

NANOTECHNOLOGICAL INVESTIGATIONS ON COVID-19 VACCINES: *Detection of toxic nanoparticles of graphene oxide and heavy metals*

The Scientists' Club

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Introduction

The new Covid-Sars2 pandemic induced industries to develop new drugs that they called vaccines. The mechanism of action of these new drugs as declared by the pharmaceutical industries coupled with what is reported in the products' data sheet was clear enough to made scientists understand that those products are not vaccines but nanotechnological drugs working as a genetic therapy.

The name “vaccine” is likely to be an escamotage used for bureaucratic reasons in order to get an urgent approval, so dribbling all the normal rules necessary for new drugs, especially for those involving novel nanotechnological mechanisms, never experienced before. All these “vaccines” are patented and their actual content is kept secret even to the buyers, who, of course, use taxpayers' money. So, consumers (taxpayers) have no information about what they receive in their bodies. They are kept in the dark as far as the nanotechnological processes involved are concerned, on the side effects on the body but mostly on the possible nano-bio-interactions that can happen.

The present study is a random sampling of some COVID19 vaccines, through direct analyses by nanotechnological instrumentation. It is not a complete, and definitive analysis of COVID19 vaccines, but a call to develop an extensive, independent counter-analysis of sampled batches prior to approval of regulatory agencies, and massive inoculation to human populations and groups of risk.

Materials and methods

Four “vaccines” were analyzed developed for Corona Virus disease (Comirnaty from Pfizer-BioNtech, Vaxzevria by Astrazeneca, Janssen by Johnson & Johnson), Moderna) using different instrumentation and protocols of preparation according to new nanotechnological approaches. Optical bright and dark field microscopy, UV absorbance and fluorescence spectroscopy, Scanning Electron Microscopes, Transmission Electron Microscope, Energy Dispersive Spectroscope, and Nuclear Magnetic Resonance instruments were used to verify the “vaccines” morphologies and contents. For the high-technology measurements and the care of the investigation, all the controls were activated and reference measurements adopted in order to obtain validated results.

Because of the brevity of the text, some measures are not reported here. We present representative findings from broader observational data. The analyses verified the morphology of the content of the samples and their chemical composition. The following images show in an objective way what the instrumentation detects. Fig.1 shows the liposomes that Pfizer uses for its product to vehiculate RNA molecules inside the cells.

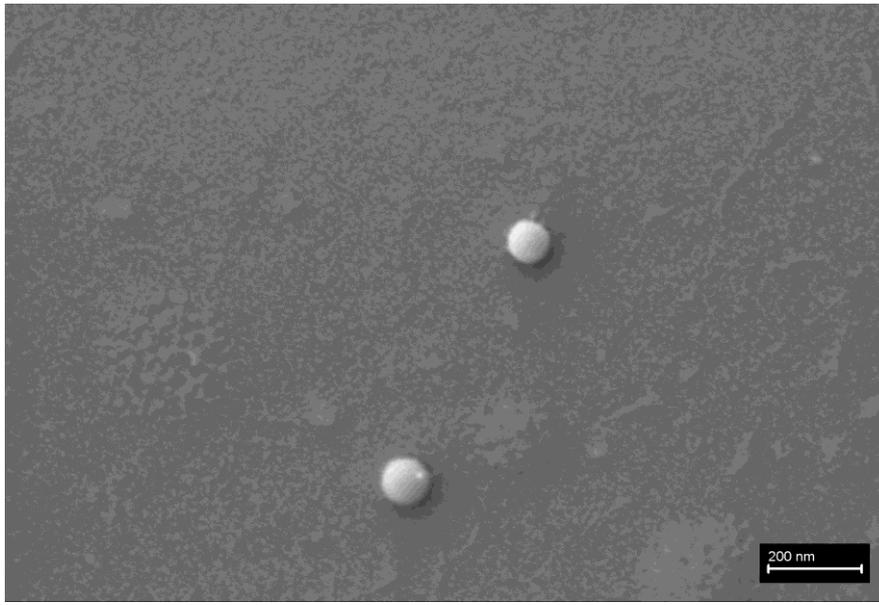


Figure 1. SEM-Cryo preparation of Pfizer vaccine.

Optical and Electronic Microscopy (TEM) (Campra, 2021)

One sample of COMIRNATY™ patent, commercialized by Pfizer-Biontech, was processed under refrigeration and sterile conditions, using laminar flow chamber and sterilized labware. Steps for analyses were:

1. Dilution in 0.9% sterile physiological saline (0.45 ml + 1.2 ml)
2. Polarity fractionation: 1.2 ml hexane + 120 ul of RD1 sample
3. Extraction of hydrophilic aqueous phase
4. UV absorbance and fluorescence spectroscopy scanning
5. Extraction and quantification of RNA in the sample
6. Electron and optical microscopy of aqueous phase

Images of the aqueous fraction of were subsequently obtained by optical microscopy to visually assess the possible presence of nanoparticles. The observations under optical microscope of revealed abundance of transparent 2D laminar objects that show great similarity with images of graphene oxide (GO) from literature (Xu et al, 2019), and with images obtained from rGO standard (SIGMA)(Figures 2a,b). Images of big transparent sheets of variable size and shapes were obtained, showing corrugated and flat, irregular 2D objects. Smaller sheets of polygonal shapes, also similar to flakes described in literature as GO (Xu et al, 2019) can be revealed with dark field microscopy (Fig 2c). All these GO-like laminar objects were widespread in the aqueous fraction of the sample and no component described by the registered patent can be associated with both types of laminar objects.

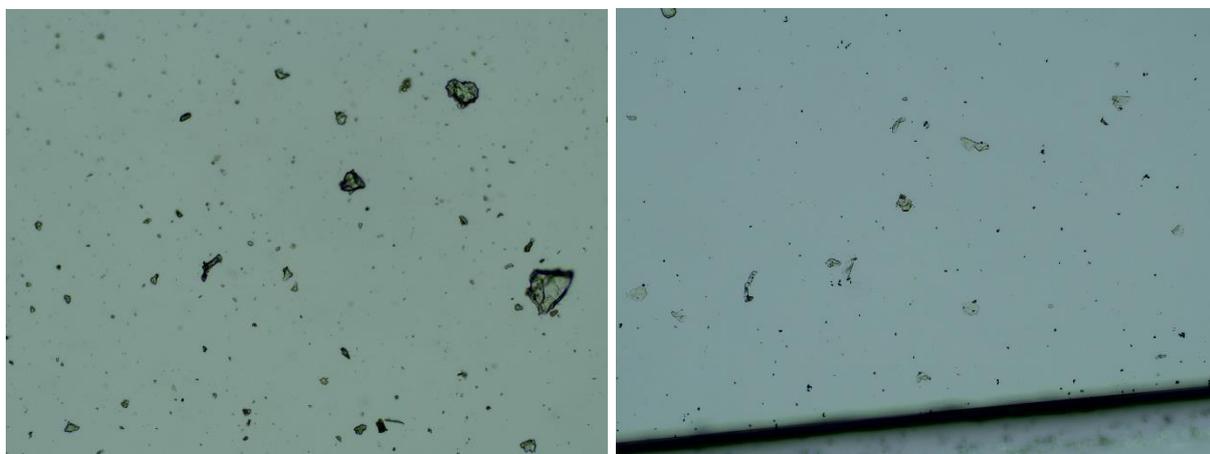


Fig 2a. Aqueous fraction image from Pfizer vaccine sample (left) and from reduced graphene oxide (rGO) standard previously sonicated (right) (Sigma-777684). Optical microscopy, 100X (Campra, 2021)

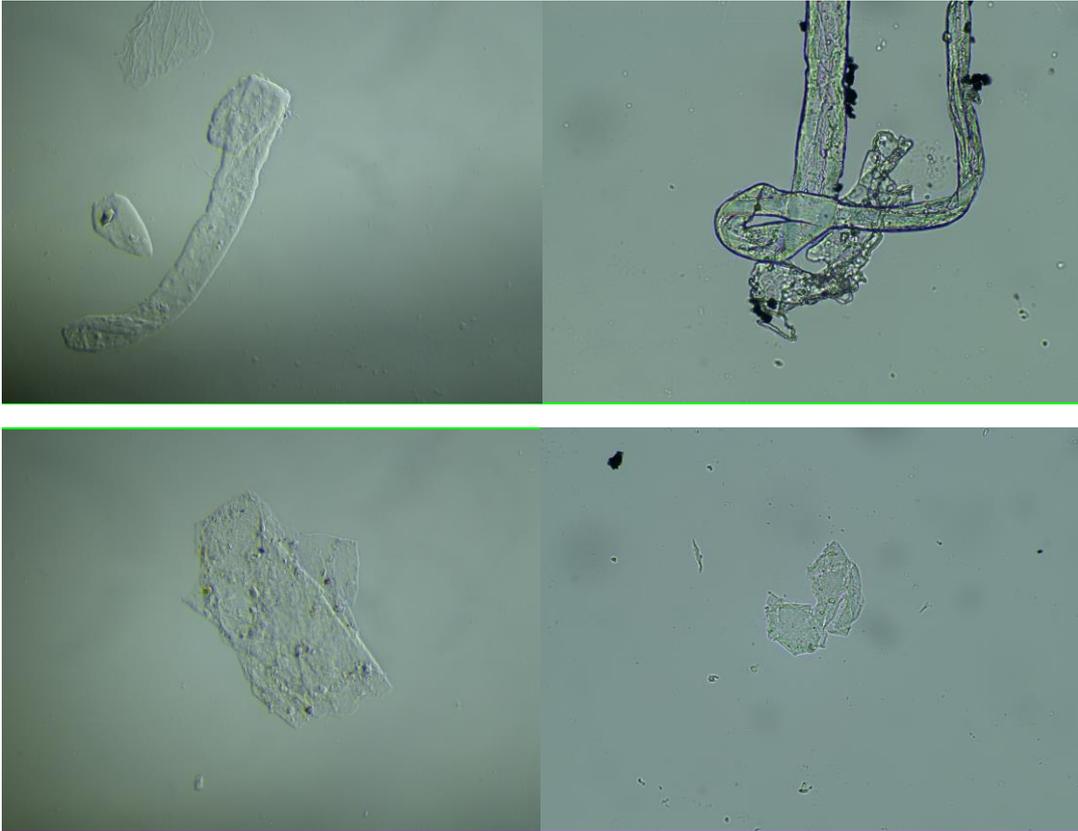


Figure 2b. Aqueous fraction images of big sheets from Pfizer vaccine sample (left) and sonicated reduced graphene oxide (rGO) standard (Sigma-777684). Optical microscopy, 600X (Campra, 2021)



Figure 2c. Aqueous fraction images of small laminar objects from Pfizer vaccine sample. Dark field microscopy, 600X (Campra, 2021)

Electronic Transmission Microscopy (Campra, 2021)

In figure 3 We show here 3 images of Comirnaty sample with increasing levels of magnification. TEM images of the aqueous fraction from sample show high similarity with TEM images of graphene oxide from the literature (figure 4, from Choucair et al, 2009). An intricate matrix or mesh of folded translucent flexible sheets can be observed, with a mixture of darker multilayer agglomerations and lighter coloured unfolded monolayers. Darker linear areas appear due to local overlap of sheets and local arrangement of individual sheets in parallel to the electron beam. After the mesh, a high density of unidentified rounded and elliptical clear shapes appears, possibly corresponding to holes generated by mechanical forcing of the mesh during treatment.

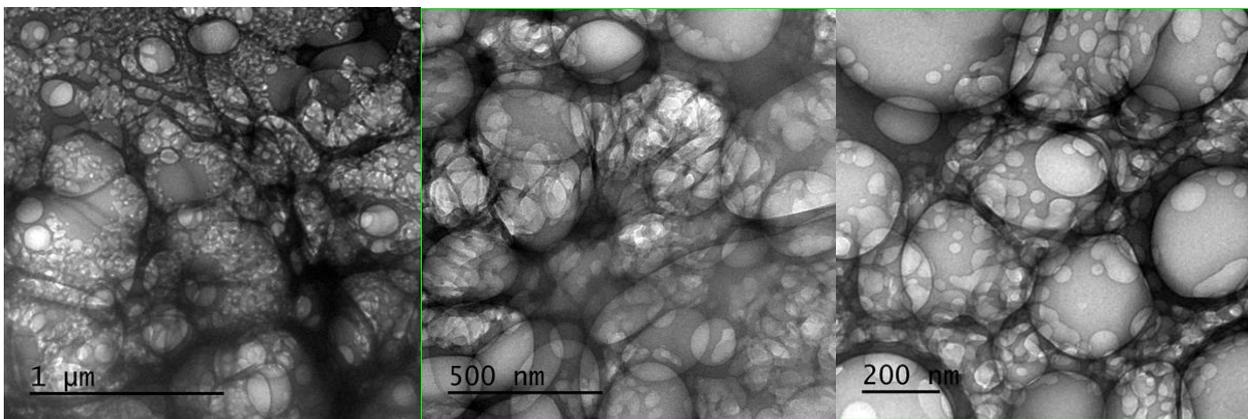


Fig. 3. Aqueous fraction from ComirnatyTM sample. Electronic microscope (TEM), JEM-2100Plus, at 200 kV (Campra, 2021)

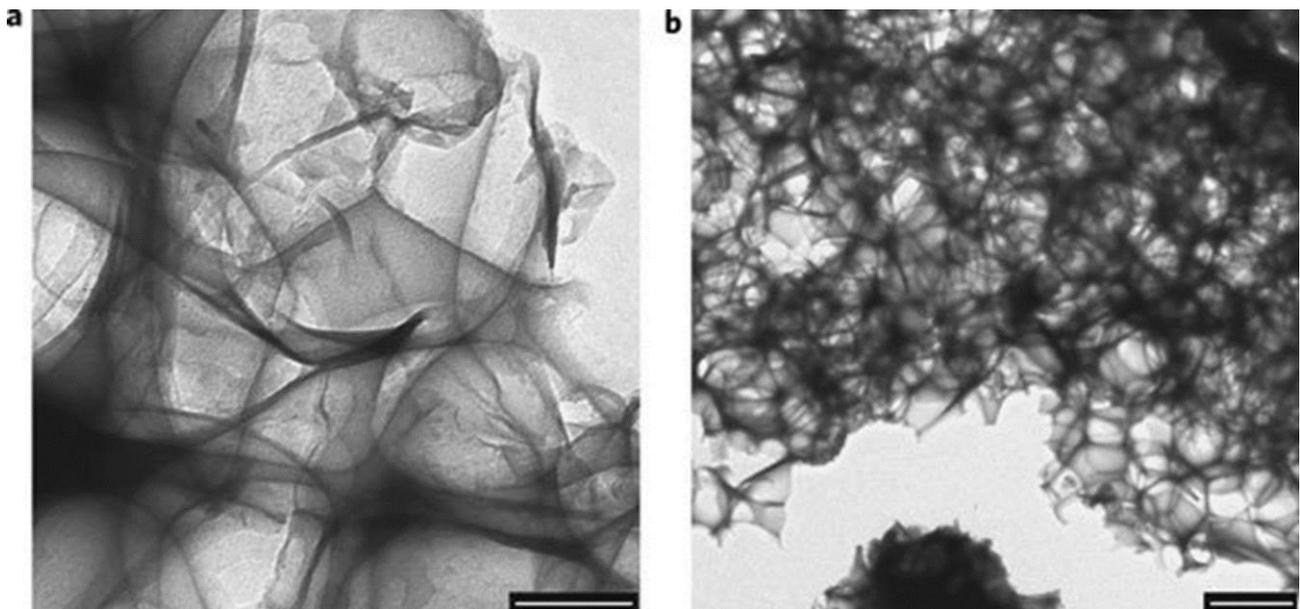


Figure 4. TEM images of graphene oxide at two magnifications (from Choucair et al 2009).

Though these sheets look quite similar to rGO described in literature, for a definitive identification of graphene by TEM, it is necessary to further fractionate the samples and obtain a characteristic hexagonal electron diffraction pattern. Due to lack of sample for further processing it has not been possible to obtain it by now. We obtained this pattern from the standard rGO sample (data not shown).

Quantification of RNA in Comirnaty (Campra, 2021)

Quantification of RNA in the sample was carried out with conventional protocols (Fisher). According to NanoDrop™ 2000 spectrophotometer calibration check specific software (Thermofisher), the UV absorption spectrum of total aqueous fraction was correlated to 747 ng/ul of unknown absorbing substances (Fig. 5). However, after RNA extraction with commercial kit (Thermofisher), quantification with RNA specific Qbit fluorescence probe (Thermofisher) showed that only 6 ng/ul could be related to the presence of RNA. The spectrum was compatible with the peak of rGO at 270nm. According to microscopic images presented here, most of this absorbance might be due to graphene-like sheets, abundant in suspension in the sample. This thesis was further supported by high fluorescence from the sample with maximum at 340 nm, in accordance with peak values for rGO. It must be reminded that RNA does not show spontaneous fluorescence under UV exposure.

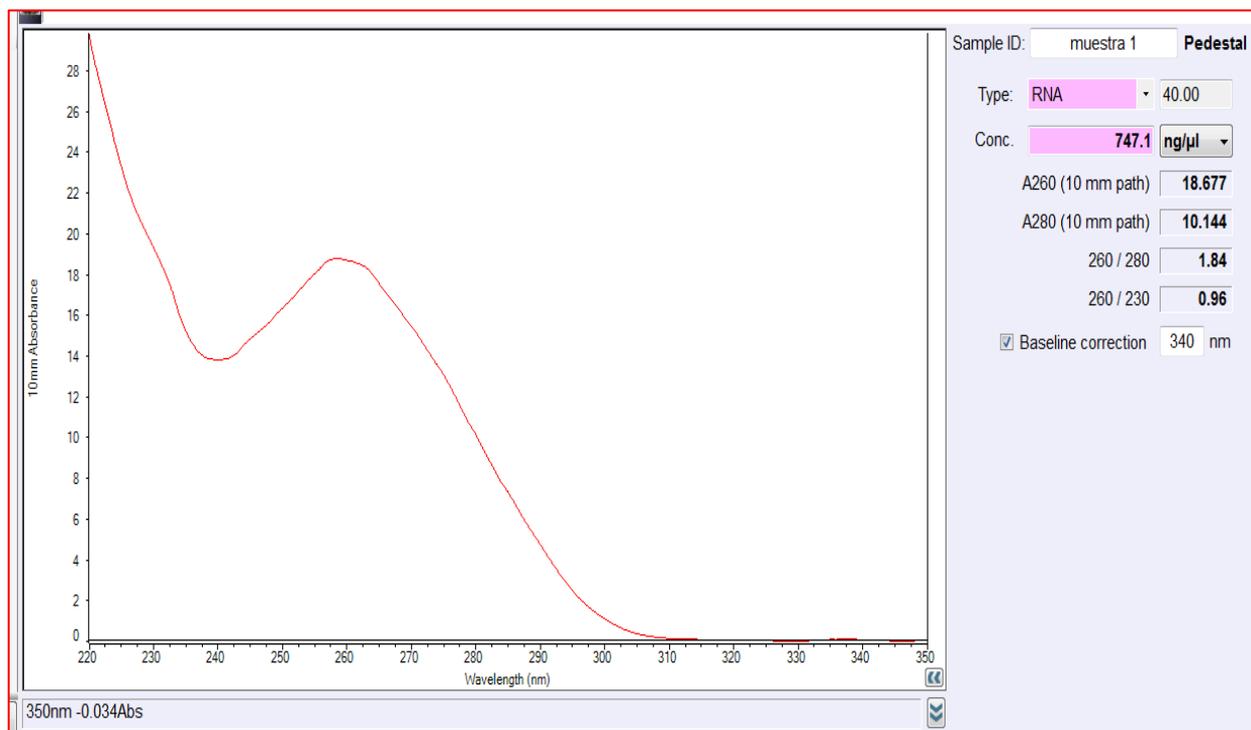


Fig. 5. UV spectrum of aqueous fraction of Pfizer vaccine sample. (Campra, 2021)

References for the preparation 1,2,3

UV fluorescence of aqueous fraction

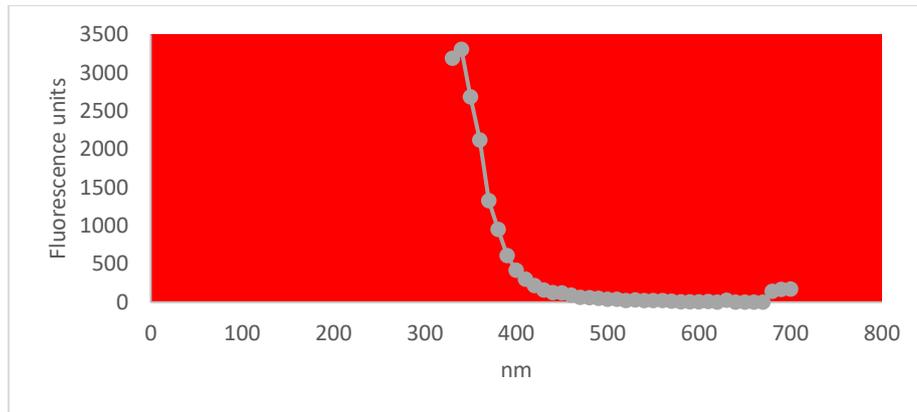


Figure 6. UV fluorescence spectra of aqueous fraction of Comirnaty™ vial. Excitation wavelength: 300 nm. (Campra, 2021)

UV absorption and fluorescence spectra were obtained with Cytation 5 Cell Imaging Multi-Mode Reader Spectrophotometer (Biotek) (Fig. 6). UV absorbance spectrum confirmed a maximum peak at 270 nm, compatible with presence of rGO. UV fluorescence maximum at 340 nm is also compatible with the presence of significant amounts of rGO in the sample (Bano et al, 2019).

Environmental Scanning Electron Microscope coupled with an x-ray microprobe of an Energy Dispersive System

The following images show different particles identified in Pfizer, Moderna, Astrazeneca, Janssen “vaccines” analyzed under an Environmental Scanning Electron Microscope coupled with an x-ray microprobe of an Energy Dispersive System that reveals the chemical nature of the debris observed.

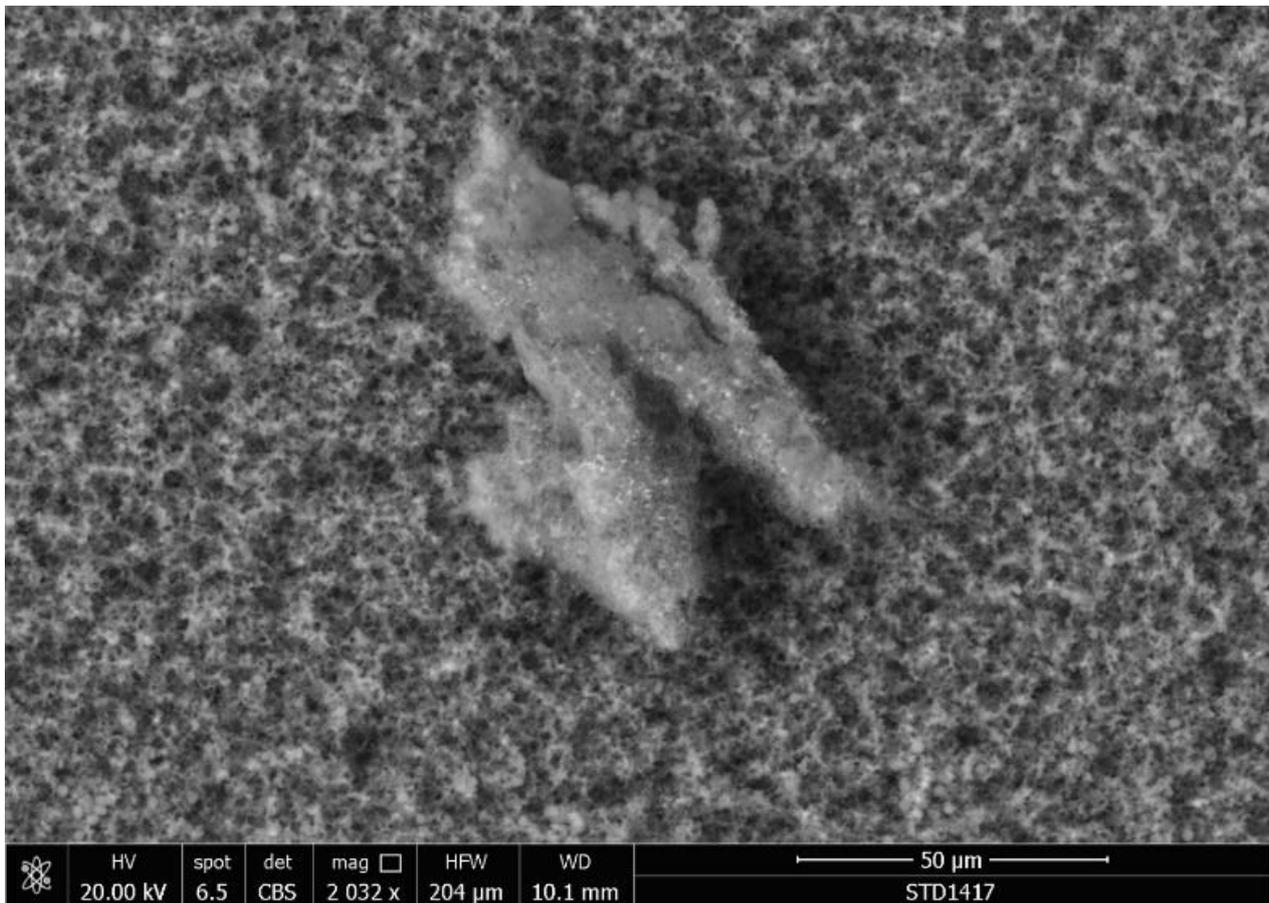
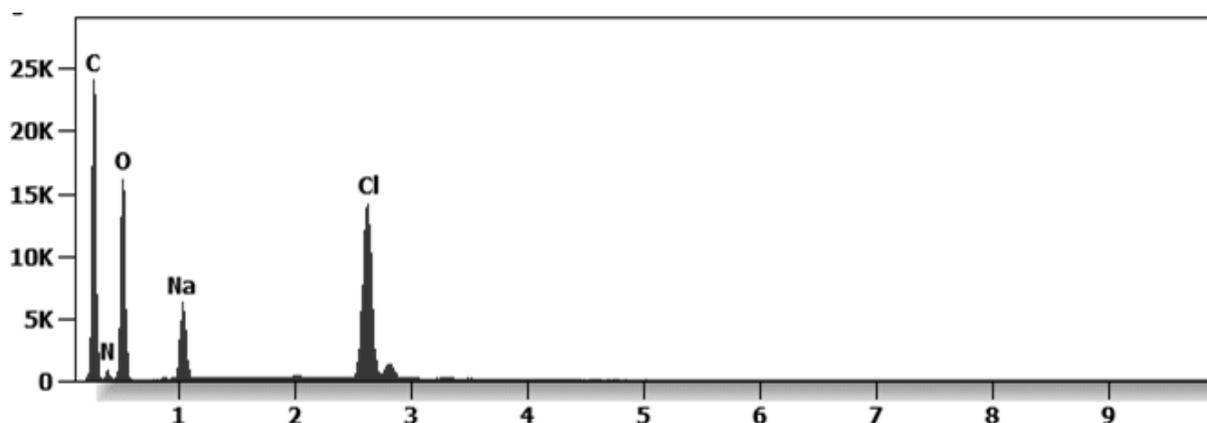


Figure 7. Scanning Electron Microscope image of a nanoparticle in Pfizer vaccine

The Fig. 7 shows a cluster of graphene nanoparticles in a Pfizer vaccine. They appear to be aggregated. The EDS spectrum reports that presence of Carbon, Oxygen and Sodium-Chloride since the product is diluted in saline solution.



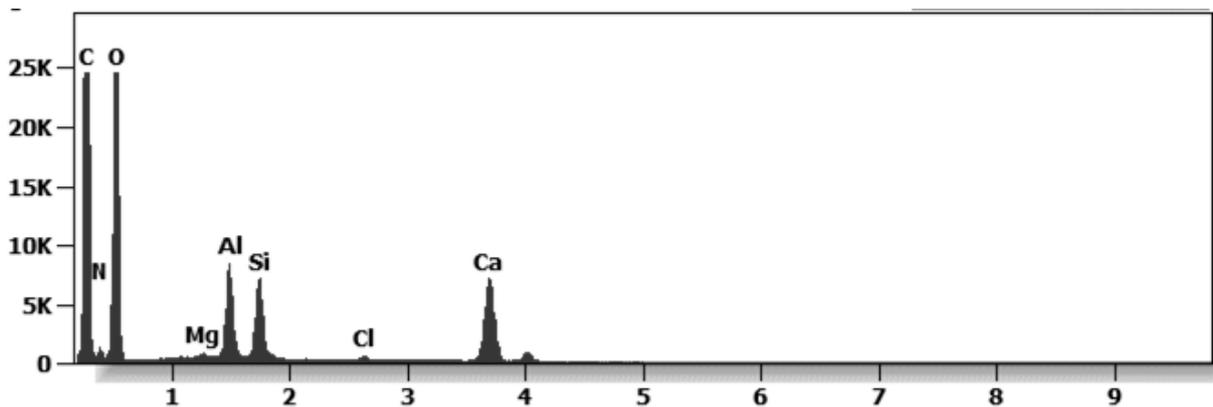
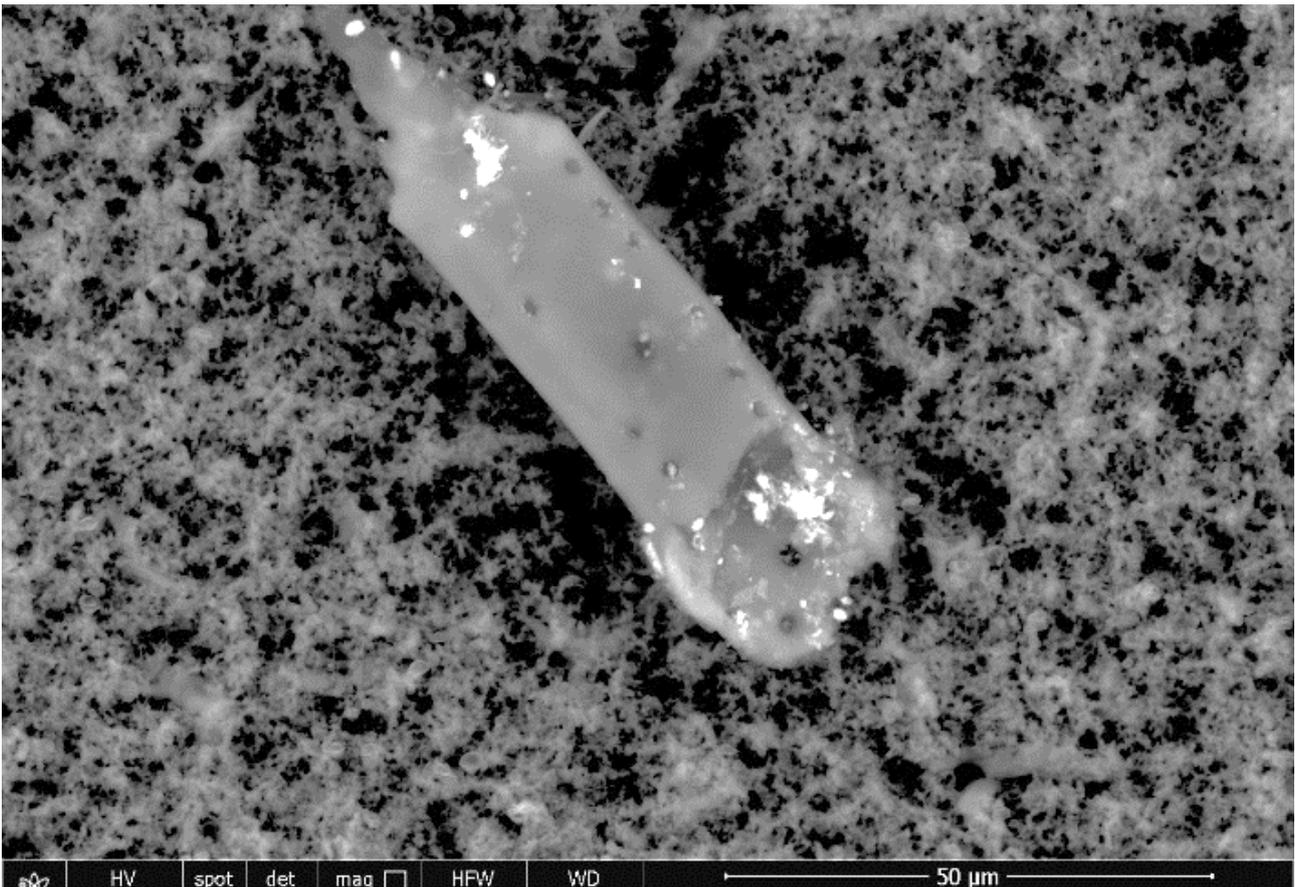


Fig.8 EDS spectrum of a Pfizer “vaccine” under an ESEM microscope coupled with an EDS x-ray microprobe (X axis =KeV, Y axis = Counts)

Fig.8 shows a strange foreign body, a 50-micron long body can be observed, a mysterious presence in a vaccine. Surely engineered with strange holes on the surface. The white debris are composed of Carbon, Oxygen, Aluminium, Silicon, Calcium, Magnesium, Chlorine and Nitrogen.

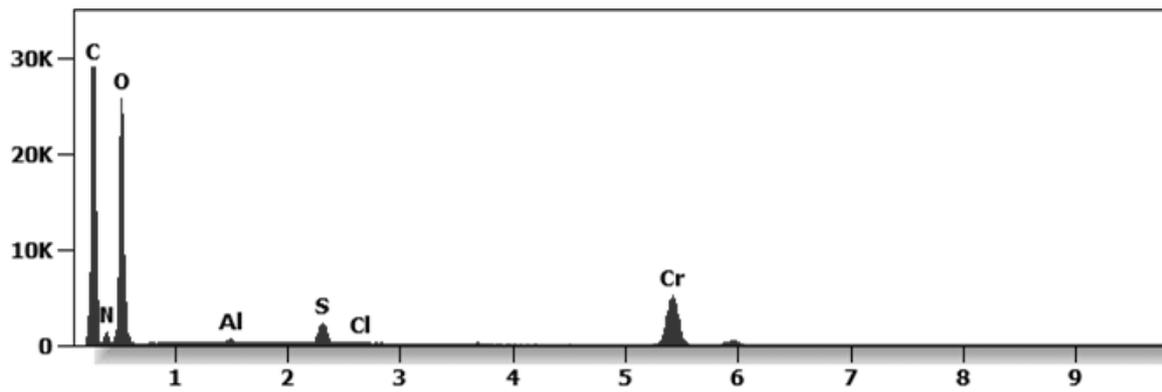
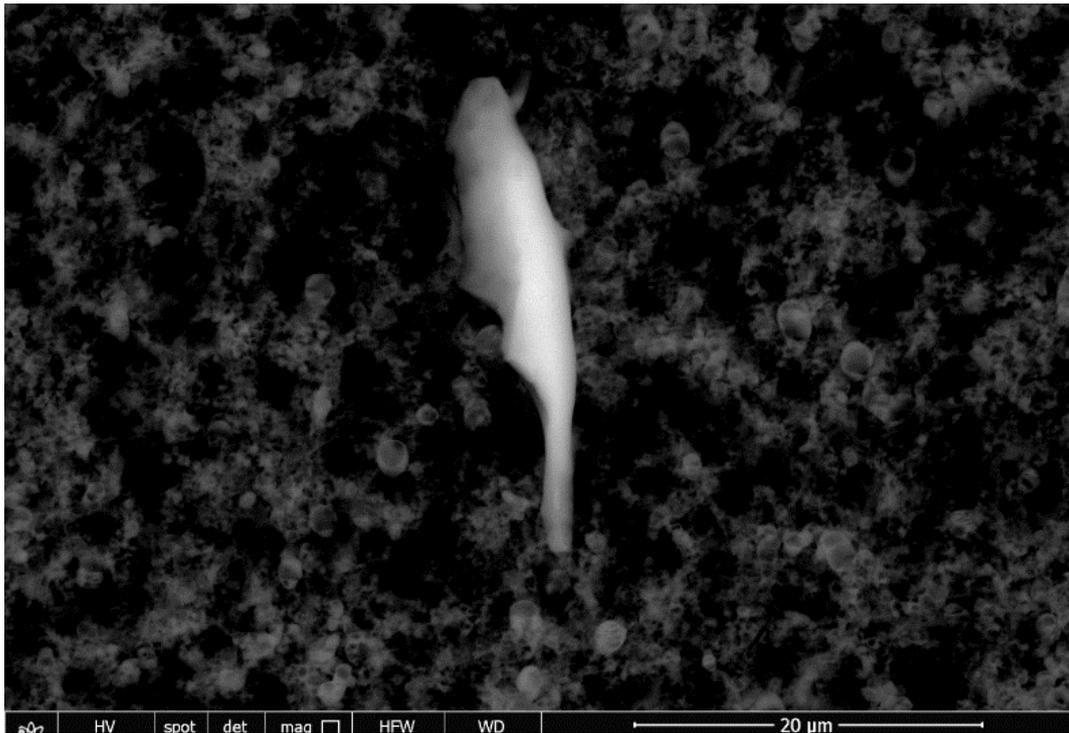


Fig. 9 Sharp debris of 20micron of length identified in a Pfizer “vaccine”. It is composed of Carbon, Oxygen Chromium, Sulphur, Aluminium, Chloride, Nitrogen.

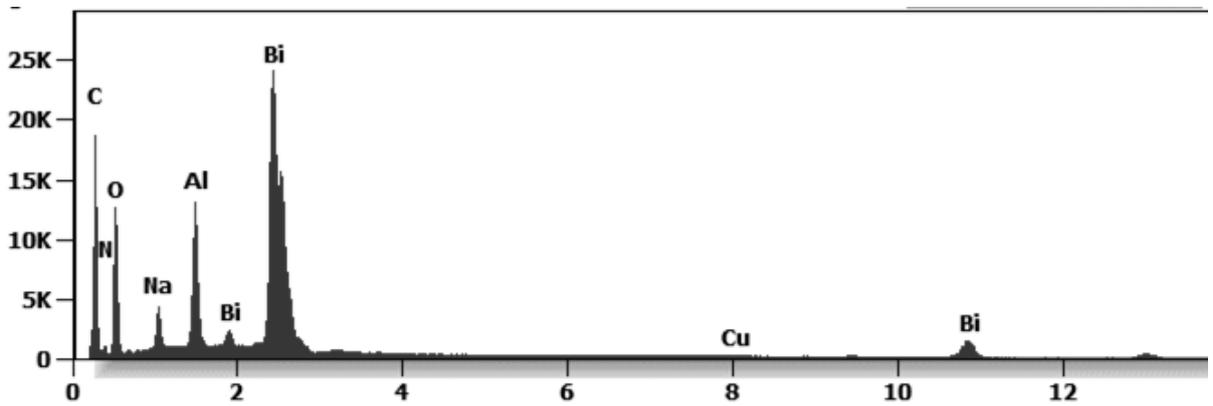
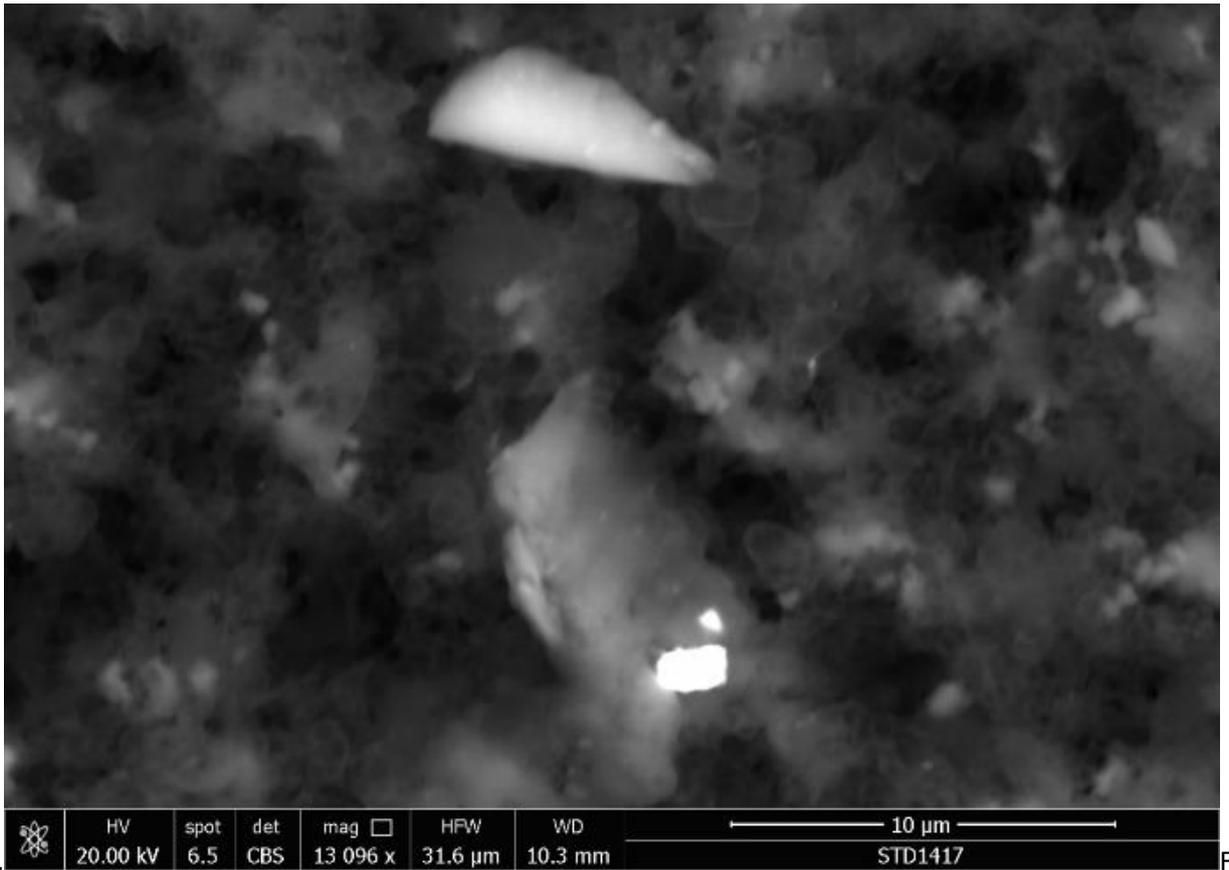


Fig. 10 Debris identified in a Pfizer “vaccine”. The white 2-micron-long particle is composed of Bismuth, Carbon, Oxygen, Aluminium, Sodium, Copper, Nitrogen.

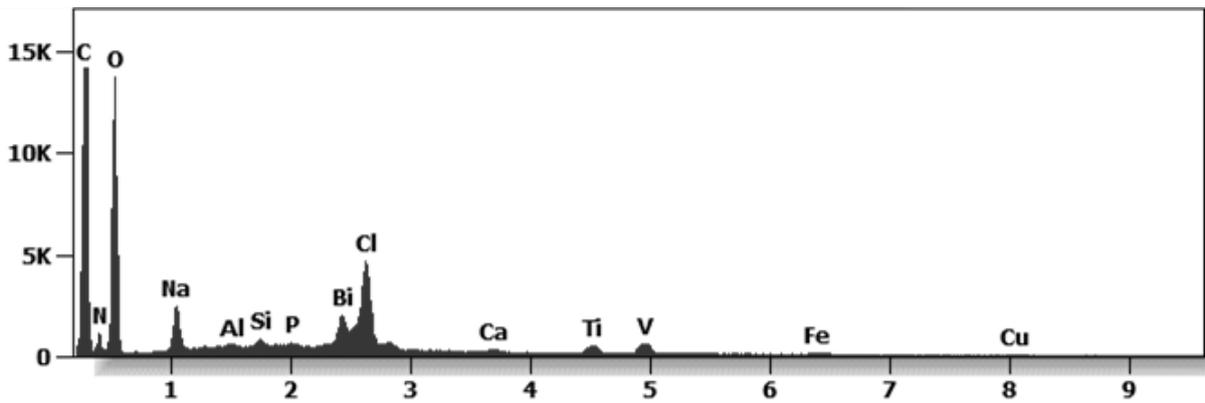
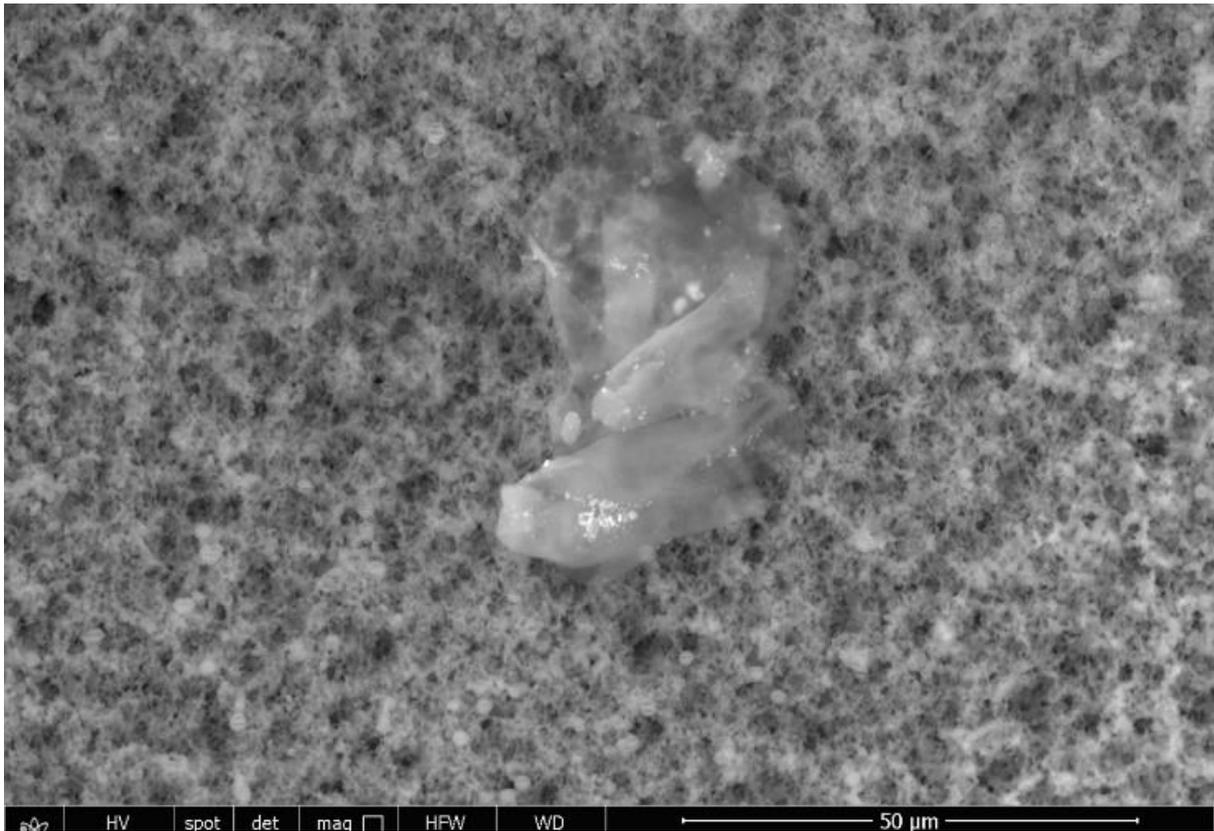


Fig. 11. Organic (Carbon-Oxygen-Nitrogen) aggregate with embedded nanoparticles of Bismuth-Titanium-Vanadium -Iron-Copper Silicon-Aluminium embedded in Pfizer “vaccine”.

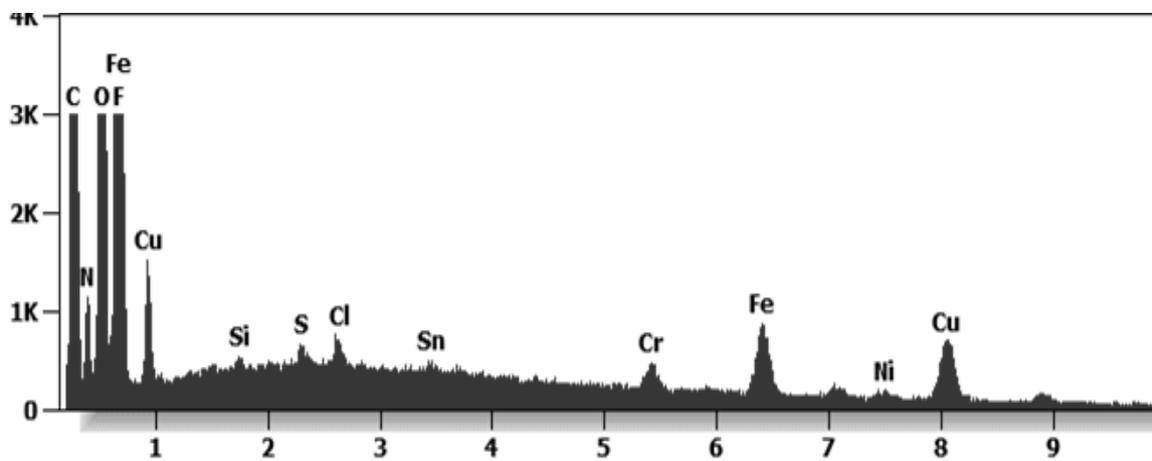
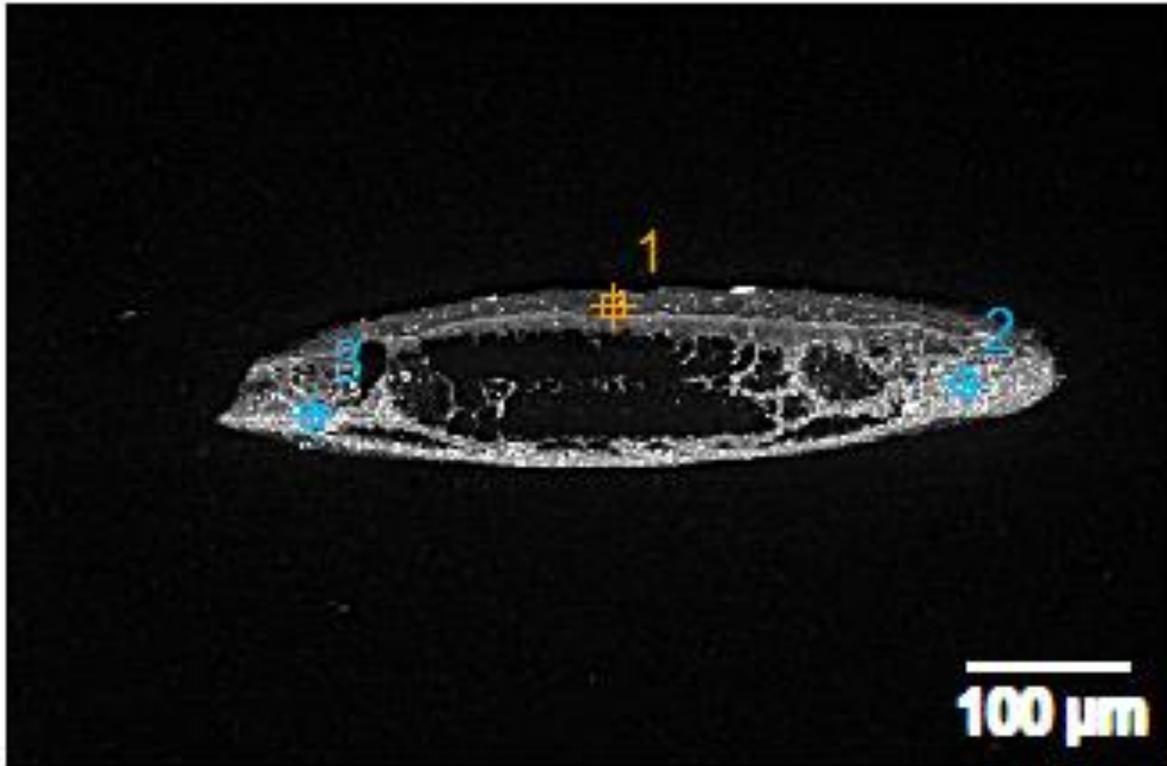


Fig. 12. Aggregate of Iron-Chromium-Nickel (stainless steel) nanoparticles embedded identified in an Astrazeneca “vaccine”.

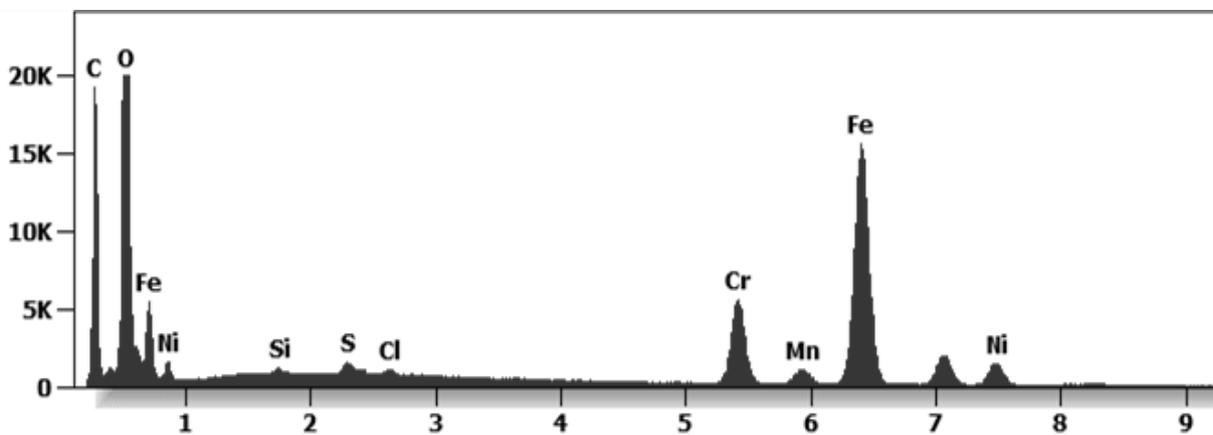
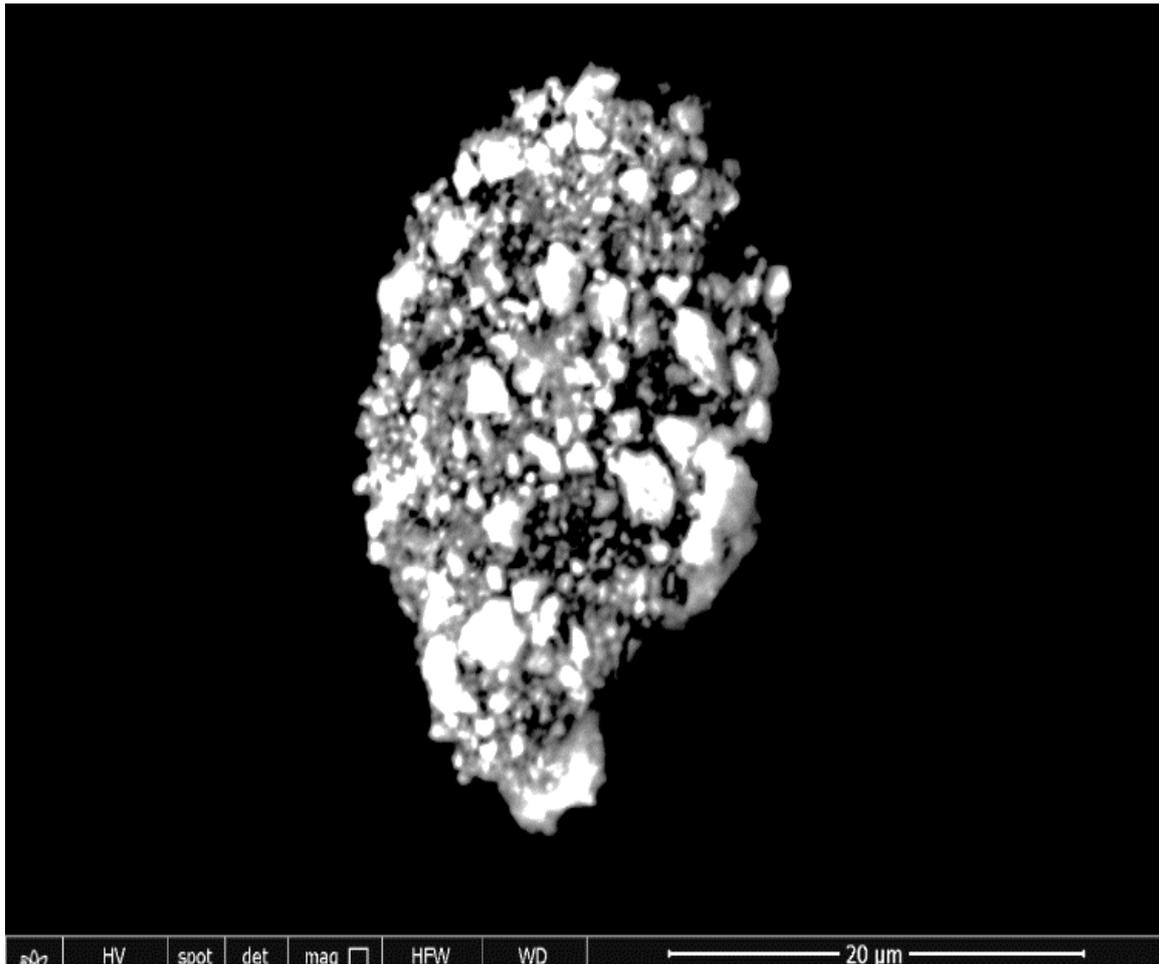


Fig.13. An organic-inorganic aggregate identified in a Janssen “vaccine”. The particles are composed of stainless .

Some aggregates , as fig. 13, are magnetic and can trigger biological problems inside the blood circulation due to possible interactions with other dipoles.

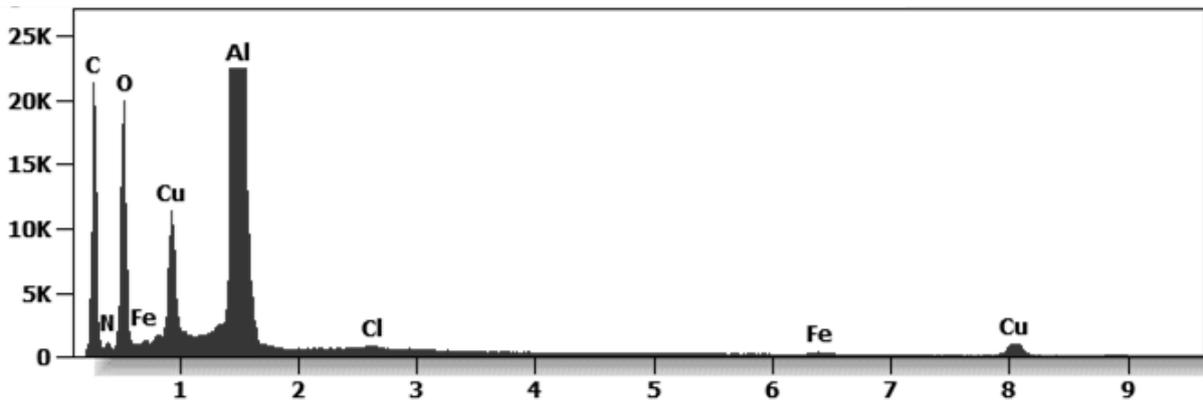
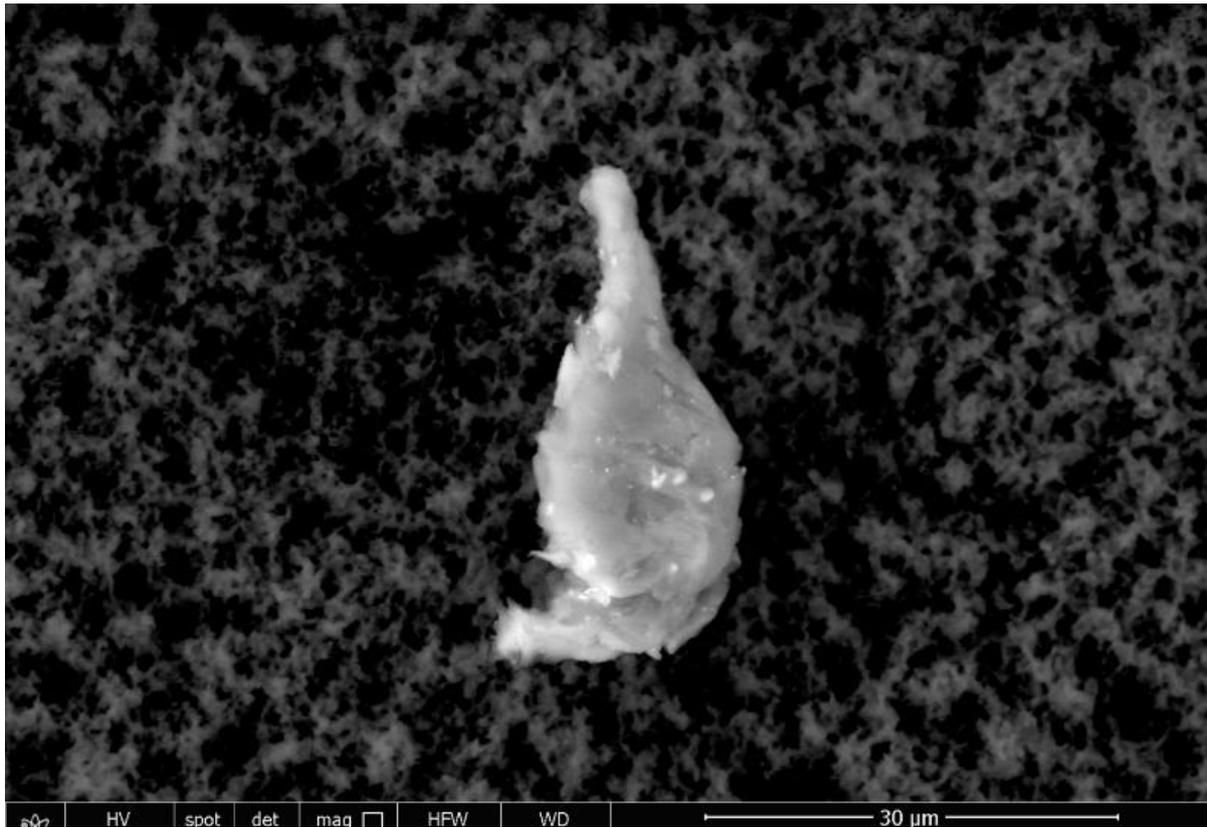


Fig. 14. A mixed entity (organic-inorganic) identified in a Moderna “vaccine”. It is a carbon-based substrate where some nanoparticles are embedded. The nanoparticles are composed of Aluminium-Copper-Iron-Chlorine.

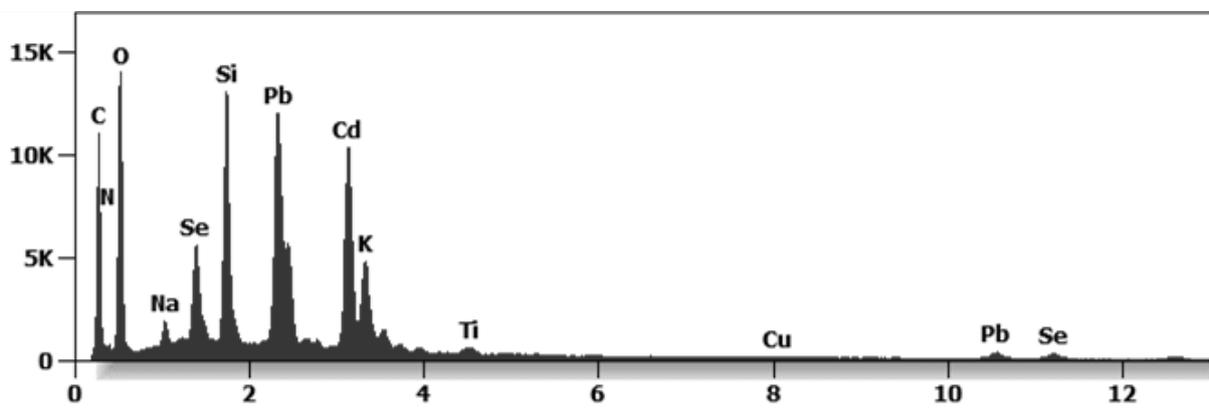
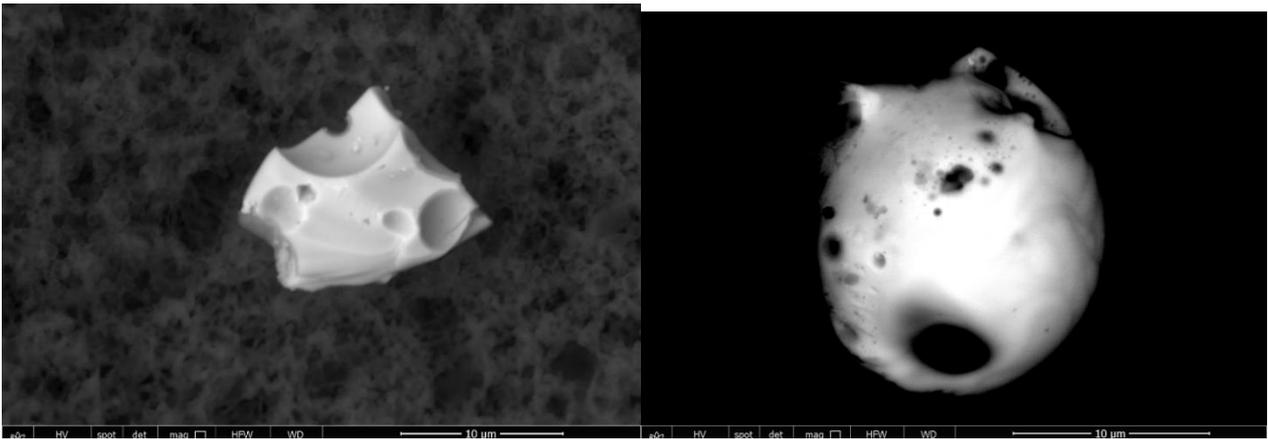


Fig. 15 EDS analysis of Moderna “vaccine”.

Many foreign bodies were identified with a spherical morphology with some bubble-shaped cavities. They are composed of Silicon-Lead-Cadmium-Selenium. This highly-toxic composition reminds that of quantum dots (cadmium selenide).

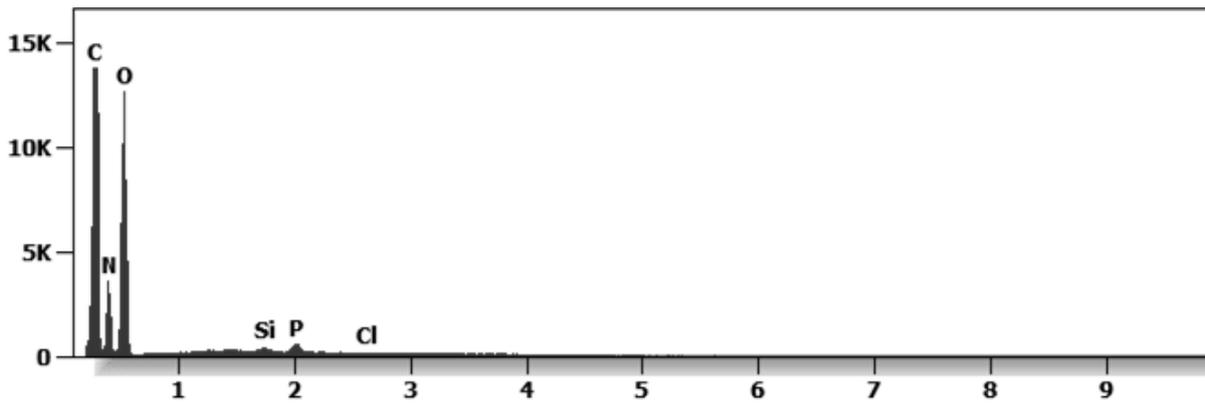
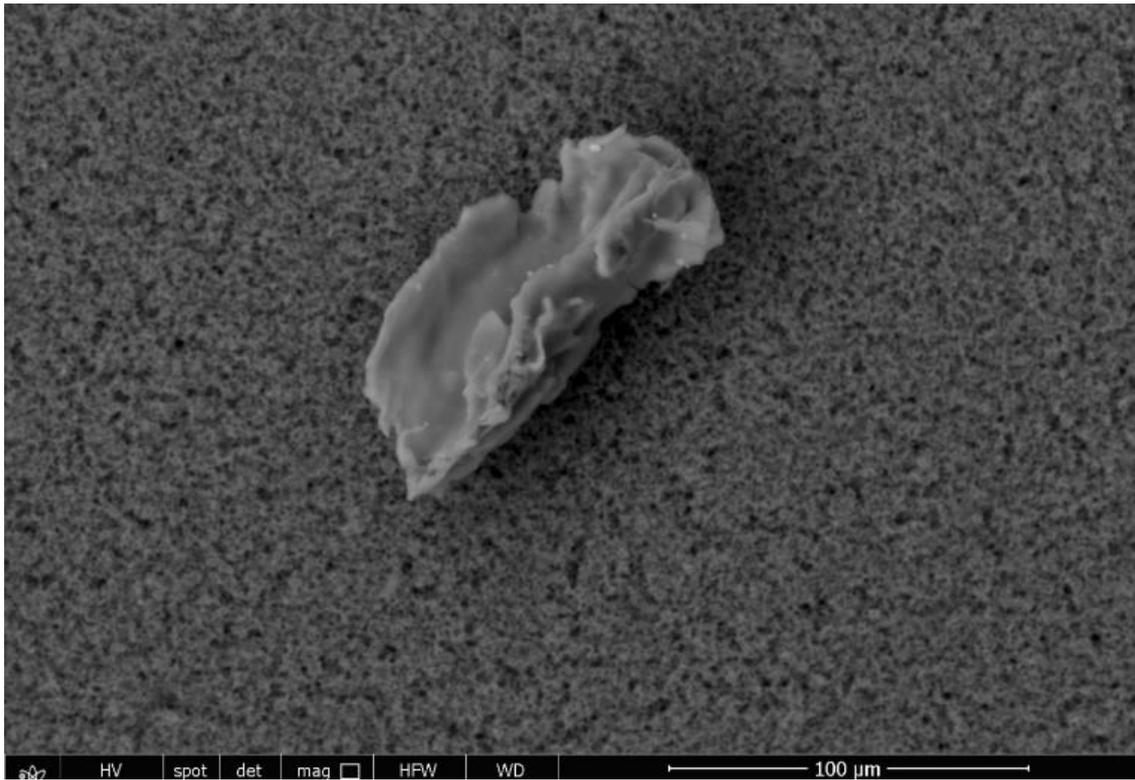


Fig. 16. Moderna “vaccine” shows a 100-micron entity that reminds that of graphene. It is composed of Carbon and Oxygen with contamination of Nitrogen, Silicon, Phosphorus, Chlorine.

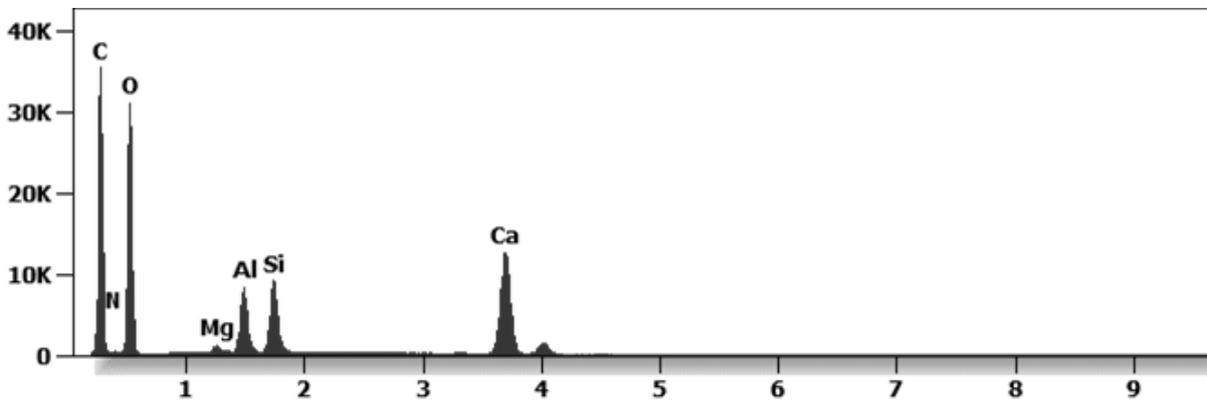
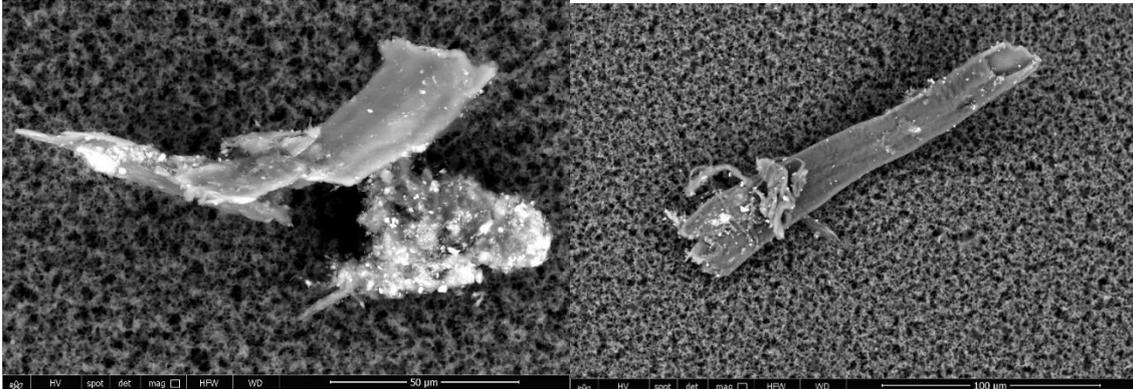


Fig. 17. Carbon-based entities in a Moderna “vaccine” mixed with aggregates filled with Aluminium-silicate particles

XRF (X-ray fluorescence)

XRF analyses reveal the organic part of which the AstraZeneca “vaccine” is composed.

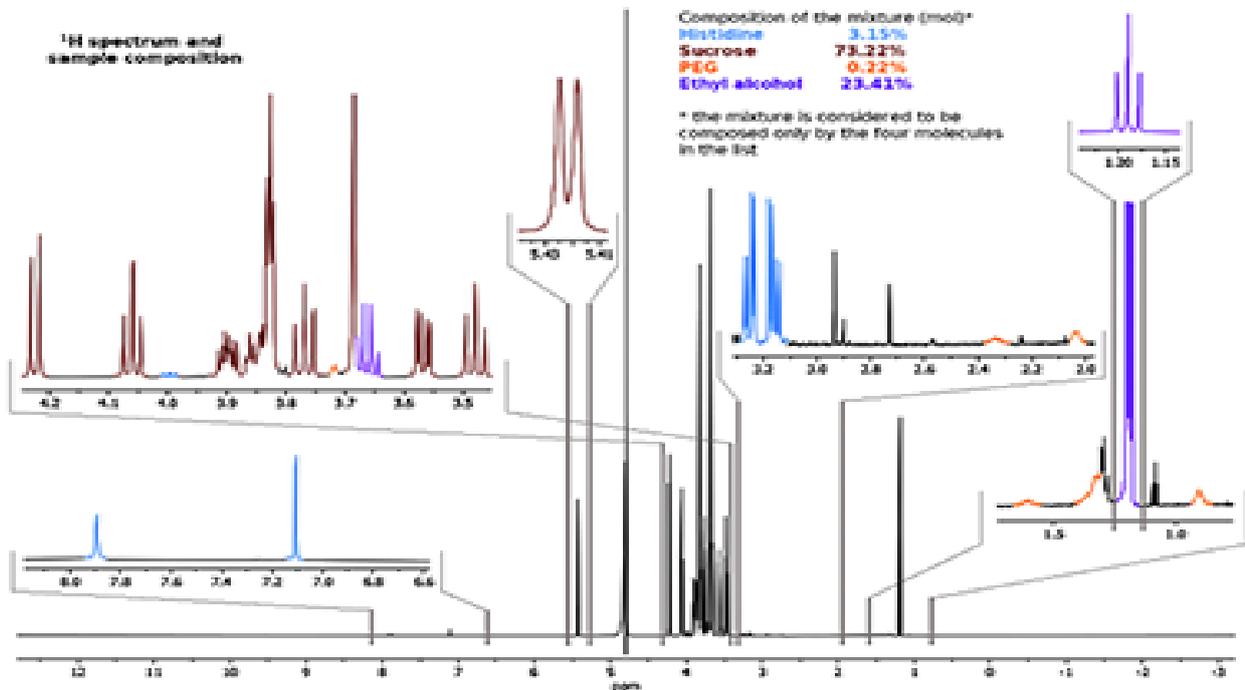


Fig. 18: ¹H spectrum of AstraZeneca vaccine

By means of XRF Instrumentation the following molecules were identified: histidine, sucrose, PEG (poly-ethylene glycol) and ethylene alcohol. The presence of sucrose and PEG are declared in the data sheet of this “vaccine”. The NMR and XPS signals of aqueous signal respond to sucrose pattern, so further processing and fractionation of samples is needed to obtain spectra from other unknown substances in the samples with these techniques.

In Fig. 18, different colours are used for the four molecules identified by means of reference spectra. Relative concentration is calculated on integrals of reference signals for molecules in a quantitative spectrum acquired with a duty cycle of 5 seconds because the longest calculated T1 was 5sec.

Discussion

In our random sampling of COVID19 vaccines, we have found preliminary evidences of the presence of nanoparticles of potential toxicity that are not declared in the technical data sheets of manufacturers, such as graphene oxide and heavy metals. Since they are not included in the documentation presented to the regulatory agencies in USA and EU (FDA, EMA, etc.) for the emergency authorizations obtained for urgent use in humans, **HERE WE CLAIM THAT extensive, independent COUNTER-ANALYSIS MUST BE DONE** to all COVID19 vaccines, including properly designed sampling of different batches throughout the period of vaccination.

It is unknown whether these nanoparticles were introduced by contamination during the process of manufacturing, or they were intentionally included in the formulations. As far as we know, **NO OFFICIAL COUNTER-ANALYSIS FROM REGULATORY AGENCIES** has been done or published. Reviewing the process of emergency authorization, it seems that control the final product before its distribution **IS ONLY BASED ON DOCUMENTS PROVIDED BY MANUFACTURERS**. That means that consumers are not fully informed of the real content of the products, so that informed consent to participate in experimental drugs has not been presented to participants. Possible adverse effects, including death, notified to VAERS and other systems might be caused by the inoculation of those contaminants into the body. It must be observed that the components that are not declared but we identified are not biocompatible and some have also a mechanical impact once they are inside the blood circulation, especially in contact with the vascular endothelium, with potential thrombotic activity. The nanoparticles found in Pfizer and Astrazeneca “vaccines”, can represent a potential risk for the human body, due to their known toxicity. They can be responsible of the formation of thrombi since they are thrombogenic. A further risk is represented by the extravasation of the particles with an ensuing possible haemorrhage. Once in the blood circulation, the particles can be carried also to the brain. In this case the patient can suffer from a stroke, and/or a cerebral haemorrhage. If the damage of the endothelium caused by the particles occurs in the heart, there is a high probability of contracting a myocarditis. In addition to all that, the toxicity of graphene is well-known (Volkov et al, 2017), so its presence in batches should be carefully monitored according to our preliminary observations.

References

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Métodos de cuantificación de RNA:

- 1-Extraction RNA Kit <https://www.fishersci.es/shop/products/ambion-purelink-rna-mini-kit-7/10307963>
- 2- NanoDrop™ <https://www.thermofisher.com/order/catalog/product/ND-2000#/ND-2000>
- 3-QUBIT2.0: <https://www.thermofisher.com/es/es/home/references/newsletters-and-journals/bioprobos-journal-of-cell-biology-applications/bioprobos-issues-2011/bioprobos-64-april-2011/the-qubit-2-0-fluorometer-april-2011.html>