Another Expert Analysis

Of a "Retracted" Paper


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This is the continuation of the retracted paper analysis I started here in the article series How Experts Lie.

https://pubmed.ncbi.nlm.nih.gov/34696485/

> The published article [1] has been retracted. Following publication, the first author contacted the editorial office regarding an improper experimental design with the potential to significantly affect the integrity of the resultant experimental data.
> Adhering to our complaint procedure, an investigation was conducted. Both the chosen construct of the spike plasmid that contained a C-terminal fused with 6xHis tag and use of a GFP reporter system under overexpression conditions in the protocol were identified as having the potential to introduce significant ambiguity regarding the nature of the reported observations. The reliability of the results and conclusions presented have therefore been undermined. Furthermore, statements regarding the effect of the spike protein on the adaptive immunity are misleading as in this article no experiments related to the adaptive immunity were performed, and the full-length spike-based vaccine was not studied. Therefore, conclusions related to vaccine safety are not validated and lacked experimental support. This article [1] is retracted and shall be marked accordingly. This retraction was approved by the Editor-in-Chief of the journal Viruses.

I remember when this paper first came out and the controversy generated from its results. It was the first cellular evidence of harms from spike proteins alone. About 7 months after being published it was retracted, and the reason given I've highlighted above. I think the authors knew how controversial their results would be, because they performed 9 different experiments all to show the same thing – DNA repair was directly impaired by spike proteins AND that more DNA went unrepaired when spike proteins were present. Each one of these experiments could have been a separate paper and separate publication. In academic circles there is always pressure to publish as many papers as possible to show how productive one's laboratory is.

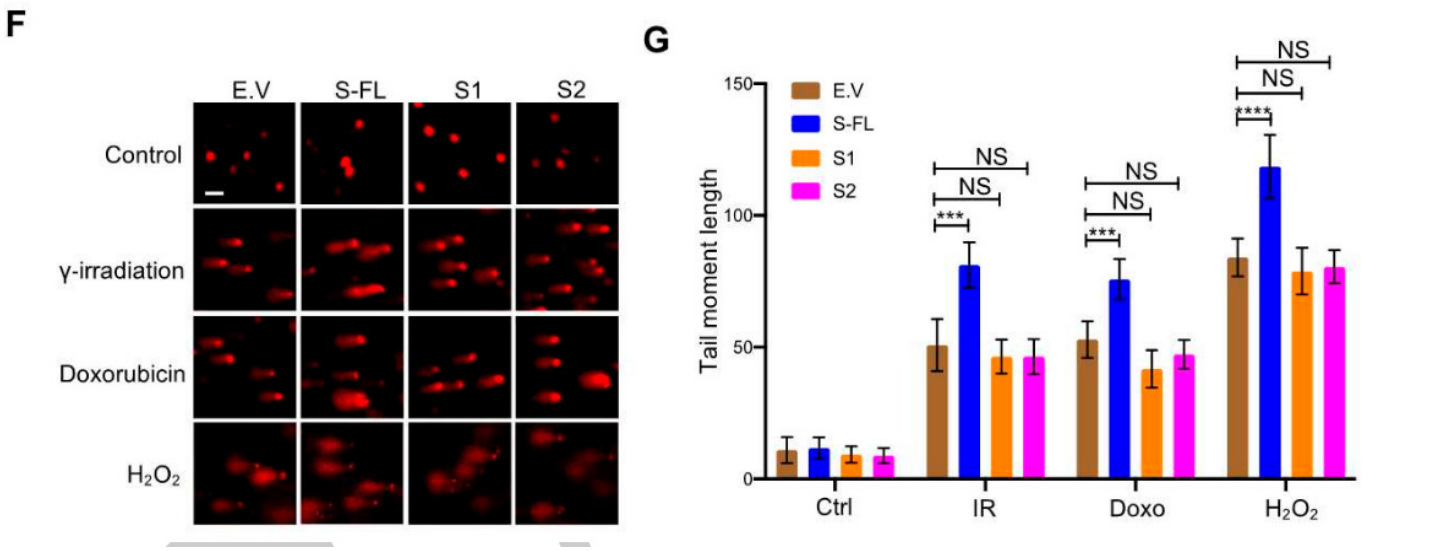
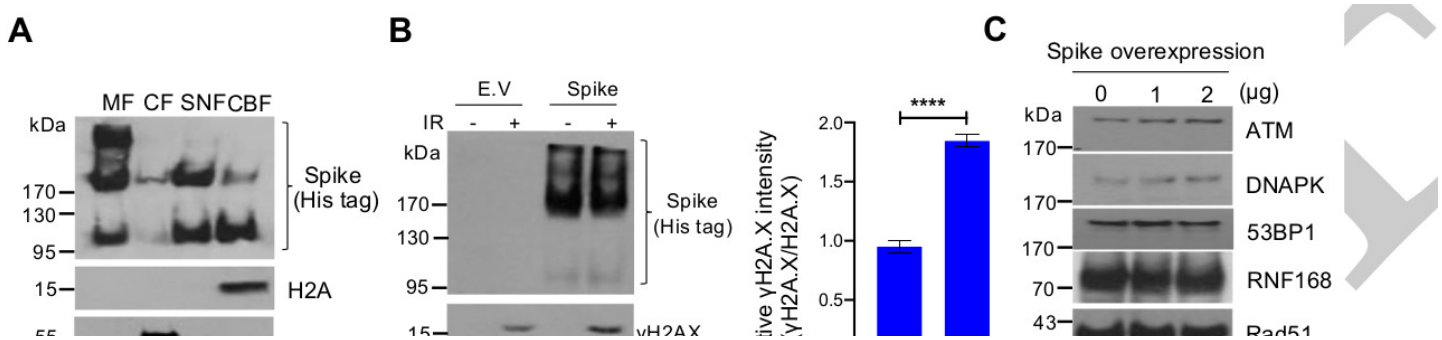
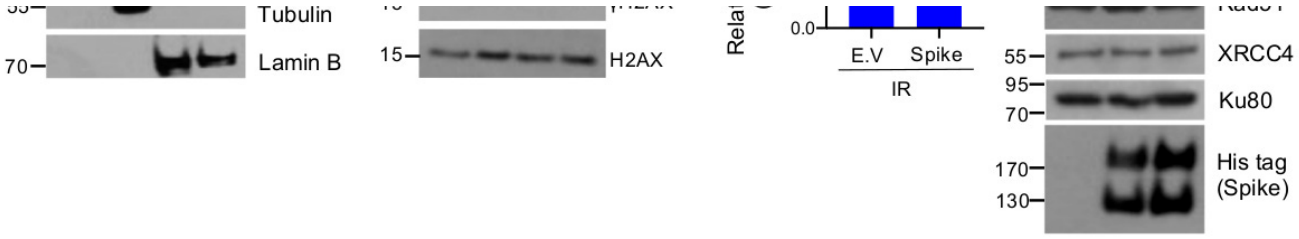


Figure G:

A comet tail assay is where the more breaks you have in a strand of DNA, the longer the "Comet tail" on a Southern Blot. That is you'll have more little bits of DNA making a longer "Comet tail" when you run the DNA on an electrophoresis gel. (An electrophoresis gel arranges your DNA sample in order from biggest to smallest.) You don't need any Fluorescent proteins for this test. So between these last two experiments, the GFP as a cause of "potential ambiguity" is minimal. You actually don't need 6xHis tags either, because you're not measuring any Spike proteins, you're only measuring the broken bits of DNA caused by the spike proteins.

Like the RFP (Red Fluorescent Protein) picture, the story is the same. S1 spike protein segment and S2 spike protein segment don't cause any increase in "Comet Tails" DNA damage. But Full length spike protein (S-FL) does cause an increase in broken bits of unrepaired DNA after DNA damage from radiation, doxorubicin (a chemotherapy drug) and Hydrogen Peroxide.

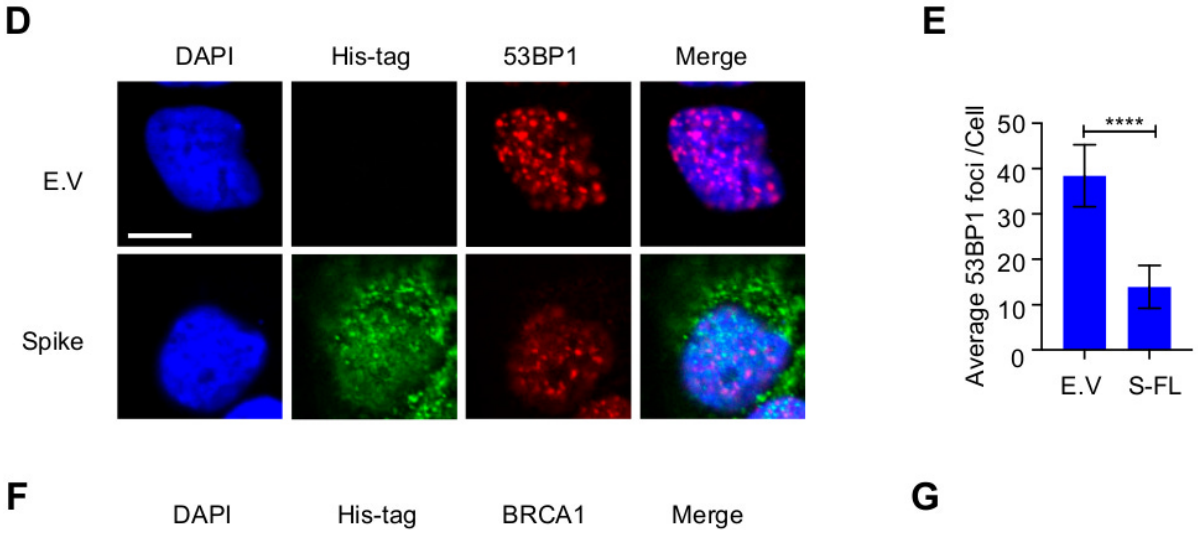


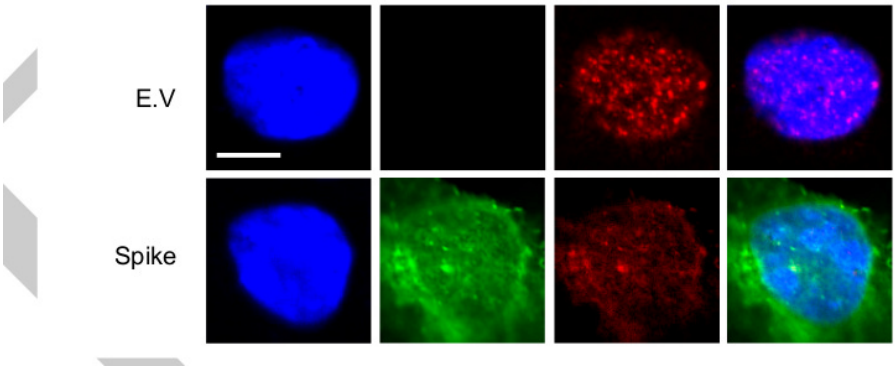


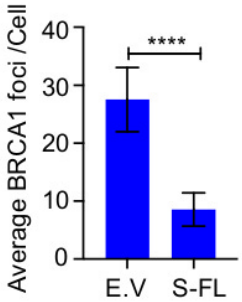
What's this? "A" shows the size of spike proteins and where they are located in the cell. Bigger proteins are bars closer to the top of the electrophoresis gel. "B" shows that when there is radiation, (IR – and +) yH2AX proteins show up and H2AX is unchanged. The more yH2AX there is, the more DNA damage there is (yH2AX gets produced by a cell in response to DNA damage) When both spike protein AND radiation are together, there is more yH2AX indicating more DNA damage than radiation alone. This confirms the previous experiments that less DNA repair happens when there's more spike proteins. Less repair = more damaged DNA!

The only possible error here is the spike proteins were tagged with His, just like in the first few experiments. It doesn't look like there's any GFP in this experiment. So we can cross Green Fluorescent Protein off as a spurious factor that somehow caused an "innocent" spike protein to SUDDENLY INTERFERE WITH DNA REPAIR.

Graph C: This gel shows that even when Spike proteins are overexpressed (over produced) the proteins for two cancer related pathways are still present in the cell. (Increasing the spike proteins does not reduce the production of ATM, DNAPK, 53BP1, RNF168, Rad51, XRCC4, and Ku80.)







Colourful Pictures! What's this?

53BP1 and BRCA1. A tumor suppressor protein and a breast cancer related protein?! (53BP1 suppresses tumors by attaching to Double strand DNA breaks, and decreases with age. reference below)

- Anglada T, Genescà A, Martín M (December 2020). "Age-associated deficient recruitment of 53BP1 in G1 cells directs DNA double-strand break repair to BRCA1/CtIP-mediated DNA-end resection". Aging. 12 (24): 24872–24893. doi:10.18632/aging.202419. PMC 7803562. PMID 33361520.

BRCA1 is one of the proteins that helps repair DNA and destroy cells where the DNA cannot be repaired.

These authors are checking to see if spike protein reduces 53BP1 and BRCA1. See the reduced redness of the Red Fluorescent protein when there's spike protein present?

(When I went to McGill and did Physiology and Cell biology, I thought I was smart, but I was never THIS smart. Not even close. The authors of this paper are Brilliant!)

This one experiment alone showing BRCA1 and 53BP1 activity impaired by Spike protein alone would be a full academic paper publishable in a top tier journal! It is showing the Spike protein's carcinogenic effect on not just 1 but TWO cancer protection proteins!

Let's do a body count! Or in the cell biology world a Protein Count!

NHEJ (DNA repair) + Spike protein = 75-80% impaired

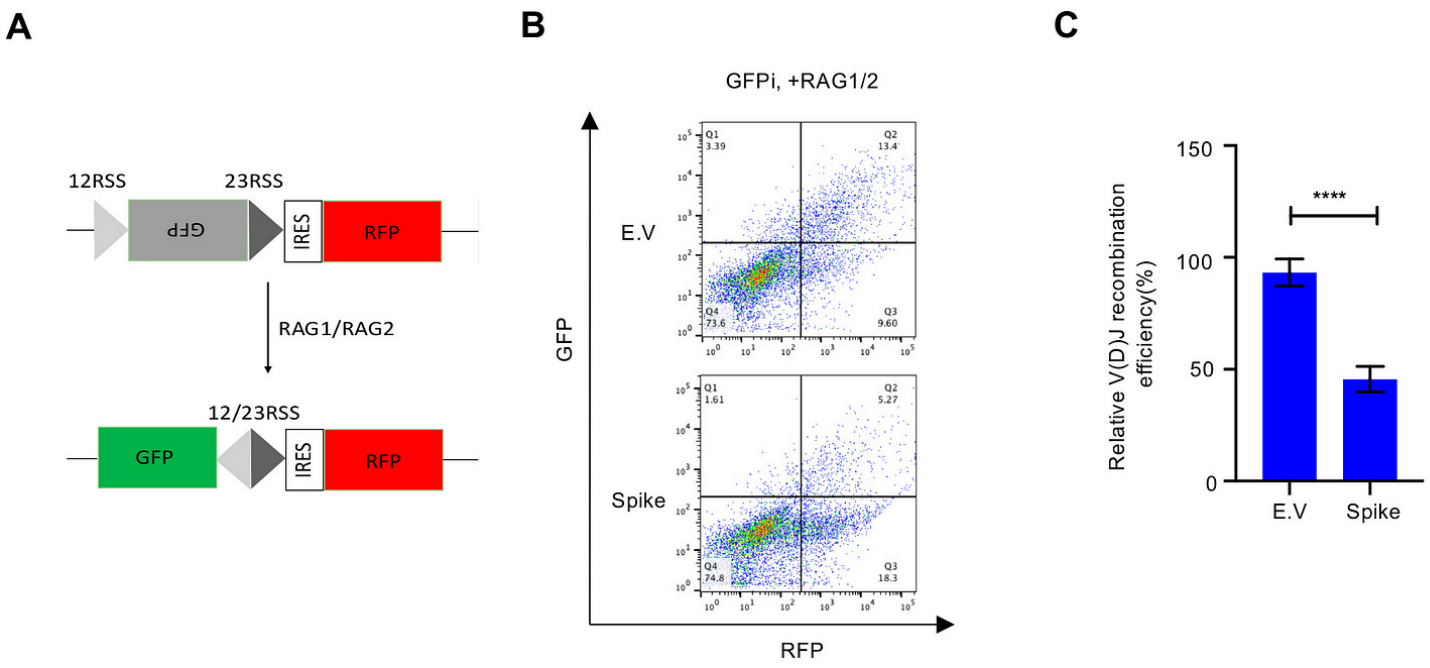
HR (DNA repair) + Spike protein = 65-75% impaired

53BP1 (Tumor Suppressor) + Spike protein = 65-70% impaired

BRCA1 (Tumor Suppressor) + Spike protein = 70-75% impaired

So 4 different proteins, all related to Cancer, all inhibited by spike proteins.

But WAIT! What's this?



Another Experiment? I thought they proved their point already!

RAG1/RAG2 (Recombination activating gene 1 and Recombination activating gene 2) are genes that cells activate for repairing DNA. (Recombination is a way for cells to repair DNA when the original code is so damaged on a strand that it cannot be recovered. So the cells "borrow" an intact code from another strand to rewrite the damaged code using recombination.)

(I was 3.97 GPA smart at McGill. But these authors are way beyond that. I would be overjoyed to have published any 1 of their experiments in a journal, but to have ALL these experiments in 1 article? This is THE paper of the CENTURY!)

So what are we looking at in those colorful scatter plots in B?

When recombination proceeds normally, because RAG1/RAG2 are unimpeded, then the more RFP there is, the more GFP there should be. This happens because RAG1/RAG2 flips the GFP gene around right side up which changes it from inactive (backwards GFP) to active (forwards GFP in figure A) If RAG1/RAG2 are working normally, it should be about 1 to 1, or a diagonal line at about 45 degrees. This looks to be the case when there is E.V (Empty Vector) without the spike protein.

BUT

When you put in the gene for spike protein in the vector… all of the sudden you have RFP lighting up without GFP, meaning the GFP wasn't activated because RAG1/RAG2 stopped working.

WHAT!!!?

A FIFTH DNA repair mechanism damaged by spike protein? A 50% reduction in V(D)J recombination?

The GREATEST cell biology paper that I've EVER read! Get the Nobel Prize ready!…

And it was RETRACTED.

WHY?

So what was the "methodological" deficiency?

Why did they say:

"Both the chosen construct of the spike plasmid that contained a C-terminal fused with 6xHis tag and use of a GFP reporter system under overexpression conditions in the protocol were identified as having the potential to introduce significant ambiguity regarding the nature of the reported observations."

Well their Red Fluorescent Protein and Comet Tail experiments indicate GFP isn't the problem. It is the Spike protein.

But in all the experiments they did, they couldn't **prove** 6xHis tags used to measure the spike proteins inside a cell didn't somehow CAUSE the spike proteins to harm DNA repair.

(Being able to measure spike proteins with a standard molecular tag changes the result for "Spike Proteins". Yeah really. That's their methodological error “with the **potential** to significantly affect the integrity of the resultant experimental data”.)

Did it?

They did so many controls with the 6xHis on 8 different Covid viral proteins, testing not just 1 but 5 DNA repair pathways, using Red Fluorescent Protein instead of Green, that I do not think 6 Histidine amino acids changed the result in all 9 of their experiments. The result was the same. Spike protein impairs DNA repair.

Their experiment was 95% perfect, not 100% perfect. Is that a reason for retraction?

Before COVID, a paper like this would have never been retracted. They might have added a Note or and Addendum. “We recognize that the 6xHis tag, although a mainstay of cell biology research, may have altered the spike protein in such a way that it was made more toxic. However, other research attaching the same 6xHis tag to other parts of the spike protein have shown similar damaging effects. In Vivo (living animal) studies are needed to confirm.”

Studies like this would NEVER have been retracted prior to 2020.

Did someone not want the cell biology evidence of Spike proteins causing harm to become known?

(As far as “In Vivo” testing to see whether their cell biology evidence holds true for whole living bodies, that experiment is already in progress — in HUMANS)

8 likes

1 Comment