

## Review of: "SARS-CoV-2 infection in a fully vaccinated case with newly diagnosed breast cancer: a case report"

Professor Samy Azer<sup>1</sup>

1 King Saud University

Potential competing interests: The author(s) declared that no potential competing interests exist.

Thank you for asking me to review the above-titled manuscript. The case is interesting. However, there are problems with the manuscript.

**Title:** not clear and could distract the readers to a connection between vaccination or virus and the development of breast cancer. It should be ".....in a fully vaccinated patient stage 1 untreated breast cancer: A case report."

**Abstract:** 1) No need for this background. More detail about the patient is needed in the case, such as occupation, BMI, smoking, alcohol drinking, or any morbidities, and how the infection was confirmed. 2) BNT162b2 mRNA, state the vaccine name as well. 3) You may raise a statement about what this case is about. What is the focus of the paper? Do not leave the readers to the discussion to discover what is the purpose of the manuscript.

**Introduction:** 1) minimise redundant information and make it more focused. 2) Editing of the English is needed. 3) "molecular nasopharyngeal swab" do you mean PCR test.

Very early state that "the case raises concern about infection with SARS-CoV-2 virus after complete vaccination against COVID-19 in an untreated stage 1 patient with breast cancer. Focus the discussion on the timing of COVID-19 immunisation in patients with cancer, treated or untreated with chemotherapeutic agents; what are the current recommendations?

**References:** Only 10 and most not focused on what was discussed. The authors should amend their claim about the lack of information in this area and explain possible infection mechanisms. There are great sources on this topic that the authors should refer to and include in their references. I have these examples.

- Desai A, Gainor JF, Hegde A, Schram AM, Curigliano G, Pal S, Liu SV, Halmos B, Groisberg R, Grande E, Dragovich T, Matrana M, Agarwal N, Chawla S, Kato S, Morgan G, Kasi PM, Solomon B, Loong HH, Park H, Choueiri TK, Subbiah IM, Pemmaraju N, Subbiah V; COVID19 and Cancer Clinical Trials Working Group. COVID-19 vaccine guidance for patients with cancer participating in oncology clinical trials. Nat Rev Clin Oncol. 2021 May;18(5):313-319. doi: 10.1038/s41571-021-00487-z. Epub 2021 Mar 15. Erratum in: Nat Rev Clin Oncol. 2021 Mar 23;: PMID: 33723371; PMCID: PMC7957448.
- Thakkar A, Gonzalez-Lugo JD, Goradia N, Gali R, Shapiro LC, Pradhan K, Rahman S, Kim SY, Ko B, Sica RA,
  Kornblum N, Bachier-Rodriguez L, McCort M, Goel S, Perez-Soler R, Packer S, Sparano J, Gartrell B, Makower D,



Goldstein YD, Wolgast L, Verma A, Halmos B. Seroconversion rates following COVID-19 vaccination among patients with cancer. Cancer Cell. 2021 Aug 9;39(8):1081-1090.e2. doi: 10.1016/j.ccell.2021.06.002. Epub 2021 Jun 5. PMID: 34133951; PMCID: PMC8179248.

- Massarweh A, Eliakim-Raz N, Stemmer A, Levy-Barda A, Yust-Katz S, Zer A, Benouaich-Amiel A, Ben-Zvi H,
  Moskovits N, Brenner B, Bishara J, Yahav D, Tadmor B, Zaks T, Stemmer SM. Evaluation of Seropositivity Following
  BNT162b2 Messenger RNA Vaccination for SARS-CoV-2 in Patients Undergoing Treatment for Cancer. JAMA Oncol.
  2021 Aug 1;7(8):1133-1140. doi: 10.1001/jamaoncol.2021.2155. PMID: 34047765; PMCID: PMC8164144.
- Forster M, Wuerstlein R, Koenig A, Amann N, Beyer S, Kaltofen T, Degenhardt T, Burges A, Trillsch F, Mahner S, Harbeck N, Chelariu-Raicu A. COVID-19 vaccination in patients with breast cancer and gynecological malignancies: A German perspective. Breast. 2021 Dec;60:214-222. doi: 10.1016/j.breast.2021.10.012. Epub 2021 Oct 29. PMID: 34736092; PMCID: PMC8555340.
- And others....