

Review Form 1.6

Journal Name:	Journal of Pharmaceutical Research International
Manuscript Number:	Ms_JPRI_90999
Title of the Manuscript:	CONCEPT OF VACCINE DEVELOPMENT AND UPDATES ON ADVERSE EFFECTS OF COVID-19 VACCINATION
Type of the Article	Review Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<ol style="list-style-type: none"> 1 The major concern is that this review is out of date. As the COVID-19 pandemic is rapidly evolving, along with vaccines and therapies to combat it, it is imperative that manuscripts and reviews present up to date info, lest they risk being ineffective. There are no references to any published works in 2022 and it seems that this review may have been written some time ago. The entire review must be updated to reflect the CURRENT state of COVID-19 vaccines and vaccine development. 2 The appropriate terminology for the virus which causes COVID-19 is "SARS-CoV-2". CoV-19 is incorrect. Similarly, the disease is COVID-19, not CoV-19. 3 This sentence "The rapid release of viable vaccinations in the United States (US) and other nations with substantial SARS-CoV-2 infections would be a significant step toward preventing the worldwide epidemic." Is in the wrong tense. It HAS been a significant help in curbing SAR-CoV-2 infection. 4 This sentence "Despite potential vaccine research advances, the timescale for public access is currently unexplained, needing proper safety screening and thorough demonstration of efficacy." Is controversial and opinionated. It could also be said that there are benefits to moving vaccines (highly likely to be safe and effective) out as quickly as possible to minimize harm to the general public. Not that this should be debated here, but caution w/ such statements should be taken throughout the manuscript and this sentence should be corrected. 5 Regarding this sentence "Interim findings from many large-scale phases 3 randomized, observer-blinded, placebo-controlled clinical studies have shown high efficacy" we are far beyond "interim estimates". Solid phase III data from multiple vaccines has been published. This speaks to the outdated nature of this manuscript. Such statements and conclusions drawn should be removed and updated with the most recent data. 6 Title misleading??? 7 What do you mean by "security of a vaccine" in this phrase "animal trials to examine the security of the potential vaccine"? 8 Who is the target audience for this review? I ask this because the manuscript contains a large amount of very basic, common knowledge about vaccine development and clinical trials. This will be of no interest to those working in the field. Perhaps sections can be omitted and the review focused to present more relevant and specific information? 9 There are some syntax issues throughout and the manuscript could benefit from review by a native English speaker. 10 mRNA platforms have resulted in a licensed vaccine. Correct text as you update it to be relevant in mid-2022. 11 In table I why is S protein listed as the antigen in almost every row? 12 Is this manuscript about COVID-19 vaccines specifically, or vaccines in general? It is unclear from reading it as the author jumps around and there are components of each (Table I for example). The manuscript should either be broadly about vaccines or focused on COVID-19 vaccines only. In its current form the manuscript is confusing to read as there is no focus. 13 This sentence "The S protein is encoded by the highly attenuated modified vaccinia virus Ankara, recombinant adeno-associated virus, or an attenuated parainfluenza virus" does not make sense. Are all of the aforementioned viruses do not use S protein as the antigenic target. 14 Remove this statement as it does not reflect the current state of COVID-19 "The struggle against the SARS-CoV-2 outbreak is far from over" 15 There are some instances of contradictory statements. You state early on that no RNA-based vaccine platforms have been approved, yet you later correctly state that 2 COVID-19 mRNA vaccines have been approved. 16 The rare instances of blood clots in those receiving the J&J vaccine, which caused the FDA to limit its use should be mentioned when this vaccine is first discussed (and later on in the adverse events section where you currently have it). 17 In the adverse events w/ COVID vaccines section you state that emesis is common w/ all COVID vaccines, but one line later you state it is particular to CanSino vaccine. Clarify. 	
Minor REVISION comments	<ol style="list-style-type: none"> 1. Expand "Nab" 2. Expand "LNPs" 3. Reference 108 is out of order in the next. 4. What is "WT virus"? wild-type? The specific strain designation should be used and not "wild type". 5. Do not use the phrase "grownups" in scientific writing. 	
Optional/General comments	<ol style="list-style-type: none"> 1. Consider including discussion on bivalent COVID-19 vaccines as one has just been approved. 2. Consider discussion of efficacy of combining different COVID-19 vaccines together, as some studies have shown superior efficacy w/ such an approach. 3. The manuscript was borderline acceptable with major revisions 	

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PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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