



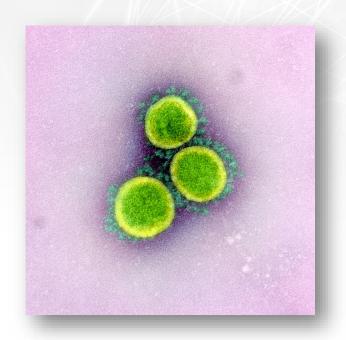
# Evaluación de la respuesta inmune neutralizante y caracterización genética de variantes aisladas de SARS-CoV-2 de individuos vacunados y/o infectados en Chile

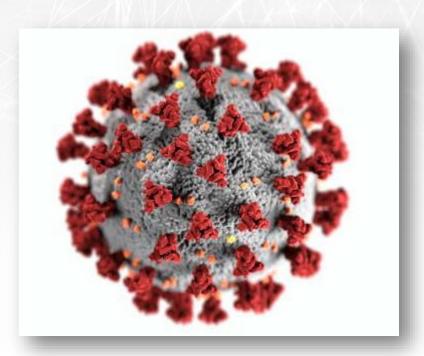
15 de mayo de 2025

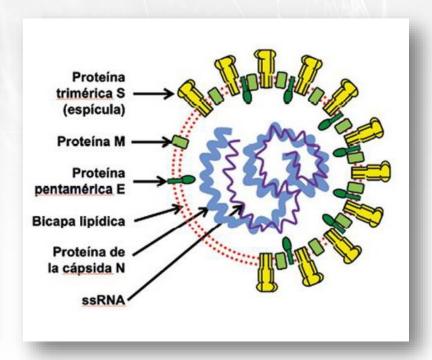
Eugenio Ramírez V.

Sección Virus Oncogénicos Subdepto. Enf. Virales, Depto. Biomédico







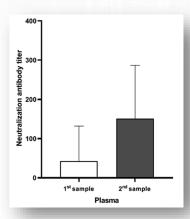


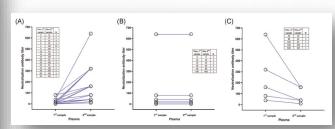
#### RESEARCH ARTICLE



## Development of neutralizing antibody responses against SARS-CoV-2 in COVID-19 patients

María Teresa Valenzuela | Cinthya Urquidi | Nicolás Rodriguez | Luis Castillo | Jorge Fernández | Eugenio Ramírez |





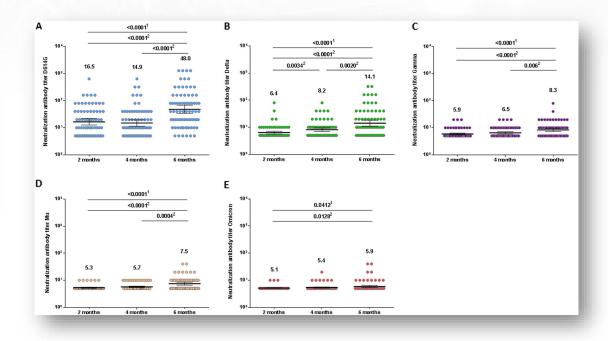
Medical Microbiology and Immunology https://doi.org/10.1007/s00430-022-00753-6

#### ORIGINAL INVESTIGATION



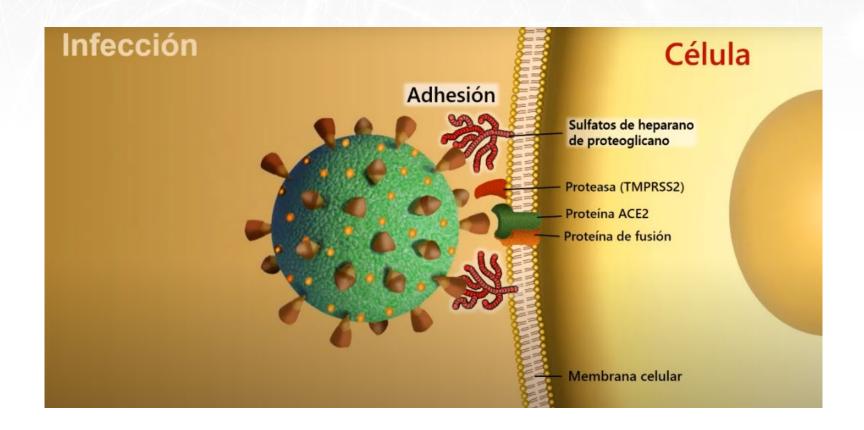
### Reduced neutralization against Delta, Gamma, Mu, and Omicron BA.1 variants of SARS-CoV-2 from previous non-Omicron infection

Paola Pidal<sup>1</sup> · Jorge Fernández<sup>2</sup> · Constanza Airola<sup>3</sup> · Miguel Araujo<sup>4</sup> · Ana María Menjiba<sup>4</sup> · Héctor San Martín<sup>5</sup> · Nicole Bruneau<sup>5</sup> · Monserrat Balanda<sup>5</sup> · Coral Elgueta<sup>5</sup> · Rodrigo Fasce<sup>6</sup> · María Teresa Valenzuela<sup>7</sup> · Ariel Orellana<sup>8</sup> · Eugenio Ramírez<sup>5,9</sup> ·





Determinar en individuos vacunados y/o infectados el nivel de anticuerpos neutralizantes contra las variantes de SARS-CoV-2 empleadas en la formulación de las vacunas bivalentes anti-SARS-CoV-2 usadas en Chile.





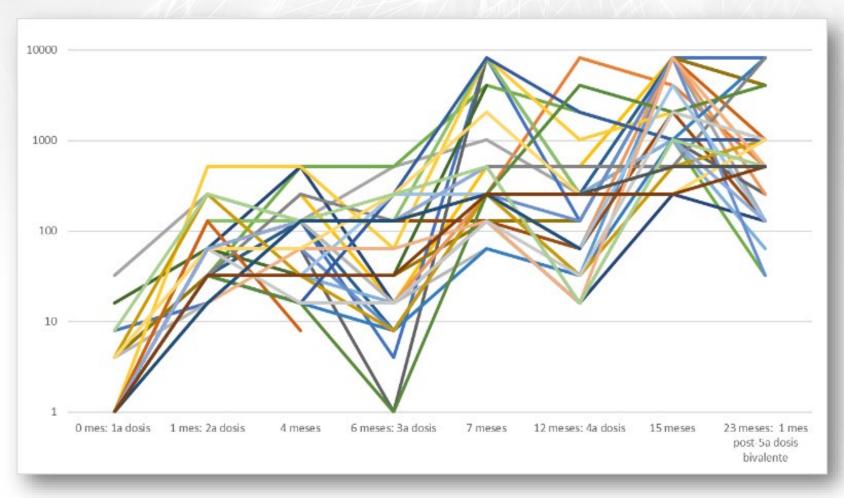
F		Dania	- CARC C-V 2				tiempo	rango de
Esquema vacunación	Dosis vacuna SARS-CoV-2					n	promedio <sup>1</sup>	tiempo <sup>2</sup>
King fraght Hair / family	<b>1</b> <sup>a</sup>	<b>2</b> <sup>a</sup>	3ª	<b>4</b> <sup>a</sup>	5ª			
1	Pfizer	Pfizer	Pfizer	Pfizer	sin dosis <sup>3</sup>	1	201	201
2	Sinovac	Sinovac	Sinovac	Pfizer	Moderna	1	36	36
3	Sinovac	Sinovac	Pfizer	Pfizer	Pfizer	8	46,9	33-71
4	Sinovac	Sinovac	Pfizer	Pfizer	Moderna	23	39,1	35-50
5	Sinovac	Sinovac	Pfizer	Moderna	Pfizer	1	36	36
6	Sinovac	Sinovac	Pfizer	Moderna	Moderna	1	35	35
7	Sinovac	Sinovac	AstraZeneca	Pfizer	Pfizer	3	61,3	48-70
8	Sinovac	Sinovac	AstraZeneca	Pfizer	Moderna	7	42	35-62

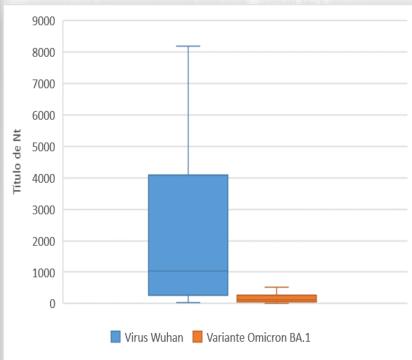
<sup>&</sup>lt;sup>1</sup> Tiempo promedio (días) desde última dosis de vacunación y toma de muestra año 2023

<sup>&</sup>lt;sup>2</sup> Rango de tiempo mínimo y máximo (días) desde última vacunación y toma de muestra año 2023

<sup>&</sup>lt;sup>3</sup> Participante no recibió la 5<sup>a</sup> dosis.

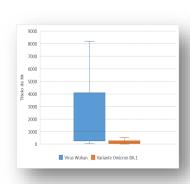


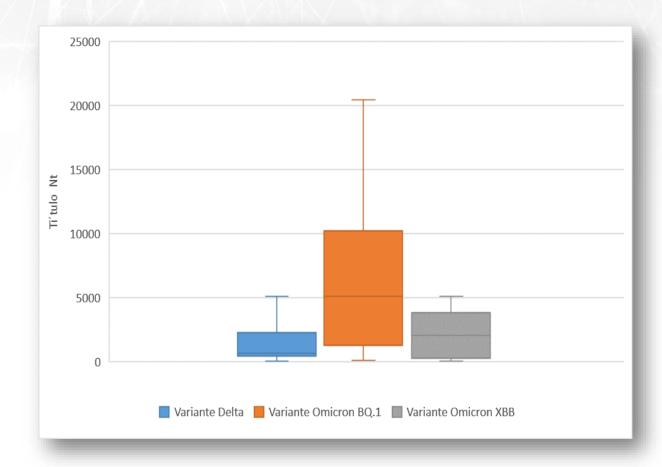






# Determinar el nivel de anticuerpos neutralizantes contra las subvariantes de Ómicron no incluidas en la formulación de las vacunas bivalentes.



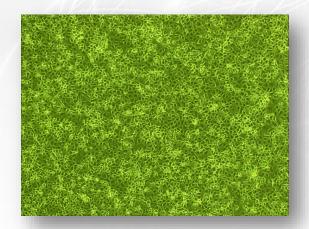


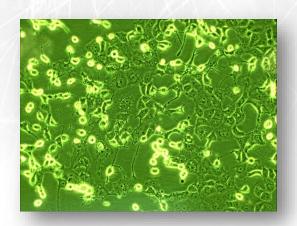


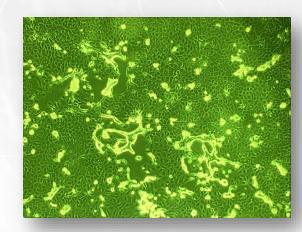
Caracterizar genética y fenotipo de variantes de SARS-CoV-2 aislados de pacientes infectados en Chile durante 2023.

# Caracterizar genética y fenotipo de variantes de SARS-CoV-2 aislados de pacientes infectados en Chile durante 2023.

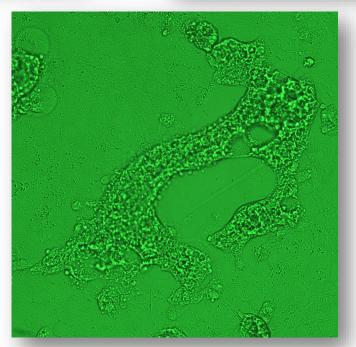




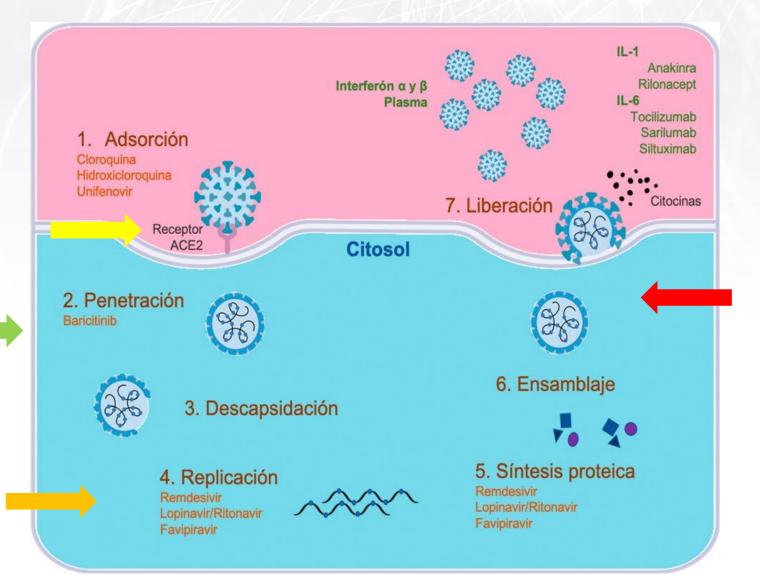






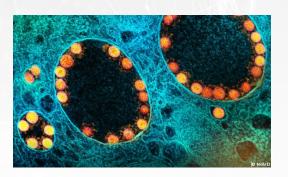


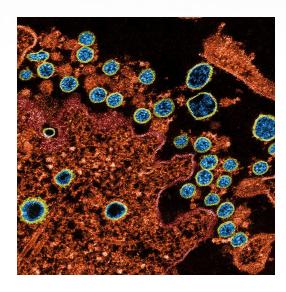
#### **Etapas del ciclo replicativo de SARS-CoV-2**





#### **Fitness Viral**

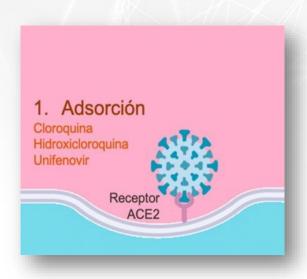




https://prints.sciencesource.com/featured/32-sars-cov-2-covid-19-virus-tem-science-source.html

#### **Adsorción Viral**



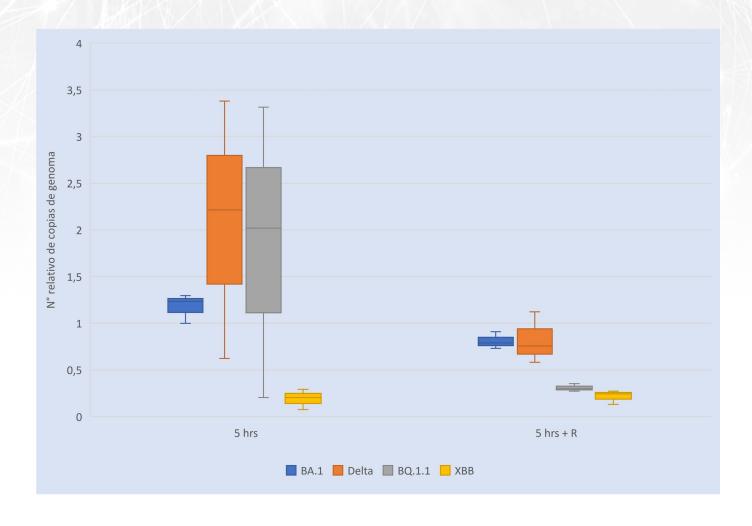




#### Penetración y Decapsidación Viral

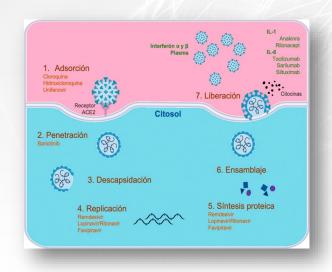


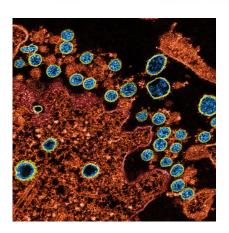


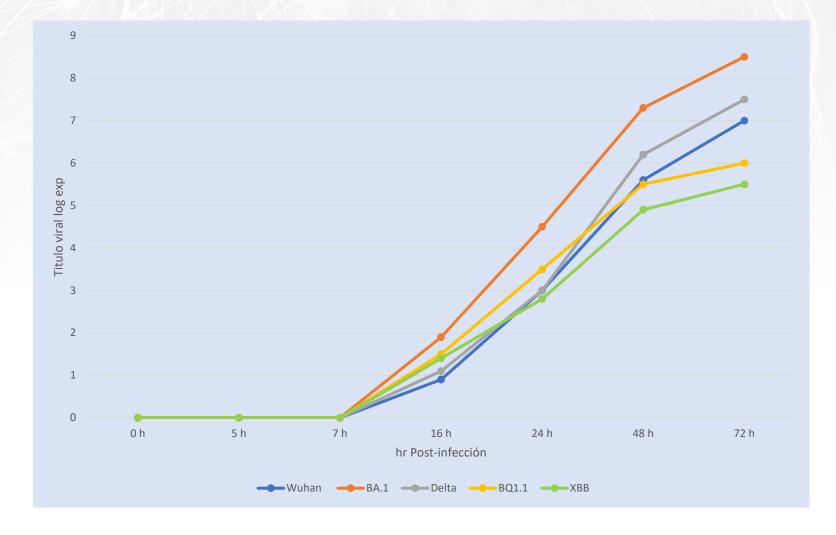


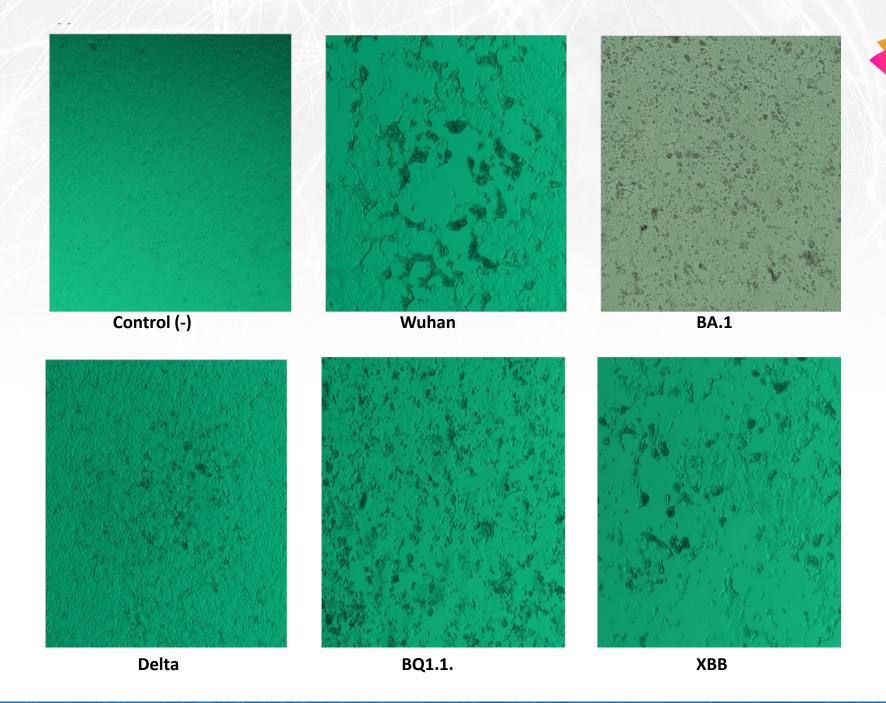
#### **Producción de Progenie Viral**











**Efecto Citopático** 

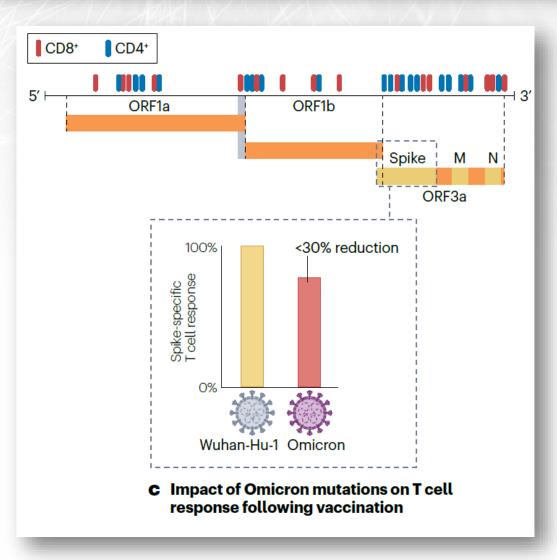
Viral

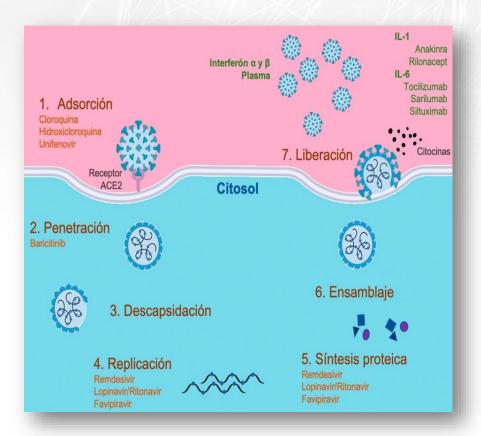


#### **CONCLUSIONES Y PERSPECTIVAS**



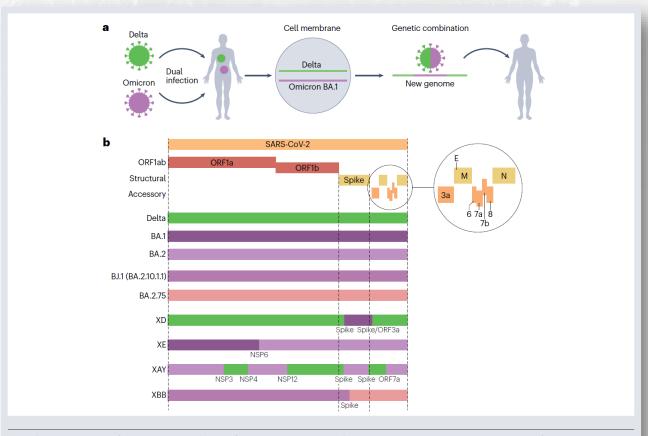












E, envelope protein; M, membrane protein; N, nucleocapsid protein; NSP, non-structural protein; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.



