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A Partial Answer to the Question Posed by David A. Hughes, PhD, in the Article: "What is in the So-called COVID-19 'Vaccines'? Part 1: Evidence of a Global Crime Against Humanity"

And unless those days were shortened, no flesh would be saved; but for the elect's sake those days will be shortened.

Jesus Christ in Matthew 24:22, *KJV*

Daniel Santiago, PharmD

Abstract

In this comment, originally thought of as a "Letter to the Editor", I want to address the opening question posed by David A. Hughes in the immediately preceding entry in this journal: "What *is* in the so-called COVID-19 'Vaccines'?" The views from under the microscope, ordinary light or electron scanning, all show undisclosed foreign objects that seem to activate themselves and aggregate into complexes that disrupt blood flow in all organ systems. With the spectral analysis using electron microscopy it is possible to determine the specific elements and relative quantities of the elements in those foreign entities. In this comment, I want to focus on the absence of certain elements that are universally present in the proteins of naturally occurring life forms from humans right down to bacteria and even the proteins formed from viruses. What is missing from the spectral analyses of the foreign elements in the main COVID-19 vaccines, Pfizer and Moderna for certain, and probably also missing from the other experimental products being widely distributed that are known to contain foreign aggregates of strange materials similar to those found in the Moderna and Pfizer injections, are the elements nitrogen and phosphorous. This fact is revealing because all natural DNA, RNA, and their protein products contain those missing elements. Nitrogen for protein synthesis and phosphorus for DNA, RNA, and energy transfer. Therefore, their absence from the foreign structures seen under many different microscopes in all of the COVID-19 "vaccines" that have been examined, and also found in blood samples of persons injected with the Moderna and Pfizer concoctions, proves that these intentionally manufactured self-assembling components, built mainly from carbon-based materials used in computing and super-conductors, are connected with the avant-garde evolutionary theory and experimentation with what is known as XNA, Xeno (Greek for "foreign"), Nucleic Acid. Most of the relevant information published behind significant paywalls in esoteric journals specializing in this peculiar branch of highly theoretical and experimental chemistry. To leap to the bottom-line of my urgent comment on the Hughes' paper, the edgy modified mRNA with N1-methylpseudouridine (Ψ) replacing the naturally occurring RNA nucleotide uridine (U) at least 728 times in each one of the 30 billion mRNA molecules in each of the Pfizer injections is an exemplar of XNA. In this comment I want to explain why the inclusion of such an XNA may be the clue that leads to the unraveling of the already devastating and potentially exterminating impact of the ongoing COVID-19 experiment on the human race.

Keywords: *N1-methylpseudouridine (m1Ψ), vaccines, uridine, mRNA, codon*

Introduction

My dad and I for years would discuss and argue the prophecies concerning biblical "end times" over the dinner table, or sitting in his patio chairs outside. He was a theologian and loved to talk especially about eschatology, as foretold in the Bible. I never imagined at 53, years after his death I would come to the realization that we were actually discussing events that are now unfolding. Reading the paper, "What is in the so-called COVID-19 'Vaccines'? Part 1: Evidence of a Global Crime Against Humanity", by David A. Hughes, PhD, I suddenly realized that we are actually seeing evidence of the introduction of XNA, not only into the body in the form of the modified mRNA, but, as the research is revealing (Aldén et al., 2022), XNA is apparently being reverse transcribed into the human genome. In page 450 of his paper, citing the work of Daniel Nagase (hear his interview with Risdon, 2022 at this link), who examined some of the undisclosed aggregated foreign structures from the Modern and Pfizer concoctions. Looking at them under an electron microscope Nagase was able to determine the chemical composition of those aggregates (for all of the periodic table except hydrogen). Hughes writes:

> The reason that these structures are significant, according to Nagase's spectroscopy, is that they contain neither nitrogen nor phosphorus, two of the six "building blocks of life" along with carbon, oxygen, hydrogen, and sulfer. Nitrogen is a component of all proteins. The absence of nitrogen and phosphorus, in Nagase's view, means that these structures cannot be biologic. This leaves open the possibility that they are synthetic biology, i.e., non-living structures designed to imitate natural biology. If so, what are they doing in the COVID-19 "vaccines"? (Hughes 2022, p. 450).

Is this current gene therapy (i.e. covid vaccine) actually an experiment in synthetic biology?
Our current way is DNA->transcription—>RNA—> translation->protein ... however with the mRNA vaccine there is a paradigm shift..... DNA->replaced by mRNA(XNA) ->transcription->RNA (xeno-life)- >translation->protein

Is the push for taking the covid vaccine a mostly successful establishment of XNA as a genetic material? Is it Engineering DNA polymerases for XNA synthesis and reverse transcription? XNA genetic material is the first step towards an XNA episome.
If so, then integrating XNA information to the cellular function is the goal.
(See image)

My view is this XNA is not a dead mans switch ...

Is there an unintended consequence headed our way?

Figure 1. My question to Dr. Peter McCullough on America Out Loud.

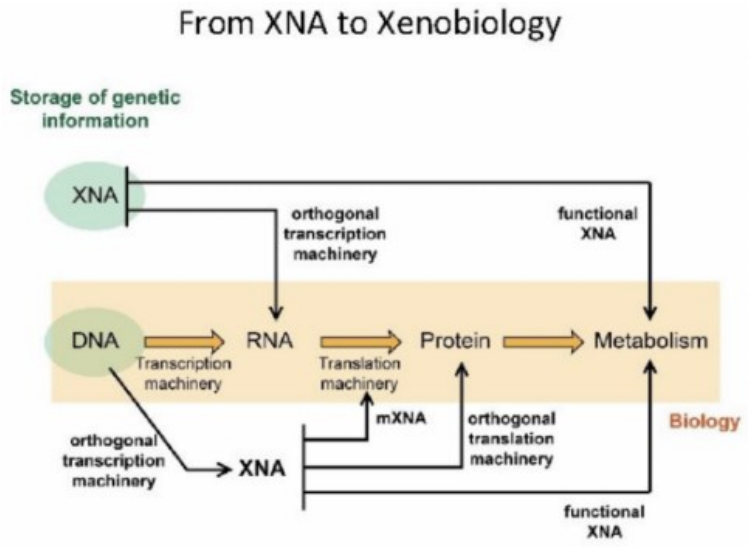

Figure 2. Slide 13 from a presentation by Vitor B.Pinheiro, Lecturer in Synthetic Biology, Institute of Structural Molecular Biology, Birkbeck University, London.

On October 22, 2021, I posed the question shown in Figure 1 to Dr. Peter McCullough on America Out Loud concerning the "current vaccines". He said he was not current enough on the XNA research to give a definitive answer.

Later, speaking to a different scientist, I asked the same question, and I also included Figure 2 from Pinheiro (2014). In that figure, as in the whole paradigm of Xenobiological research, the term "orthogonal" is used to mean a foreign biological system that operates outside of and which remains, as the Figure 2 suggests, independent of natural DNA. However, the XNA through its own distinct version of modified RNA, as in the Moderna and Pfizer COVID-19 concoctions with 728 substitutions of N1-methylpseudouridine (Ψ) for natural uridine (U) nucleotides, as detailed by Nance and Meier (2021), can commandeer the natural ribosomal systems that constitute what Pinheiro calls "Translation Machinery". But see the objections Oller and I (2022, p. 305) voiced earlier to the mythology behind the absurd claim that the body's genetic systems at any level operate in a strictly "mechanical" way, as if they were mere machines.

Keeping that in mind, even with the Figure 2 to aid comprehension, I could not get an answer to my question. But, in reading the Hughes paper, and particularly thinking through the findings of Nagase, I think I have discovered the answer myself. By producing a foreign RNA, as I suggested in my initial question to McCullough (see Figure 1 above), the Moderna and Pfizer genetic engineers did, indeed, simply create an XNA, the "modified mRNA, to interact with what Pinheiro calls the body's ribosomal systems. Normally, those protein producing systems are controlled by a host of microRNAs, enzymes, protein-protein interactions, and by other factors that we know are at play and yet have not yet been characterized explicitly. What we do know for sure, however, is that there is no part of the body's biosignaling systems that can be regarded as strictly mechanical. The systems are tuned to interact with each other from before any given human being is even conceived. Now, however, with what we know of the ongoing global COVID-19 genetic experiment, and from the results so dramatically displayed in the many figures of the Hughes paper, the XNA plan as suggested by Figure 2, uses foreign mRNA at the level of protein production and metabolism to be reverse transcribed (along the lines Aldén et al. have demonstrated) into the natural DNA. The XNA may be outside the DNA to begin with, but the plan is to get it on the inside. With that in mind, the foreign particles and aggregations discussed by Hughes have a straightforward possible explanation.

To answer the opening question in his title, the N1-methylpseudouridine (Ψ) in the Moderna and Pfizer concoctions is an XNA codon.

Background on XNA

The abbreviation "XNA", according to Chaput and Herdewijn (2019) first appeared in the literature in 2009. They suggest that it was first used then with a view toward creating "genetically modified organisms (GMO) in which all of the foreign DNA used to establish a desired non-biological property would be stored in an artificial genetic system that is orthogonal to nature's genetic material". In 2012, *Popular Mechanics* included an article by Fecht (2012) titled, "XNA: Synthetic DNA That Can Evolve". Natural DNA has a sugar backbone composed of deoxyribose sugar, but according to the article:

> Now scientists have shown that at least six other types of sugars can form nucleic acid backbones — and they can be used to store and retrieve genetic information. The researchers built DNA molecules from scratch, but replaced the deoxyribose with six other kinds of sugar, including hexitol, threose, and arabinose. The six types of synthetic genetic chains are called XNAs, or xeno-nucleic acids ("xeno" is Greek for "foreign"). And because XNA shows the possibility of heredity — passing down their genetic information — the researchers say these molecules not only could address fascinating questions about the origin of life, but also could open up the possibility of another kind of life based not on DNA and RNA. Jack Szostak, a geneticist and Nobel laureate at Harvard University, tells PM in an email that the work "is very interesting with respect to the origin

of life — in principle, many different polymers could serve the roles of RNA and DNA in living organisms. Why then does modern biology use only RNA and DNA?"

How does XNA differ from DNA?

As Fecht says, XNA differs from DNA by using a modified nucleic acid. Duffy et al. (2020) note that N1-methylpseudouridine (Ψ) qualifies as an XNA according to a part of one of their figures which I reproduce here as my Figure 3:

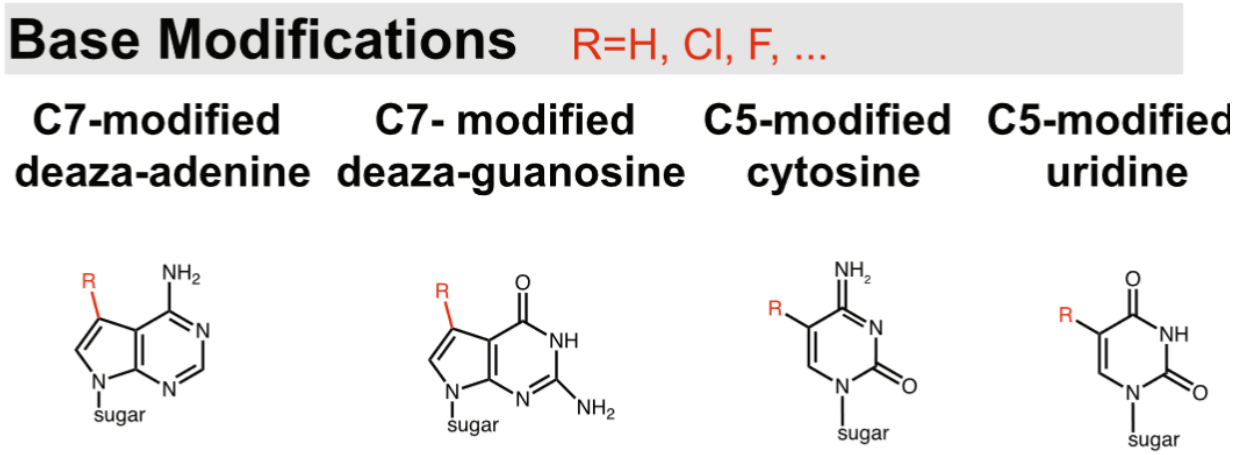

Figure 3. Here are some of the modifications Duffy et al. (2020, p. 3 of 14) proposed for XNAs, where the red R is a variable that can be hydrogen, chloride, iron, and so forth.

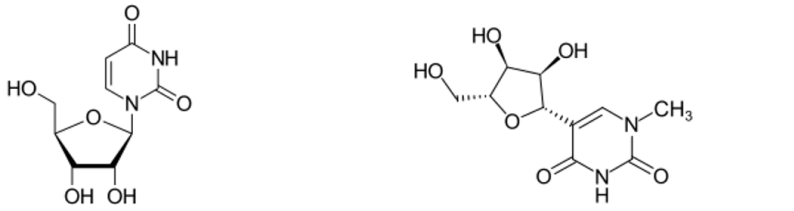

Figure 4. This is a side-by-side comparison of the naturally occurring uridine (U) nucleotide found in natural mRNA compared against the XNA N1-methylpseudouridine (Ψ) in the modified XNA used in Moderna and Pfizer experimental concoctions misleadingly called "vaccines".

According to proponents of Xenobiology (Martinez & Gilbert, 2018; Duffy et al., 2020; Martinez et al., 2022) artificially constructed XNA has greater base pair stability than natural DNA and RNA. Also, according to the promoters of the experimental modified mRNA, actually XNA, concoctions of Moderna and Pfizer the new XNA backbone conformation (within the lipid nanoparticles) provides cloaking from attack by the body's immune defenses and increased production of the intended protein because of greater stability and durability of the modified mRNA — actually an XNA. Duffy et al. (2020) were optimistic about the possible real-life applications of XNAs, including their "emergent" (which usually means new and never before encountered) "properties":

> Advances in nucleic acid chemistry have enabled the development of XNAs with improved base-pairing stability over natural nucleic acids as well as enhanced activity in the context of living tissues, leading to several FDA approved nucleic acid therapeutics [Smith & Zain, 2019]. Research continues apace to identify novel

> chemistries with increased potency, bioavailability, stability, decreased toxicity, and minimal off-target effects. An interesting development in this context is the discovery that mixed backbone chemistries can display novel emergent properties.

It is interesting that in 2022 hardly any of our scientific and medical authors, almost none at all, are discussing the coerced injection of experimental XNA, it seems, into well over half the population of the world. I think that the fact that much of the relevant research is published and held behind a paywall is preventing at least some, maybe most, of the critical information from being disseminated to our best minds. Shouldn't all of this kind of theoretical and experimental work be made available in open access journals that are essentially free to the professional researchers and clinicians who are being effectively kept in the dark, along with the public consumers who are being experimented on with Xenobiological products which are already having widespread injurious "emergent" effects that are killing many and disabling many more? In a paper still under review and being revised as we speak, I already discussed in some detail how the supposed near-miraculous properties of N1-methylpseudouridine in the modified mRNA, something which now appears to be an XNA that is more harmful than it is "magical", is actually disrupting important methylation processes and immune defense functions.

An Intentional Strategy of Coercion

The Hughes paper, I believe, is an imperative article not only for the recipients of the experimental concoctions posing as "vaccines", but also for complicit clinicians helping to promote and distribute them (until recently practically the whole of mainstream medical practitioners and pharmacists), and especially for those who have unknowingly been conned into pushing this harmful world-wide experiment. We are witnessing consequences that have not been seen since the time of Noah's great flood. The introduction of Ψ into billions of nanolipid payloads distributed to billions of recipients in one, two, and up to five or more doses, raises the spectre of possible "emergent" functions and dysfunctions that have never before existed in the bodies of innocent, unknowing, uninformed recipients. To what purpose?

Nie et al. (2020) have written about "expanding genetic systems with XNAs" in ways that can lead to "novel functions that do not exist in nature. . . . chemical and structural parameters for genetic information storage, heredity, and evolution" (p. 3483). They also take passing notice of the fact that "in eukaryotes" epigenetic modifications that can be effectively cancelled by the introduction of an XNA (see Figure 2 above), normally serve higher level communication functions, "representing a second layer of regulatory information beyond the essential information encoded in the base sequence" (p. 3 of 18). They even write in the same context about "the incorporation of synthetic nucleotides into artificially built genetic systems". Could this be what we are seeing, at least in part, in the aggregative structures emerging from the experimental XNAs that have been deployed?

The most likely goal, in my view, the only one that seems to make sense to me, is to get the synthetic mRNA, an XNA as I have demonstrated above, to be reverse transcribed into human DNA (as reported already by Alden et al., 2022), so that people claiming to be smarter than God (as detailed by Kyrie & Broudy, 2022, in this issue) can direct future evolution as summarized in the Hughes article.

Even though N1-methylpseudine (Ψ) is found in nature, it was not found in the human body until the mRNA, the XNA, concoctions were injected into unsuspecting people without disclosure of their harmful and potentially lethal contents. In many cases, the injections were pressed upon

unwilling recipients who were fearful of downstream consequences and who consented reluctantly but without knowing what they were getting into (see the 2022 documentary film "Uninformed Consent" directed and produced by Todd Harris). Did any recipients know that N1-methylpseudouridine can result in pairing that is very different from the natural uridine? Or that such variability results in amino acid substitutions with unknown consequences in bodily proteins?

Research published in the prestigious *Proceedings of the National Academy of Sciences* before the advent of COVID-19 had already shown that "pseudouridine [including the kind in the so-called "mRNA vaccines"] impedes translation elongation and increases the occurrence of amino acid substitutions" and also "that mRNA modifications can modulate mRNA translatability and . . . can alter tRNA selection by the ribosome" (Eyler et al., 2019). Those researchers also noted that "the presence of Ψ can promote the low-level synthesis of multiple peptide products from a single mRNA sequence in the reconstituted translation system as well as human cells". Could the intended aim be the one boasted of by Schwab, Harari, and others? They suggest that "small rate defects could become important . . . We speculate that it could be advantageous . . . for evolution and adaptation." But can such grand objectives be seriously entertained unless reverse transcription of the kind demonstrated by Alden et al. (2022) completes the connection of the XNA in the Moderna and Pfizer injections into human DNA (see particularly their Supplementary Materials, Table S1, concerning the Ψ component of those so-called "vaccines")?

Conclusion

The whole experimental program seems to be based only in the theory that we humans formerly emerged quite accidentally from a "primordial soup" and that, therefore, it is reasonable to suppose that nothing harmful can come from applying evolutionary theory to XNAs through this huge ongoing pharmaceutical experiment. Does it sound too far-fetched? Well, consider the title by Sarah Fecht (no kidding) from clear back in 2012: "XNA: Synthetic DNA That Can Evolve." She wrote:

> John Chaput, a molecular biologist at Arizona State University and an author [co-author] on the new study in *Science* [Pinheiro et al., 2012], says this work asks a new question: "How can you perform Darwinian evolution on something other than DNA or RNA? Lots of DNA and RNA molecules have been evolved in the laboratory, but going the next step and doing it on other molecules has been very challenging. This is one of the first examples of that.

In the end, Fecht suggests that any experiment involving the use of XNAs "to pass genetic information from one generation to the next" is a matter far off in the future. She speculates that "XNAs could serve as the building blocks for completely new genetic systems" and Chaput seems to wonder:

> "Could you create synthetic life with it? That's possible, but it's much further down the road."

Well, looking at the "emergent" phenomena in the COVID-19 fluids and in the blood of recipients as revealed in the experimental studies summarized by Hughes, maybe the kind of evolutionary experiment speculated about by Fecht, Chaput, and others is already underway. Will it expand human capabilities by merging them with robotic control systems of artificial intelligence? Or is the experiment likely to injure and impair the lives of those unknowing souls who survive the still unfolding COVID Aftermath. Are the pundits gambling away the future of humanity?

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