

# **An Examination of the Scientific Evidence for the Existence of the SARS-Cov-2 Virus and Its Relation to COVID-19**

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## **Abstract**

Following increased respiratory illness in Wuhan, China, a novel coronavirus was isolated, and named 'SARS-Cov-2'. This was then determined to be the cause of the respiratory illness now termed 'COVID-19'. This paper argues that there is no evidence in the scientific literature to suggest that the SARS-Cov-2 virus exists, let alone causes illness. The fact remains that SARS-Cov-2 has never been purified, despite this being the agreed upon procedure for proving the existence of a virus. This paper argues that a virus is not the cause of COVID-19 and therefore alternate possible causes must be examined.

## **Introduction**

The following is a brief timeline<sup>1</sup> of events leading up to the present global pandemic. In December 2019, Chinese authorities in Wuhan began observing an increase in cases of pneumonia. On December 31, researchers claimed to have ‘isolated’ a new coronavirus, which was given the name ‘SARS-Cov-2’. It was then very quickly asserted that SARS-Cov-2 was the cause of the respiratory illness (now termed COVID-19). On January 11, China reported its first COVID-19 death. By the end of January, the ‘virus’ had spread to other countries including Japan, South Korea, the United States and Thailand. On March 11, 2020, the WHO declared COVID-19 to be a ‘pandemic’.<sup>2</sup> Cases of COVID-19 have now been reported in nearly every single country in the world, with most governments adopting draconian measures including lockdowns, and other restrictions, in order to combat the spread of the illness.

While such drastic measures have been instituted to combat the spread of COVID-19, it should be noted that no evidence exists in the scientific literature to support the hypothesis of a new pathogenic coronavirus.

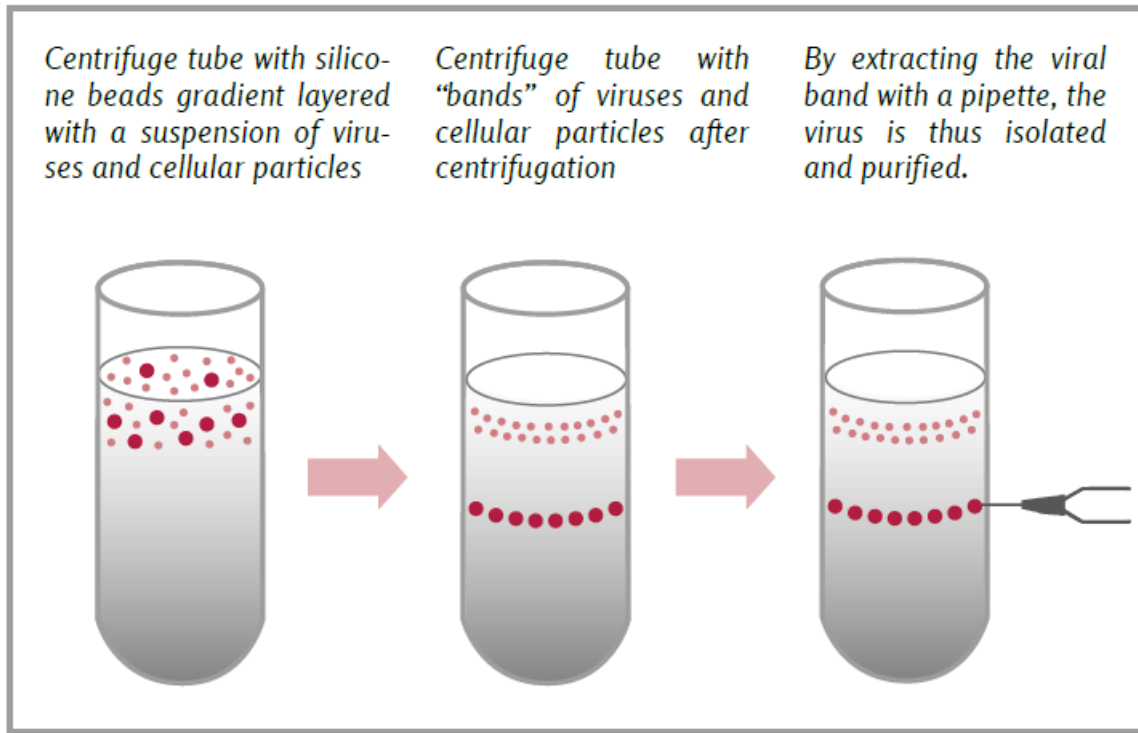
## **Proving the existence of a virus**

Viruses are microscopic particles that consist of DNA or RNA encased in a protein coat.<sup>3</sup> All virologists accept that to prove the existence of a virus, one must purify the viral particles.<sup>4,5</sup> The purification process is required for a number of reasons. These include:

1. To separate viral particles from cellular material. Since viruses and cells are composed of the same biological components, purification is crucial in order to determine which nucleic acids and proteins are viral.
2. To prove that the particles are infectious. Otherwise, it cannot be ruled out that other factors are responsible for the production of new particles.
3. To be able to demonstrate the pathogenicity of the virus.
4. To obtain viral proteins and nucleic acid sequences for use in tests.

The established method used to purify viral particles is known as density gradient centrifugation. The first step is the preparation of a sucrose solution such that its density gradually increases from the top to the bottom of the test tube. Viral culture supernatant is then placed on top of the sucrose solution. The test tube is then spun at high speeds in a centrifuge. Over several hours, each constituent reaches a place where its density is equal to that of the surrounding liquid. The constituents then become concentrated in various density

‘bands’ in the test tube. The band containing the viral particles is then removed and analysed under an electron microscope to reveal purified viral particles. Chemical analysis including full virus characterisation can then be carried out.



The density gradient centrifugation process. Reproduced from Lanka (2015).<sup>6</sup>

Currently there is no such study that has attempted to purify SARS-Cov-2 using the above described method. Despite this, the initial study that was carried out in Wuhan titled ‘A pneumonia outbreak associated with a new coronavirus of probable bat origin’<sup>7</sup> is often cited as ‘proof’ that SARS-Cov-2 causes COVID-19, yet the authors of that study made no such claim. They state:

“There are still many urgent questions that remain to be answered. The association between 2019-nCoV and the disease has not been verified by animal experiments to fulfil the Koch’s postulates to establish a causative relationship between a microorganism and a disease.”

It should be noted that even the conclusion of an ‘association’ between SARS-Cov-2 and COVID-19 is speculation without purifying the virus first to prove its existence.

## Exosomes share many similarities with viruses

Exosomes have a variety of important functions in the body. These include carrying signals and molecule to other cells, and acting like ‘sponges’ to protect cells from toxic damage.<sup>8,9</sup>

Much remains unknown about extracellular vesicles and as such, they are a continual topic of biochemical research.

Several scientific papers have noted similarities between exosomes and viruses. One such paper, titled ‘Extracellular vesicles and viruses: Are they close relatives?’<sup>10</sup>, notes:

“It has recently been found that EVs can have important biological functions and that in both structural and functional aspects they resemble viruses.”

Extracellular vesicles are also known to be released when cells are under stress from toxins, including antibiotics.<sup>11</sup> Therefore, the addition of antibiotics to cell cultures may induce the release of exosomes, which are then mistaken for viral particles.

Exosomes are also known to be released by various different cell types and are similar in size to viruses. Exosomes have also been examined to be generated along similar pathways to certain viruses.<sup>12</sup>

No study thus far has purified SARS-Cov-2 and therefore, there is no way to tell whether electron microscope images show extracellular vesicles (exosomes) or viral particles. This is demonstrated by examining the below images. Figure 1 is claimed by study authors to show intracellular SARS-Cov-2 virions while Figure 2 shows exosomes. It is argued that the particles represented in these two images are indistinguishable.

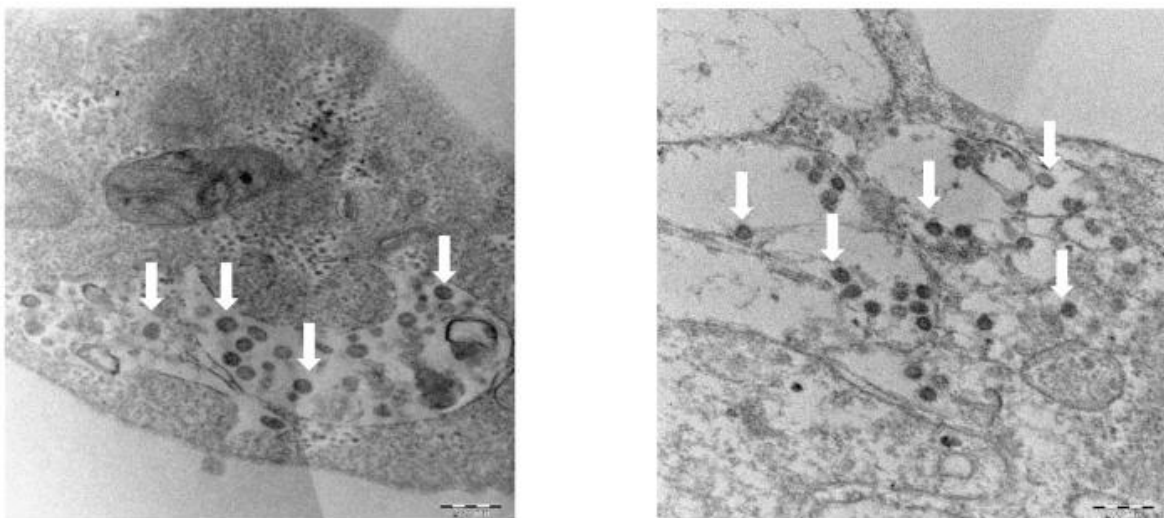


Figure 1 – claimed to show intracellular SARS-Cov-2 virions. Reproduced from Kim et al (2020)<sup>13</sup>

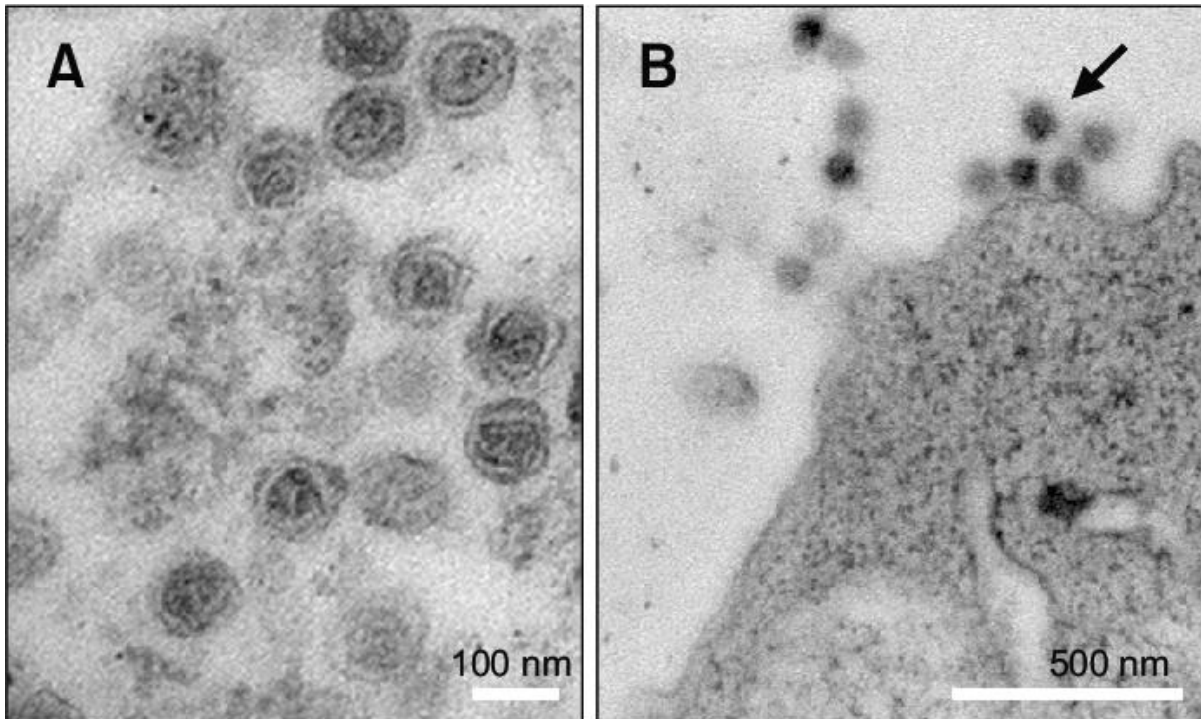


Figure 2 – exosomes. Reproduced from Choi & Mun (2017)<sup>14</sup>

### **Current studies fail to prove the existence and therefore pathogenicity of the SARS-Cov-2 ‘virus’**

As previously stated, the scientific literature shows no attempt to purify the SARS-Cov-2 virus using the accepted method of density gradient centrifugation. Since the ‘virus’ has never been purified, there is no proof that sequences assumed to belong to ‘SARS-Cov-2’ in fact do so.

In Brent Leung’s documentary on the HIV virus,<sup>5</sup> he asks Dr Luc Montagnier what the purpose of purification is. Montagnier answers, “to make sure you have a real virus”. The importance of purification is made clear by Fredricks and Relman (1996) in their paper ‘Sequence-Based Identification of Microbial Pathogens: a Reconsideration of Koch’s Postulates’,<sup>15</sup> in which they state that (emphasis mine):

“...with only amplified sequence available, the biological role or even **existence** of these inferred microorganisms remains unclear.”

While no study has purified SARS-Cov-2, there are a number of studies that have claimed to ‘isolate’ the virus. It may be common to think of ‘isolation’ and ‘purification’ as being the same thing, but they are not. The term ‘isolation’ is a jargon term in virology, assigned to data that virologists claim ‘prove’ the existence of a virus.<sup>16</sup> This is an important distinction

to make because any papers that claim to have ‘isolated’ SARS-Cov-2 are misleading and do not show proof of the existence of a virus. This can only be done through purification, which has not yet been attempted by any research team.

Furthermore, it should be noted that any claims in the scientific literature of SARS-Cov-2 being the ‘causative agent’ of COVID-19 are not only misleading but blatantly false. In their paper titled ‘Identification of Coronavirus Isolated from a Patient in Korea with COVID-19’<sup>13</sup> Kim et al (2020) falsely state that:

“Following the first outbreaks of unexplained pneumonia in Wuhan, China, in late 2019, a new coronavirus was identified as the causative agent in January 2020.”

The authors include a reference to back up this extremely bold statement, which is a paper by Paraskevis et al (2020)<sup>17</sup> attempting to describe the genome of the alleged SARS-Cov-2 virus. This paper, despite being cited as proof that SARS-Cov-2 causes COVID-19, offers no evidence of SARS-Cov-2 being the ‘causative agent’ of anything. In fact, the authors of said paper state that:

“The unique genetic features of 2019-nCoV and their potential association with virus characteristics and virulence in humans remain to be elucidated.”

It must be emphasised once again that causation cannot be proven without purification, as stated by Fredricks and Relman (1996):

“The absence of a purified intact microorganism prevents experimental reproduction of disease (Koch’s third postulate).”

## **Conclusion**

Based on the data currently available in the scientific literature, it must be concluded that whatever SARS-Cov-2 is, it is not the cause of COVID-19, nor can it be regarded as a ‘virus’. It is thus imperative that alternate causes of increased illness be examined.

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