19 patient using a combination of vitamin D, zinc, and quercetin. While the patient experienced some improvement in symptoms after supplementation, it is important to note the limitations and uncertainties associated with this approach.

Firstly, the case report relies on anecdotal evidence from a single patient, which limits the generalizability of the findings. The lack of a control group and the absence of a larger sample size make it difficult to draw definitive conclusions about the effectiveness of this treatment.

Moreover, the study does not provide a clear rationale for the selection of these specific supplements, or the dosages used. The mechanism of action and optimal dosages for these supplements in treating COVID-19 are still not wellestablished. The potential synergistic effects of the combination are speculative and require further investigation.

Additionally, it is important to consider the potential risks and side effects associated with high-dose supplementation of these substances. Zinc supplementation, for example, can lead to adverse effects such as gastrointestinal disturbances and impaired copper absorption. High-dose vitamin D supplementation can also have negative effects, including hypercalcemia and kidney damage.

Furthermore, the report does not account for other factors that may have influenced the patient's recovery, such as natural immune response, rest, and supportive care. Without a comparison to standard care or a placebo group, it is challenging to attribute the observed improvements solely to the supplementation.

In conclusion, while this case report suggests some potential benefits of using a combination of vitamin D, zinc, and quercetin for the treatment of COVID-19, the findings should be interpreted with caution. Further well-designed clinical trials are needed to establish the safety, efficacy, and optimal dosages of these supplements in the context of COVID-19 treatment.