

肺炎疫情- 2019 新型冠狀病毒疾病 (COVID-19) 與 SARS-CoV-2

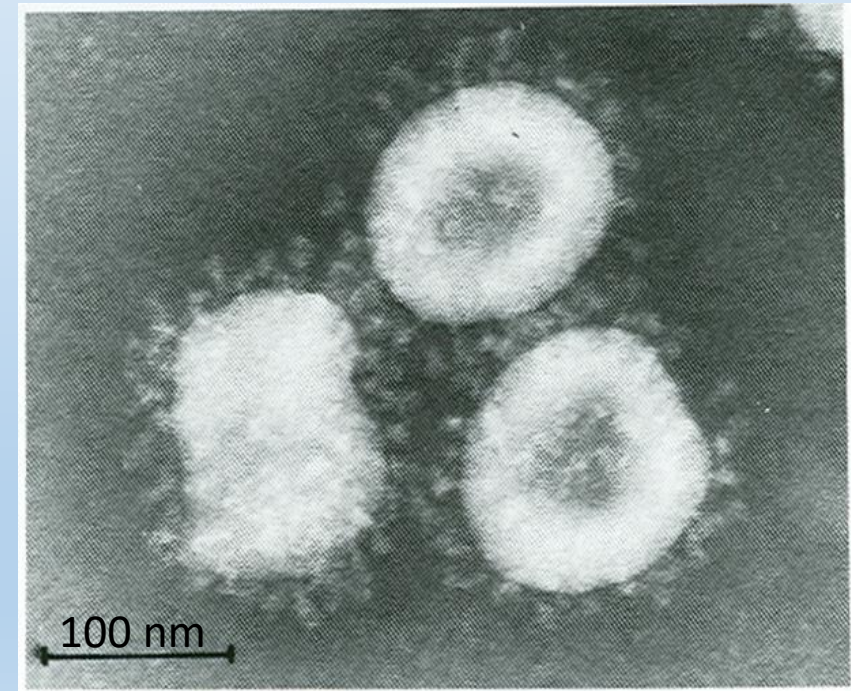
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Characteristics

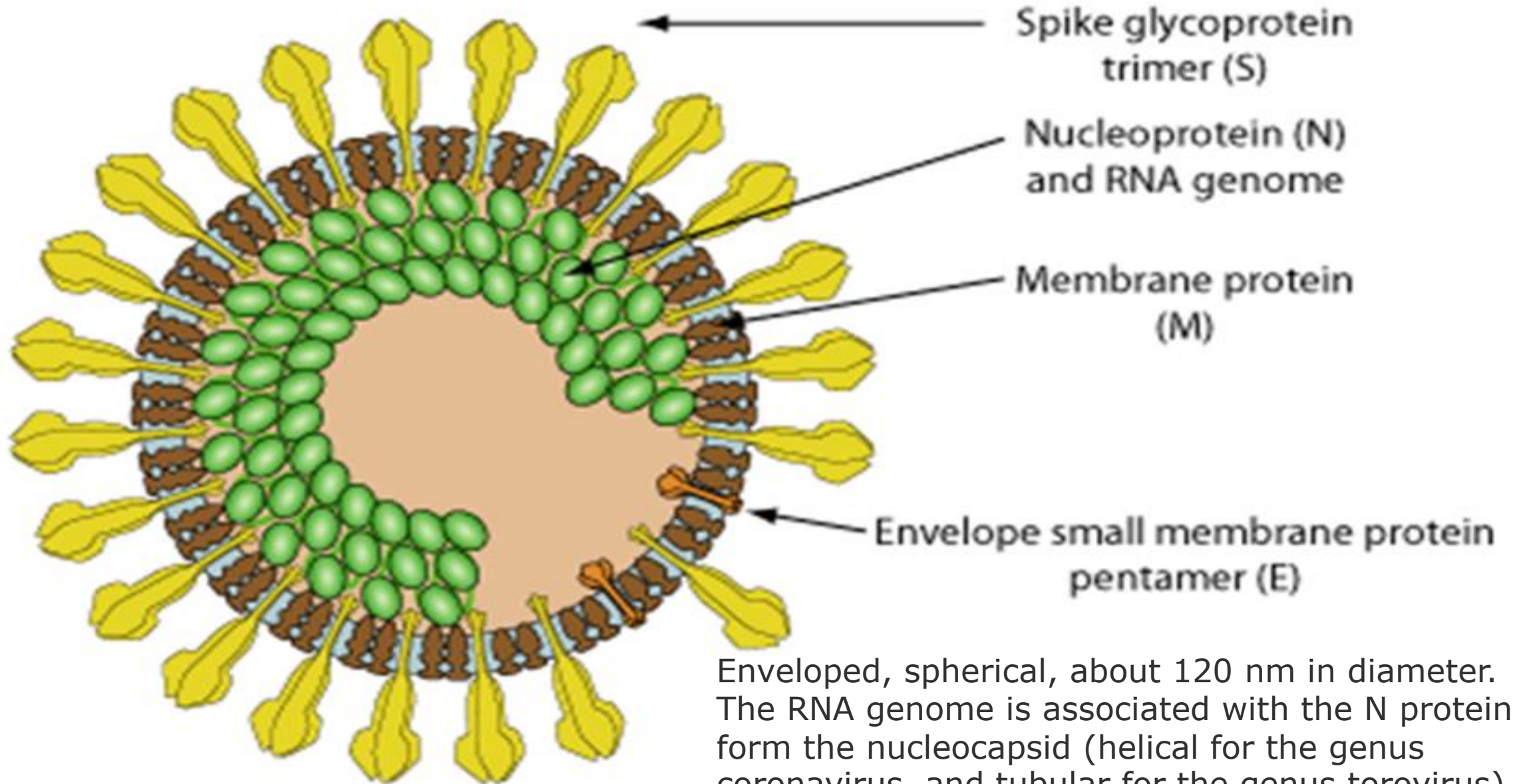
Coronaviridae

- 2 subfamilies, 5 genera, 27 subgenera, 49 species
- 50th: SARS-CoV-2
(Severe Acute Respiratory Syndrome)

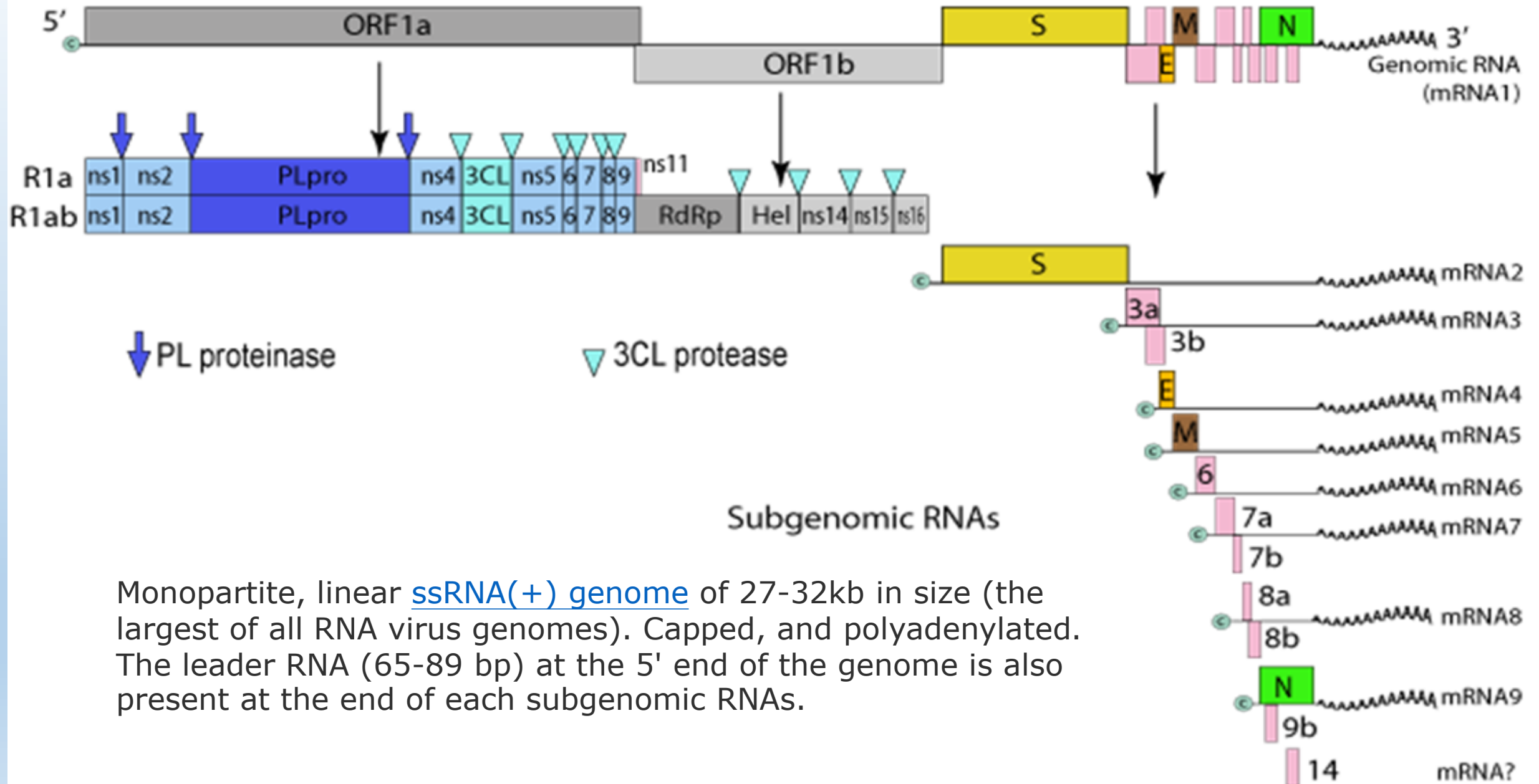
doi: <https://doi.org/10.1101/2020.02.07.937862>



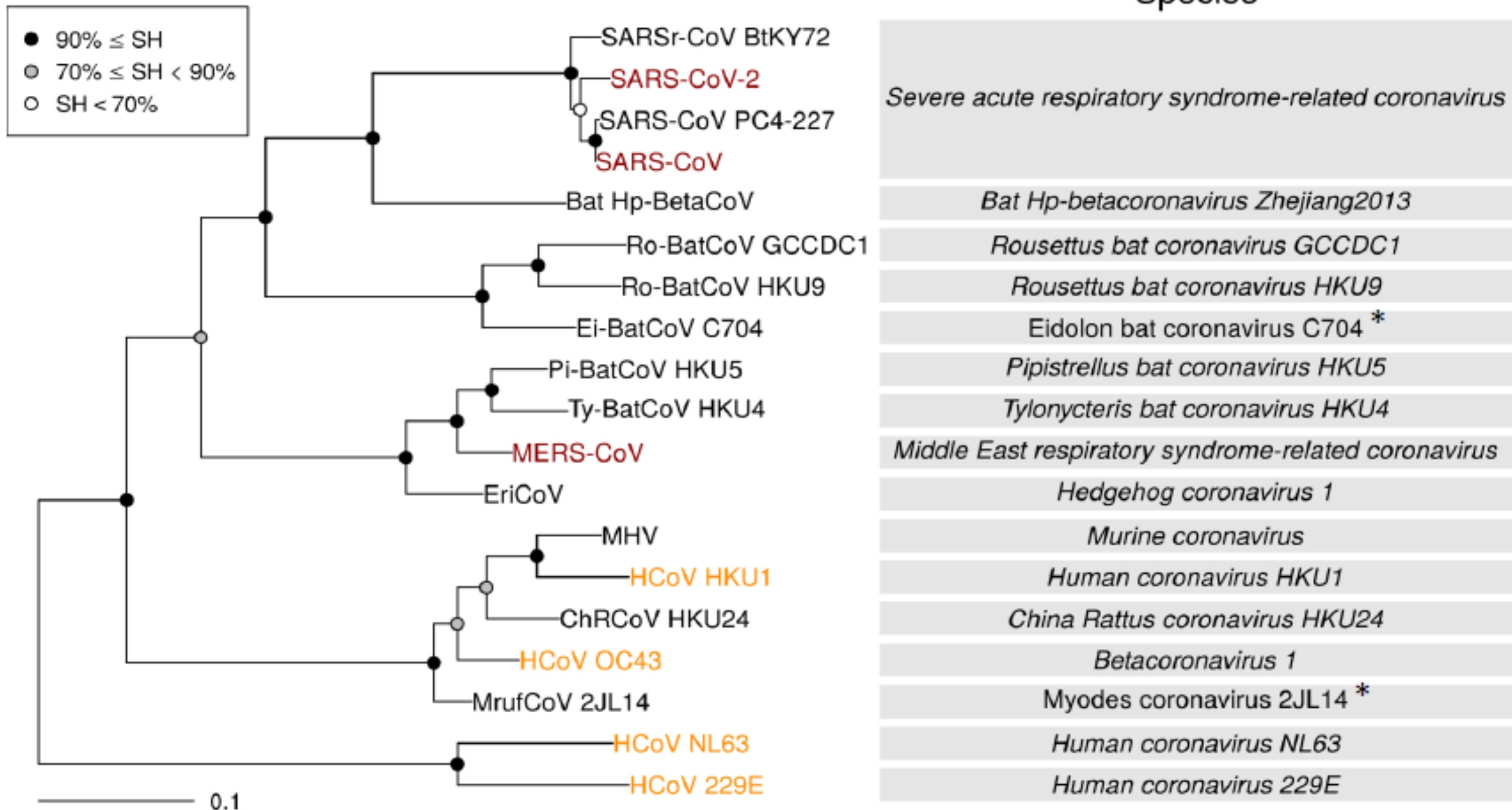
SARS coronavirus

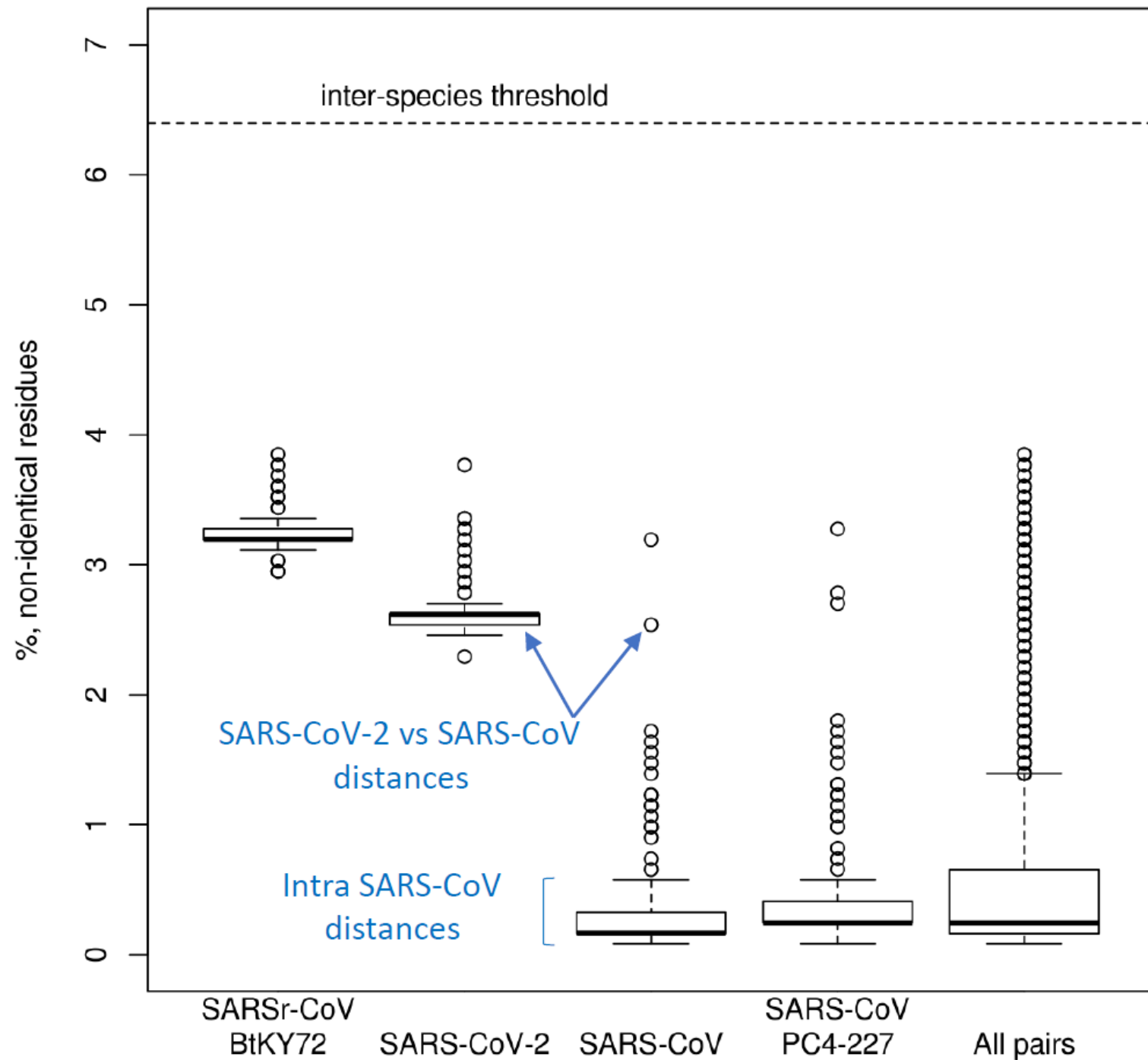


SARS Coronavirus



Monopartite, linear [ssRNA\(+\) genome](#) of 27-32kb in size (the largest of all RNA virus genomes). Capped, and polyadenylated. The leader RNA (65-89 bp) at the 5' end of the genome is also present at the end of each subgenomic RNAs.





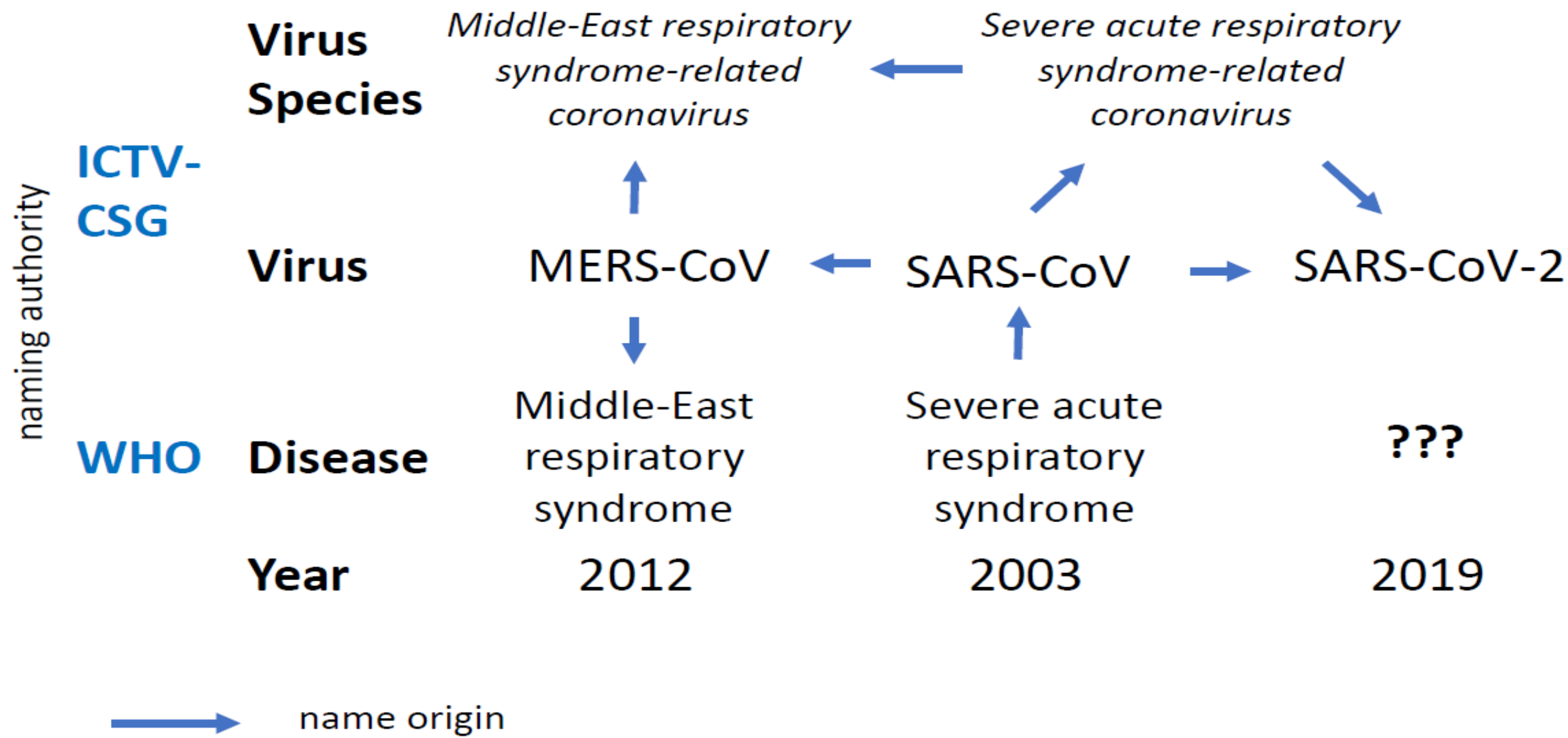
Pairwise distances between selected viruses within the species of Severe Acute Respiratory Syndrome (SARS)-related coronavirus.

A

Subgenus	<i>Merbecovirus</i>		<i>Sarbecovirus</i>	
Species				<i>Severe acute respiratory syndrome-related coronavirus</i>
Virus	MERS-CoV	SARS-CoV	SARS-CoV-2	
ICTV-CSG	Yes	Yes	No	Novel Virus?
WHO	Yes	Yes	Yes	
Year	2012	2003	2019	

Virus novelty and naming of the three zoonotic coronaviruses emerging in the first decades of the 21st century. Year, indicates the year in which the virus was first identified. (A) Independent assessments of virus novelty by the ICTV-CSG and WHO performed during the three outbreaks came to different conclusions. Vertical arrows indicate the degree of virus novelty according to taxonomy. doi: <https://doi.org/10.1101/2020.02.07.937862>

B



(B) History of coronavirus naming during the three zoonotic outbreaks in relation to virus taxonomy and disease (clinical manifestation). doi: <https://doi.org/10.1101/2020.02.07.937862>

Laboratory Diagnosis, Prevention and Control

新型冠狀病毒感染症 (Novel Coronavirus Infections)

一、臨床條件

同時符合以下三項條件：

- (一) 急性呼吸道感染，臨床症狀可能包括發燒 ($\geq 38^{\circ}\text{C}$) 及咳嗽。
- (二) 臨床、放射線診斷或病理學上顯示肺部實質疾病。
- (三) 無其他可替代的診斷能完全解釋疾病。

二、檢驗條件

具有下列任一個條件：

- (一) 臨床檢體（咽喉擦拭液、痰液、血液）分離並鑑定出新型冠狀病毒。
- (二) 臨床檢體新型冠狀病毒分子生物學核酸檢測陽性。

三、流行病學條件

發病前 10 日內，具有下列任一個條件：

- (一) 曾經與出現症狀的極可能病例或確定病例有密切接觸，包括照護、相處、或有呼吸道分泌物、體液之直接接觸，或
- (二) 具有新型冠狀病毒疫情流行地區之旅遊或居住史。

四、通報定義

具有下列任一個條件：

- (一) 符合臨床條件及流行病學條件，或
- (二) 僅符合臨床條件第(一)項及流行病學條件第(一)項，或
- (三) 符合檢驗條件。

五、疾病分類

(一) 極可能病例：

雖未經實驗室檢驗證實，但符合臨床條件，且於發病前 10 日內，曾經與出現症狀之確定病例有密切接觸者。

(二) 確定病例：

符合檢驗條件。

Summary

Transmission:

- ✓ Respiratory:
- ✓ Digestive tract: Enteroviruses, Hepatitis viruses
- ✓ Arthropod-borne: Dengue viruses, Hantaviruses
- ✓ Blood/ Body fluids: HIV, Hepatitis viruses
- ✓ Sex contact: HIV, Hepatitis viruses, HPV

Respiratory disease

Virus: SARS-CoV

SARS-CoV-2

Influenza viruses

Parainfluenza viruses

Rhinoviruses

Adenoviruses

Reoviruses

Bocavirus

Bacteria: *Streptococcal pyogenes*

Streptococcal pneumonia

Haemophilus influenza

Moraxella catarrhalis

平安健康!!



Thank you for listening.