# Supplement to Science Summary

## Questions & Answers

## In respect of the Vials Tested by Dr Speicher

*Authorship: The following was created and is endorsed by the co-signatories to the letter of Mr Russell Broadbent MP to the Prime Minister of Australia, dated 25 September 2024.*

**When the vials arrived at the lab of Dr Speicher, the dry ice had evaporated. Did this affect the testing?**

No.

Synthetic DNA is stable at room temperature for months. The shipping time would have had very little negative effect on the DNA levels. Even if the vials had been at room temperature for the entire shipping time, the levels of synthetic DNA in the vials would not have meaningfully reduced.

DNA is so stable that you can get DNA from forensic samples (dead people buried for years) and ancient people.

Moreover, there is no means by which the synthetic DNA quantities in these vials could have increased after the dry ice had evaporated. DNA does not and cannot spontaneously multiply in vaccine vials.

Though the lipid nanoparticles may have degraded, and in turn degraded some of the modRNA, this would not have significantly degraded or changed the DNA levels in the vials. The only possible effect could have been some of the synthetic DNA breaking down into smaller fragments.

If DNA was degrading the level would only go down and not up. So, these vials are null and void for injecting into people, but the synthetic DNA was still stable and detectable.

Even degraded DNA fragments can be detectable and can pose human health risks, depending on their composition. In the context of the synthetic DNA contained in these vials, even degraded fragments, such as SV40 sequences, are likely to retain their potential to integrate into human DNA or cause other biological disruptions.

Lastly, and by way of a practical example, it is well known DNA is stable at room temperatures for months because of validation studies which have proven that women in Australia can, and do, self-collect their own DNA samples for Cervical Screening tests at home. Thousands of DNA samples are routinely stored at room temperature in Australia every year for this purpose.

**The Moderna vial was not tamper-sealed. Did this leave open the possibility of external contamination?**

No.

For the results found to have been the result of tampering, a person tampering with the vial would have had to have contaminated the vial with the exact same series of synthetic DNA sequences as was detected in the other independent studies around the world. This is an unlikely theory.

The Moderna vial was a leftover vial with some contents remaining, retrieved from the storage facility of an Australian health practitioner, which is why it was not tamper-sealed.

**Was Chain of Custody broken?**

No.

The TGA is correct that Dr Speicher's affidavit does not contain the Chain of Custody. However, lawyers PJ O'Brien & Associates, who commissioned the testing, advised that the Chain of Custody is documented and included in a separate prosecution brief being readied for the Commonwealth Attorney-General and Commonwealth Director of Public Prosecutions. Those Chain of Custody documents will be released to the public in due course.

The Chain of Custody documents the origin of each vial from storage facilities of Australian health practitioners, their names, how the vials were collected, on what dates, and how they were securely transported to a certain destination in Australia, before being securely couriered from Australia to Dr Speicher in Canada, the name of the courier company, and the type of cold storage packaging used for couriering to Canada.

**Did the expiration dates on the vials of mid-2022 affect the test results?**

No.

The vials analysed were retrieved from Australian cold storage facilities of registered Australian health practitioners. This cold storage would have maintained the integrity

of the synthetic DNA until at least the moment of retrieval. As noted in the first answer provided above, synthetic DNA is stable at room temperature for months.

After the expiration date of a vaccine vial, there is no ability for the synthetic DNA to multiply or increase in volume within the vials.

As DNA degrades over time, the amount of intact whole-plasmid synthetic DNA in the vials would gradually decrease. However, even synthetic plasmid DNA degraded into DNA fragments can be detectable and can pose human health risks depending on their composition. In the context of the synthetic DNA contained in these vials, even degraded fragments, such as SV40 sequences, are likely to retain their potential to integrate into human DNA or cause other biological disruptions.

Any DNA degradation would only have lessened, rather than increased, the chance that testing would have found problematic levels of synthetic DNA contamination in the tested vials. This logically implies that the results obtained by Dr Speicher may be viewed as a lower bound on the level of DNA contamination in the covid vaccine vials used in Australia.

For the results obtained by Dr Speicher to be irrelevant to the health of Australians injected with these products, one of the following would have to be true:

- Outright forgery of data by Dr Speicher or his team.
- Pre-testing insertion into the Moderna vial of the exact DNA sequences found in other vials tested in other countries (note that this would not have impacted the results of testing the Pfizer vial).

We stand by Dr Speicher's results, which are aligned with results from similar testing conducted on vials used in other countries.

We strongly encourage other independent scientific teams to replicate our analysis, following scientific best practice. Note that due to the enormous incentives at play, any such testing can only be performed credibly by teams who were not involved in the Covid vaccine development or roll-out, do not receive funding from any person or body that was, and stand to gain nothing in terms of money or status from any of the many possible results of the analysis.

**A criticism has been raised in the following terms: *Dr Speicher, McKernan et al's, and Dr Konig et al's methods are erroneous because both the qPCR and fluorometry methods are inappropriate for testing solutions with high modRNA concentration and inflate results.***

The most recent work by Dr Speicher used an additional RNaseA step in the method, which removes the modRNA so that it is not interfering with the detection of the synthetic DNA.

The earlier Speicher *et al* 2023 and Konig *et al* 2024 papers as they are currently written did not have this RNaseA step in them.

Pfizer is using Fluorometry to measure the modRNA and qPCR to measure the synthetic DNA.

The same qPCR primers can measure for the modRNA, but Pfizer is choosing not to do this.

All that is required is a 5min Reverse Transcription (RT) step at 55C and the qPCR becomes a RT-qPCR test for the synthetic DNA, almost exactly like what people used to test for whether they had Covid.

Why is Pfizer allowed these two different test methods?

Moderna's much earlier patents teach us how qPCR testing for synthetic DNA significantly ***under-measures*** the problem.

So Pfizer choosing, and regulators allowing Pfizer to use these two different test methods means their results ***over-measure*** the modRNA, and ***under-measure*** synthetic DNA, in circumstances where we can assume Pfizer knew about the Moderna patent evidencing that the use of qPCR will ***under-measure*** the synthetic DNA.

This would appear to be how Pfizer is evading the 10 ng per dose limit problem, with results that significantly ***under-report*** the actual synthetic DNA levels in each dose.

However the problem is exacerbated by the Therapeutic Goods Administration (TGA) (and all other regulators) presumed, as 'authorities', to know all about the above considerations, particularly the Moderna patent.

It has become increasingly clear that the testing methods employed by the TGA have failed to adequately address the risks posed by synthetic DNA contamination in Pfizer and Moderna vaccines. The TGA's reliance on outdated guidelines such as ICH Q2(R2), which do not account for the unique nature of modRNA platforms using Lipid Nanoparticles, or LNPs, has resulted in significant shortcomings. These guidelines were arbitrarily cited by the TGA to dismiss findings by scientists like Dr. Speicher, rather than embracing the necessary new scientific approaches to detect the synthetic DNA in these products that is hidden from old test methods due the LNPs cloaking or hiding the synthetic DNA.

Notably, the TGA *appears* to have been using testing methodologies - as documented in TGA FOI 5286 - that only target a small segment of the plasmid DNA, failing to detect the bulk of the contamination, particularly those fragments under 200 base pairs

where the highest risk lies. Alarmingly, Moderna, through its own patent filings, had specifically warned about the inadequacy of such testing methods for detecting residual DNA, especially DNA encapsulated in lipid nanoparticles (LNPs). Despite this warning, the TGA has relied on these insufficient methods, which grossly ***under-detect*** the true extent of contamination. Moderna's patents also highlighted the risks of insertional mutagenesis and carcinogenesis, yet these serious risks remain inadequately addressed by the TGA's current testing practices.

Further, despite prior warnings and international scrutiny, the TGA has not conducted proper tests to detect ***LNP-encapsulated*** synthetic DNA nor performed any investigations into the risks of synthetic DNA integration into human cells. This raises serious concerns about the TGA's capacity to protect the public from the known dangers of synthetic DNA contamination.

The old methods looked for *naked* or free floating DNA which ***were not*** encapsulated in LNPs.

Naked DNA has a 10 min half-life in the blood and is quickly destroyed. Not so when the synthetic DNA is encapsulated in LNPs. The LNPs 'safely' transport the synthetic DNA throughout the human body to cells, and delivery the synthetic DNA inside of cells. From there the synthetic DNA is free to impact adversely with cellular functioning.

The LNPs were designed to protect the modRNA but are also protecting the synthetic DNA contamination *too*.

The limit of 10 ng per dose of synthetic DNA contamination was created in respect of *naked* DNA contamination. That limit is entirely inappropriate for synthetic DNA encapsulated and protected in LNPs, where the LNPs are used for avoiding the human body's defence mechanisms against contamination.

Moreover, once the synthetic DNA has been delivered into cells by the LNPs, the synthetic DNA has then avoided the human body's defence mechanisms and is free to interrupt cellular functioning in the multiple ways as detailed in the ***Science Summary*** attached to the letter of Mr Russell Broadbent MP, to the Prime Minister, dated 25 September 2024.

The only way to begin remedying this situation is for the TGA to acknowledge these failures and to urgently conduct comprehensive testing, in line with new scientific methods, to either confirm or disprove the findings of Dr. Speicher and other eminent scientists. Immediate action in the lab is necessary to prevent further harm.

Finally, Dr Speicher, Kevin McKernan, and Dr Konig have remained transparent with their work and methods at every step.

On the other hand, and by contrast, the TGA are entirely **opaque** and have been hiding their methods through redactions from the public and science community.

As a public science agency financed by the public, it is incumbent upon the TGA to present any science they possess for being able to unequivocally refute Dr Speicher, Kevin McKernan *et al*, Dr Speicher *et al*, and Dr Konig *et al*, for allaying any public fears.

To date the TGA refuses to provide *any* evidence.

18 October 2024