In the world of news, there are normally just two sides. There is the MSM (Mainstream) and the alternative (or conspiracy). There sometimes are other sides, but normally the alternative side hates to think outside its own box, if that makes sense.

Basically, both sides need to follow a narrative. MSM needs to follow the 'it's on the news, etc., so it has to be real'. Alternative follows 'it's MSM, it can't be real, and therefore it has to be only this one'. If someone in the alternative world says 'hey, I don't believe it's that, I think it's this instead' then the alternative viewpoint is it can only be the same as the other entire alternative, otherwise it's not real.

Makes sense?

Good, so the reason I brought this out, is that in the alternative news, this video is doing the rounds, stating that the vaccines contain graphene.

https://brandnewtube.com/watch/deadly-shots-former-pfizer-employee-confirms-poison-in-c-19-vaxx_KRzQED8lhKWRY3y.html

But from what I can see on first glance, is it seems to be a case of lets join the dots no matter what, to get the result we want. Like the famous 2+2=5.

So, what I will do is look at the two webpages she shows. Also, the MSDS for Pfizer, and then finally the patent she mentions but doesn't actually show (I would say the most important part).

But I will look at each separately. What I mean is, I will look at each page, get the salient points and 'ignore' the other pages. After, I will see if there is anything that 'joins them up'.

However, firstly, she mentions that the ALC-159, when she searches comes up with Sinopeg. But when I searched, it wasn't even in the first pages or so. Can you buy from other companies? YES, yes you can.

Does it state in the MSDS that it only comes from this source? No, as that is a data sheet. All chemicals etc. have one, all the way down to the good old toilet cleaner you have in your house. Will they state who they buy from? Of course not, trade secret and confidentiality. Plus, they would have others offering their products etc.

She mentions that it only comes from Sinopeg, and it's from China. This then raises the alarm bells in your head. CHINA!!! But you can buy it from all over: USA, Spain, etc. For example, here are a couple and I've stated where they're from:

https://www.medchemexpress.com/alc-0159.html - USA

https://www.biochempeg.com/product/mPEG-N,N-Ditetradecylacetamide.html - USA

https://www.caymanchem.com/product/34336/helping-make-research-possible - USA

https://www.shochem.com/phospholipids/cationic-phospholipids/alc-0159-cas-1849616-42-7.html - China

https://www.carbosynth.com/carbosynth/website.nsf/(w-productdisplay)/208B6A2F392204458025871700 15FD93 - All over

https://cymitquimica.com/products/3D-FM180901/1849616-42-7/mpeg-nn-ditetradecylacetamide/ - Spain

https://www.xdiscoverychem.com/archives/cas-1849616-42-7 - China

Anyway, back to the topic in hand.

First up, the MSDS. Now, I'll look at the main one direct from the company, and for completeness, the one from the FDA and UK:

https://safetydatasheets.pfizer.com/DirectDocumentDownloader/Document?prd=PF00092~~PDF~~MTR~~PFEM~~EN

https://www.fda.gov/media/144413/download

https://www.gov.uk/government/publications/regulatory-approval-of-pfizer-biontech-vaccine-for-covid-19/summary-public-assessment-report-for-pfizerbiontech-covid-19-vaccine

I'm only bothered about the excipients, as that is all she talks about, so no need to go into the full depth.

An excipient is a substance formulated alongside the active ingredient of a medication, included for the purpose of long-term stabilization, bulking up solid formulations that contain potent active ingredients in small amounts (thus often referred to as "bulking agents", "fillers", or "diluents"), or to confer a therapeutic enhancement on the active ingredient in the final dosage form, such as facilitating drug absorption, reducing viscosity, or enhancing solubility.

https://en.wikipedia.org/wiki/Excipient

So, firstly, the official document from the actual company:

https://safetydatasheets.pfizer.com/DirectDocumentDownloader/Document?prd=PF00092~~PDF~~MTR~~PFEM~~EN

Under Section 3, it states what is included. If you look, you will see this:

-				available		available	available
PEGA / ALC-0159 -	< 1		Not Listed	No data available	Not Listed	No data available	No data available
Disodium phosphate	< 1		Not Listed	No data	Not Listed	No data	No data

And that is the main thing she is looking at, ALC-0159. Note it only has a short name, PEGA. That's just the abbreviations, it's the ALC number you need.

I've done a bit of an edit, where you can now see the heading:

Chemical name	Weight-%	REACH Registration Number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
PEGA / ALC-0159 -	< 1		Not Listed	No data available	Not Listed	No data available	No data available

So, the weight is < 1%. Also, it's under the listing for non-hazardous. No EC number, etc. (like all the rest in the table).

Not much in there, so what does the FDA one say:

https://www.fda.gov/media/144413/download

Not much, it's all about administrating, but interesting to read.

UK?

https://www.gov.uk/government/publications/regulatory-approval-of-pfizer-biontech-vaccine-for-covid-19/summary-public-assessment-report-for-pfizerbiontech-covid-19-vaccine

Excipients

The excipients sucrose, sodium chloride, potassium chloride, dibasic sodium phosphate dihydrate, monobasic potassium phosphate and water for injection are all of Ph. Eur. grades, which are acceptable.

In addition to those excipients, the vaccine contains four lipids, of which two are used in approved medicinal products (cholesterol and 1,2-distearoyl-sn-glycero-3-phosphocholine, hereafter termed DSPC) and two are considered novel in that they have not been used in an authorised medicinal product in the UK:

- ALC-0315 ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate))
- ALC-0159 (2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide).

The lipids are intended to encapsulate the mRNA in the form of a lipid nanoparticle to aid cell entry and stability of the RNA/lipid nanoparticles.

The primary function of the PEGylated lipid ALC-0159 is to form a protective hydrophilic layer that sterically stabilises the LNP which contributes to storage stability and reduces nonspecific binding to proteins. As higher PEG content can reduce cellular uptake and interaction with the endosomal membrane, PEG content is controlled.

Novel excipients

ALC-0315 is a cationic lipid and is critical to the self-assembly process of the particle itself, the ability of the particle to be taken up into cells and the escape of the RNA from the endosome. ALC-0159 is a polyethylene glycol (PEG) lipid conjugate (i.e. PEGylated lipid).

So, that is all it mentions. Can't spot anything about Graphene there. What we will do, is take a look at the item in question, ALC-0159. We'll look at good old trusty (in a way) Wikipedia:

https://en.wikipedia.org/wiki/ALC-0159

Not much at the site, so a copy/paste job is:

"ALC-0159 is a PEG/lipid conjugate (i.e. PEGylated lipid), specifically, it is the N,N-dimyristylamide of 2-hydroxyacetic acid, O-pegylated to a PEG chain mass of about 2 kilodaltons (corresponding to about 45-46 ethylene oxide units per molecule of N,N-dimyristyl hydroxyacetamide). It is a non-ionic surfactant by its nature. It has been deployed in the Pfizer-BioNTech SARS-CoV-2 mRNA vaccine that contains the active ingredient tozinameran."

And if you click on the PEG, it states:

https://en.wikipedia.org/wiki/Polyethylene_glycol

"A PEGylated lipid is used as an excipient in both the Moderna and Pfizer–BioNTech vaccines for SARS-CoV-2. Both RNA vaccines consist of messenger RNA, or mRNA, encased in a bubble of oily molecules called lipids. Proprietary lipid technology is used for each. In both vaccines, the bubbles are coated with a stabilizing molecule of polyethylene glycol."

So, now we know what ALC-0159 is. It's a PEG (polyethylene glycol), used to encase the messenger RNA is a bubble of oily molecules. It has a rather long name, but that can be shortened, as it's the ALC-0159 that is the important bit. It's not stated in the Pfizer or UK data sheets as having anything else added that is graphene.

So, onto the next part. First up, the actual chemical itself:

https://www.sinopeg.com/2-polyethylene-glycol-2000-n-n-ditetradecylacetamide-alc-0159-cas-1849616-42-7_p477.html

Now, what does it say here? Well, it states the ALC-0159, so that's a match. Just like Wikipedia etc. It also shows the CAS number, 1849616-42-7.

Now, if you watch the video, she says she searches by the CAS number. That's fine, it's a well know way to recognise chemicals etc. But how did she come up with that CAS? Well, it's in the Wikipedia page, but it's not in the Pfizer document. So, she may have searched ALC-0159 and found the CAS in Wikipedia. And yes, if you search the CAS number, you do come across Sinopeg…but as the third option, and other companies are there so why was that singled out?

Anyway, back to the page ☺

It just has the abbreviation being MPEG-DTA, the long name and that's about it.

What about the graphene page? Well, let's have a read of it:

https://www.sinopeg.com/core-shell-structured-polyethylene-glycol-functionalized-graphene-for-energy-storage-polymer-dielectrics-combined-mechanical-and-dielectric-performances_n28

I'll copy/paste the wording here, and bold the parts that are specific, and may be what we need to look at more in depth.

"Graphene, as the thinnest, strongest and stiffest material and arranged in a honeycomb pattern structure with sp2-hybridized carbon, finds more potential applications in modern industry than other carbonaceous allotropes; in pristine form, it is also an excellent heat and electric conductor . However, the major obstacle in utilizing graphene, particularly for electronic applications, is its insolubility in the fully reduced state due to the strong affinity between the graphene sheets.

In the present study, they synthesized for the first time a **polydispersed graphene with desirable electric conductivity by covalent functionalization with single terminal aminated polyethylene glycol monomethyl ether (PEG-NH2)**. The PEG-NH2 grafted graphene **(PEG@GO)** was then **reduced by hydrazine hydrate** to **PEG@rGO** and **subsequently incorporated into epoxy resin** by a solution mixing method. The PEG@rGO with a"core-shell"structure exhibited homogeneous dispersion in epoxy and also effectively reduced the dielectric loss, hence contributing excellent dielectric properties and mechanical strength to the final **PEG@rGO/epoxy nanocomposites**.

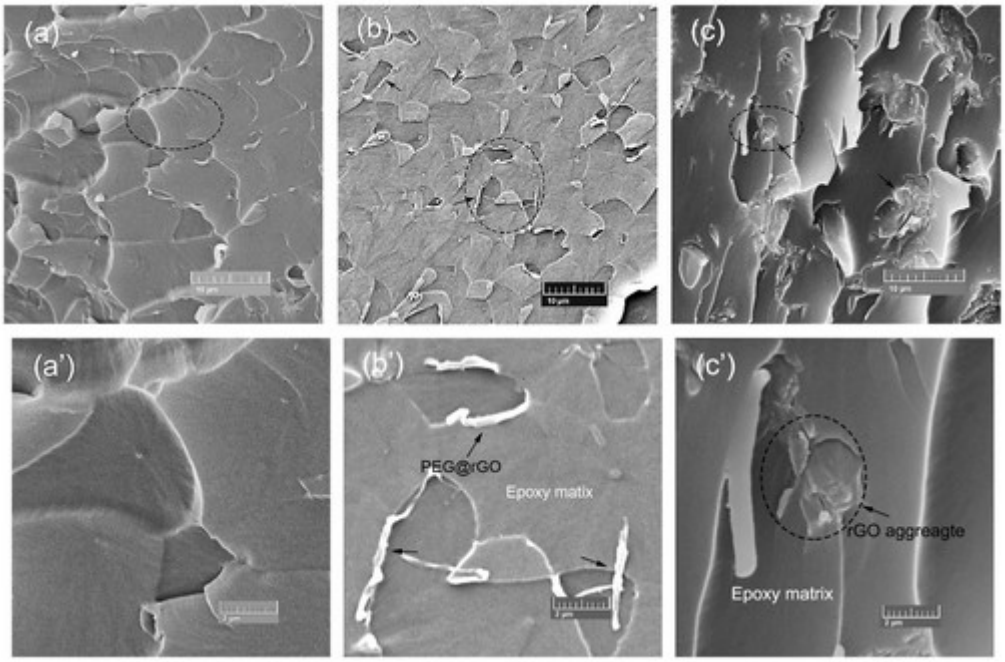


Fig. 1. Low and high magnification SEM images of (a, a') neat epoxy, (b, b') PEG@rGO/epoxy 1.0 wt%, and (c, c') rGO/epoxy 1.0 wt% nanocomposites. Dielectric properties of PEG@rGO/epoxy nanocomposite.

Fig. 1 displays representative **SEM images** of neat epoxy, PEG@rGO/epoxy and rGO/epoxy nanocomposites. The surface of neat epoxy (Fig. 1a and a') displays a typical smooth structure characteristic of its brittleness. The modified PEG@rGO exhibits excellent dispersion in epoxy (black arrows in Fig. 1b) and no obvious aggregates of PEG@rGO are observed. The magnified SEM image of PEG@rGO/epoxy (see Fig. 1b') reveals some PEG@rGO nanosheets pulled out or dragged from epoxy and also confirms strong interfacial filler/matrix interaction due to the filler surface functionalization. By contrast, untreated graphene (rGO) nanoplatelets aggregate easily in epoxy matrix caused by the inert surface of reduced graphene as demonstrated in Fig.1c and c', yielding

poor mixing and dispersion of rGO. Therefore, the excellent dispersion of PEG@rGO compared to untreated rGO results in enhanced dielectric and mechanical properties of the nanocomposites discussed in the next two sub-sections.

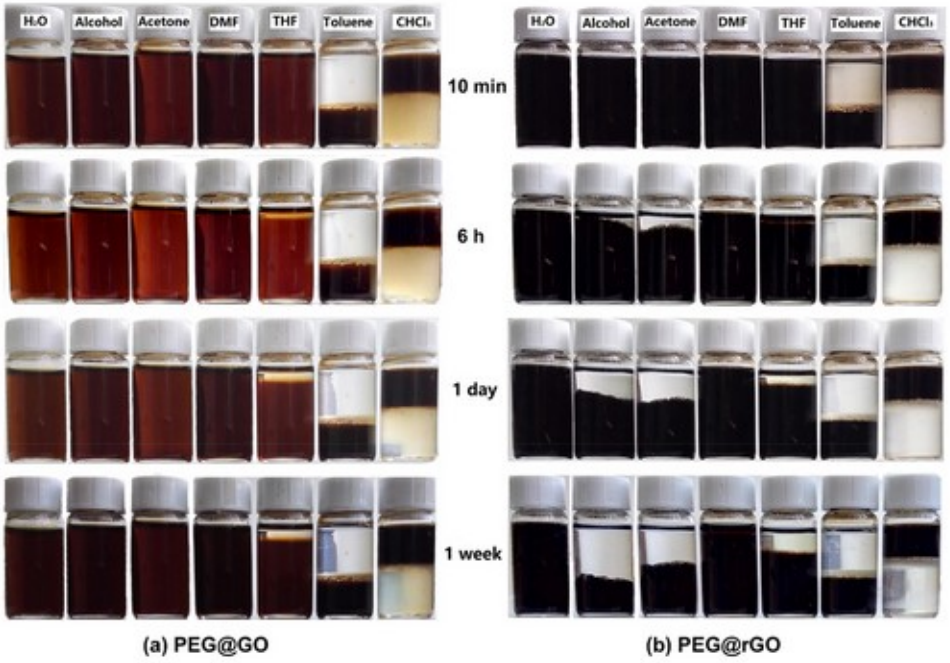


Fig. 2. Dispersion state of (a) PEG@GO and (b) PEG@rGO in different solvents after different times.

It is known that pristine graphene is extremely insoluble in water and other organic solvents, while GO exhibits polydispersed behavior due to the formation of plenty of hydrophilic oxygen groups. The solubility of PEG@GO and PEG@rGO in different solvents are displayed in Fig.2. As expected, PEG@GO shows good compatibility in water, alcohol, acetone and DMF even after 1 week. The good dispersion of PEG@GO is mainly attributed to the oxygen groups at its edges and basal plane. After reduction, PEG@rGO is less soluble than PEG@GO, especially in alcohol and acetone. However, it exhibits excellent water solubility owing to the successful grafting of hydrophilic PEG-NH2.

In summary, **graphene oxide** was chemically functionalized with single terminal amino-PEG (**PEG-NH2**) and subsequently introduced into **epoxy resin** as a“core-shell”structure to enhance the **dielectric performance of polymer dielectrics**. The resulting PEG@rGO became hydrophilic and displayed **a polydispersive behavior** in various solvents. The unique structure and excellent dispersion state of PEG@rGO offer a facile technique to modulate the interface and optimize the microstructure, hence achieving high permittivity and low loss polymer dielectric materials.

Author: **Y Li, X Bi, S Wang, Y Zhan, Y Liao**

DOI： **10.1016/j.compscitech.2020.108341**

Sinopeg provide various **NW poly(ethylene glycol) (PEG)** products: 2KDa, 5KDa, 10KDa, 20KDa, etc.”

Phew, let's look at some of those bold parts above.

"polydispersed graphene with desirable electric conductivity by covalent functionalization with single terminal aminated polyethylene glycol monomethyl ether (PEG-NH2)"

Firstly, PEG-NH2 - There are quite a few different versions of this within the actual Sinopeg website:

https://www.sinopeg.com/PEG-NH2_ss

Polydispersed - this means particles of varied sizes in the dispersed phase of a disperse system. If you want to understand dispersion, then here is Wikipedia:

https://en.wikipedia.org/wiki/Dispersion_(chemistry)

Basically, it states "A dispersion is a system in which distributed particles of one material are dispersed in a continuous phase of another material. The two phases may be in the same or different states of matter."

So, key wording here is PEG-NH2.

Now, by the looks of it, after the polydispersed graphene was electrically conducted with the PEG-NH2, it became PEG@GO. This was then reduced by hydrating with hydrazine, and renamed PEG@rGO. There are no products for PEG@GO or PEG@rGO at Sinopeg.

So, key wording here is PEG@GO and PEG@rGO.

Next, it talks about epoxy nanocomposites. Now, there are quite a few places that explain what these are. In simple terms before I show some of the sites, epoxy is the family of basic components or cured end products of epoxy resins, and there are many uses for epoxy, most notably, adhesives:

https://en.wikipedia.org/wiki/Epoxy

and the nanocomposites is a multiphase solid material where one of the phases has one, two or three dimensions of less than 100 nanometres (nm) or structures having nano-scale repeat distances between the different phases that make up the material:

https://en.wikipedia.org/wiki/Nanocomposite

So, when you then realise what both are, you can visualize what both are together. So, here are a couple of sites:

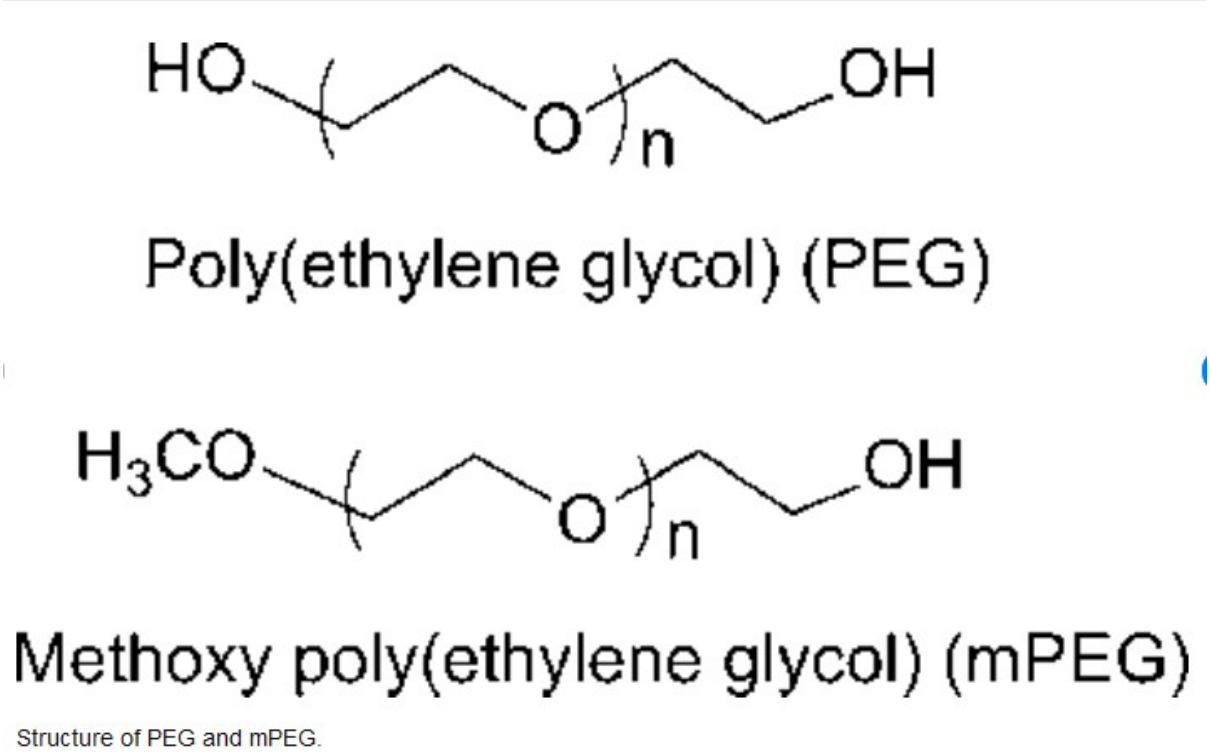
https://pubs.rsc.org/en/content/articlelanding/2016/tc/c6tc01210h#:~:text=Epoxy%20based%20thermosetting%20nanocomposites%20are,and%20low%20shrinkage%20on%20curing

https://www.sciencedirect.com/science/article/pii/S2214785320374940

In the context of this Sinopeg article, it appears that they are looking at using graphene in epoxy, using nanocomposites. This is actually what it states in its summary, and the fact it's used for dielectrics.

https://en.wikipedia.org/wiki/Dielectric

So, just to look at this, do any of the key wordings match up with anything that is what the actual PEG that is in the vaccine? No. Simple terms, nothing states that MPEG-DTA was used at all in the graphene oxide article. It states PEG, but not MPEG. And here is a picture of the structure:



Structure of PEG and mPEG.

https://www.researchgate.net/figure/Structure-of-PEG-and-mPEG_fig5_256922992

Interestingly, it does seem to mention graphene oxide in the summary as the main thing, not graphene. Why? Well, this was the one that they found to be more stable. Here is a little about the two:

https://www.graphene-info.com/graphene-oxide

So, what about the third thing she mentions, the patent? Well, she seems to stumble on that question, and doesn't show a screenshot, even though it's probably something she needed to post.

https://patents.google.com/patent/CN112220919A/en

Now, it's a lengthy read, and does show some insight into something along the lines, but what it doesn't state, is that PEG was used at all. And it's still pending, so it's not even a current patent. Unfortunately, in the world of science (and probably other fields), people propose all manner of things, but most never happen.

Also, just to go back a bit to the article from Sinopeg. It mentions this at the end:

DOI： **10.1016/j.compscitech.2020.108341**

Looking that up in Google brings you some of the following:

https://www.sciencedirect.com/science/article/abs/pii/S0266353819336371

https://en.x-mol.com/paper/article/1281717433257345024

With the title of:

Core-shell structured polyethylene glycol functionalized graphene for energy-storage polymer dielectrics: Combined mechanical and dielectric performances

Nothing whatsoever to do with vaccine.

So, my conclusion of this is that it's not related at all. Yes, PEG is used in the vaccine, as MPEG-DTA. But there is nothing that can state that graphene or graphene oxide is used within MPEG-DTA or that it's used within vaccine with PEG.

But can we find anything about the lady in question? Yep, we can. So, here is her LinkedIn profile:

https://www.linkedin.com/in/karenkingstonkk

She states that she worked in Pfizer, which is true. But in sales and marketing. She was the founder for Varitage. Although there is no link at that site, she does have one on her Twitter account, that she hasn't tweeted anything since 2020. Why not tweet about this graphene?

https://twitter.com/KarenKingstonKK

http://varitage.com/

And one of her clients at that company is actually Pfizer.

Varitage is an avant-garde marketing and communications agency specializing in the biotech industry. Services range from strategic business planning and clinical communications, to the development of broad-reaching digital media plans, including e-commerce platforms. Our clients have included Fortune 50 companies, such as Pfizer and Medtronic, to industry start-ups and one of leading biotech venture capital firms, Johnson & Johnson Development Corporation.

And it looks again, just to be sales and cgi imagery, and to expand on the LinkedIn, it states this:

> Karen has over 20 years of industry experience across sales, marketing, strategic consulting, digital media, and senior management. She was a top performing sales representative in NYC for Pfizer and was quickly recruited to the marketing side of the business where she played an integral role in the re-launch of VIAGRA.

Nothing to state she was working in the actual lab side. Don't get me wrong, you need to know what you're selling, but scientists I would say have more knowledge as that is their area of expertise.

But that's all really, I'm not going to delve into her life that much. All I will say is, don't take anything at face value, no matter which side you're looking at. Just because it's not MSM, doesn't mean it's right. And vice-versa.