

SCIENTIFIC STUDY

mRNA vaccine study demonstrates spike protein does damage heart

LIFE AND BIOETHICS

18_01_2025



**Paolo
Gulisano**



From the outset, the use of mRNA vaccines has raised a number of concerns about their efficacy and safety, which are prerequisites for their marketing. As is well known, these concerns were overwhelmed by the propaganda that the mRNA vaccine was perfectly

safe. However, scientific studies are now being published which show a very different reality and confirm that one of the main criteria of medicine, that of caution, has been violated in the approval of these drugs.

Just a few days ago, on 14 January 2025, the prestigious journal *Nature* published a study based on experiments on mice showing that mRNA vaccine particles reach the heart from the vaccination spot and cause damage to myocardial tissue. The study shows that intramuscularly injected lipid nanoparticles (LNPs) carrying SARS-CoV-2 mRNA spikes reach cardiac tissue and lead to changes in the proteome, causing immune activation and blood vessel damage.

What is the proteome? While the genome is the complete set of genes in a cell, the proteome is the complete set of proteins. At different times in a cell's life, its gene set will be unchanged, static, whereas its protein set will be extremely different and highly dynamic. An organism has radically different protein expression in different parts of its body, at different stages of its life cycle and under different environmental conditions. Modern biomedicine offers a wide range of nanotechnology-enabled drugs that alter the traditional distinction between biology, chemistry and physics.

In this study, the presence of certain nanoproteins was detected in so-called 'off-target' tissues. The presence of LNPs and mRNAs was observed in the hearts of mice. As some LNPs are used in RNA therapies and drug development, and given reports of cardiac complications following Covid vaccination, the potential impact of LNP-driven mRNA expression in the heart was further investigated.

The analysis confirmed off-targeting (i.e. diffusion to different organs) of mRNA delivered by LNP to the heart after intramuscular injection, excluding spike protein trafficking from the injection site to the heart as the main source of the spike protein signal. The latter, derived from LNP mRNA, was observed in both immune and non-immune cells throughout the body, and in particular the spike protein was found mainly in the endothelial cells of cardiac capillaries.

Analysis revealed changes in cell metabolism and signalling, as well as in the immune system, in the mRNA-expressing groups. These changes were associated with metabolic processes. Subsequently, proteomic changes were specifically induced by mRNA spike expression and significant changes in metabolism-related protein expression, RNA and protein expression were found. In particular, changes were found in proteins associated with the development and maintenance of the vasculature, as well as notable proteome changes in the heart.

This suggests that not only the mRNA spike, but also the expression of each mRNA should be carefully evaluated for drug delivery by LNP. In conclusion, the observed LNP accumulation and proteome changes in cardiac tissue suggest a potential mechanism by which LNP-based mRNA vaccines could contribute to the reported cardiac complications.

Nanotechnology is one of the main tools being considered by proponents of so-called 'human enhancement'. This is a path that tends towards transhumanism through genome and proteome modification, focusing less on curing the sick and more on genetic transformation. Nanomedicine, which has had the opportunity to experiment on a global scale with Covid-19 vaccinations, would like to achieve cell repair techniques with the ambition of revolutionising medicine.

In the light of studies such as the one published in *Nature*, one wonders what the consequences of these experiments will be.