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Athina Adonatou

By email: fyi-request-16318-fd391d10@requests.fyi.org.nz

Ref: H202110075

Tēnā koe Athina

## Response to your request for official information

Thank you for your request under the Official Information Act 1982 (the Act) to the Ministry of Health (the Ministry) on 6 August 2021. I will respond to each part of your request in turn.

All the below questions are in relation to a herald article, dated 6th August 2021 [www.nzherald.co.nz/nz/covid-19-coronavirus-eight-week-wait-between-vaccinations-could-be-recommended-says-ashley-bloomfield/4LWBTINQYCJ3CBC6GGTDWXWCNI/]

- 1) In the article you stated that "Recent studies have shown that an eight-week gap between doses would provide greater immunity"
- Please provide me with the actual scientific studies used to determine and inform this directive, given that Pfizer has said 3 weeks as also stated in the article

Emerging evidence shows that longer intervals ranging from 6 to 14 weeks between two doses of Pfizer leads to higher immune responses than the standard three-week interval. This information is publicly available here:

- www.pitch-study.org/
- www.medrxiv.org/content/10.1101/2021.05.15.21257017v1
- www.medrxiv.org/content/10.1101/2021.07.26.21261140v1.full
  - 2) In the same article you also stated "the current three-week gap was sound and provided effective immunity"
  - Please explain what you mean by 'sound' and please provide evidence used to inform your statement of 'providing effective immunity' and define what you mean when you say 'effective'

A three-week gap between two doses of Pfizer is "sound" as it has been shown to be effective at preventing symptomatic COVID-19 infection based on evidence from both clinical trials and the real-world rollout of the vaccine. The Pfizer vaccine is considered effective based on study outcomes showing the ability to reduce symptomatic infections in vaccinated populations.

Clinical trials for the Pfizer vaccine used a three-week interval between the two doses. Based on the results of these trials, the Pfizer vaccine has been approved by many international regulators, including Medsafe in New Zealand. Data from these clinical trials has shown that a three-week interval between two doses of the Pfizer vaccine is highly effective at preventing symptomatic COVID-19 infection. This information is publicly available here: <a href="https://www.nejm.org/doi/full/10.1056/nejmoa2034577">www.nejm.org/doi/full/10.1056/nejmoa2034577</a> and here:

www.nejm.org/doi/full/10.1056/NEJMoa2107456.

Additional evidence from the real-world rollout of the Pfizer vaccine has also shown that a three-week interval between two doses is highly effective at preventing symptomatic COVID-19 infection. This information is publicly available here: <a href="https://www.nejm.org/doi/full/10.1056/nejmoa2101765">www.nejm.org/doi/full/10.1056/nejmoa2101765</a>.

- 3) Later in the article you stated "The mRNA vaccines, such as Pfizer, are considered to be very easy to adapt as new variants emerge"
- please provide the scientific articles used to inform this statement.

The Pfizer vaccine is an mRNA vaccine that contains the genetic code for the spike protein on the surface of the SARS-CoV-2 virus. Each SARS-CoV-2 variant contains different mutations in their spike proteins. The vaccine manufacturing process for mRNA vaccines is fully synthetic and doesn't rely on living cells or cultured cell lines. For more information on how the Pfizer vaccine is made, see here: <a href="www.nytimes.com/interactive/2021/health/pfizer-coronavirus-vaccine.html">www.nytimes.com/interactive/2021/health/pfizer-coronavirus-vaccine.html</a>.

Once the manufacturing process is set up, other mRNA vaccines can be designed to target different variants very quickly by simply using the genetic material from the new variant to adapt the mRNA. The established manufacturing process can then be used to produce the adapted mRNA vaccines against the new variant. For scientific articles that discuss this, see here: <a href="https://www.mdpi.com/1422-0067/21/18/6582">www.mdpi.com/1422-0067/21/18/6582</a> and here: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8053359/">www.ncbi.nlm.nih.gov/pmc/articles/PMC8053359/</a>.

I trust this information fulfils your request. Under section 28(3) of the Act you have the right to ask the Ombudsman to review any decisions made under this request. The Ombudsman may be contacted by email at: <a href="mailto:info@ombudsman.parliament.nz">info@ombudsman.parliament.nz</a> or by calling 0800 802 602.

Please note that this response, with your personal details removed, may be published on the Ministry website at: <a href="https://www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests">www.health.govt.nz/about-ministry/information-releases/responses-official-information-act-requests</a>.

Nāku noa, nā

Gul Hall

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Group Manager, COVID-19 Science and Insights COVID-19 Health System Response