

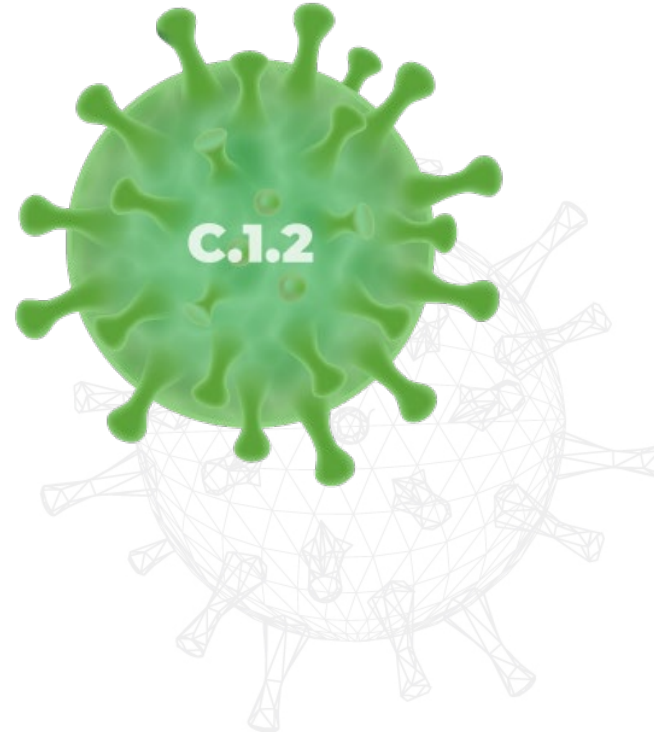
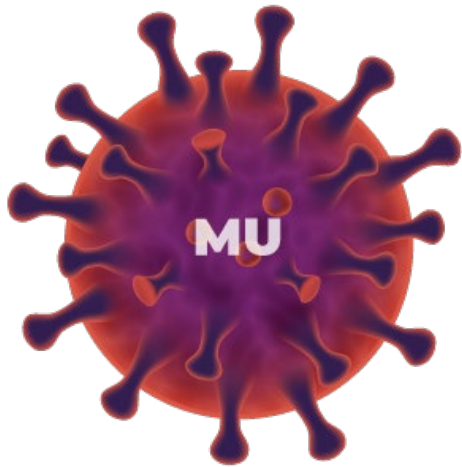
# Emerging COVID-19 Variants of interest

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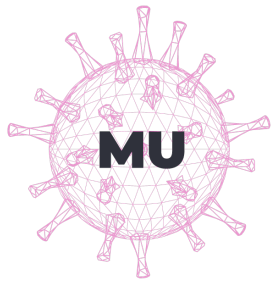
Health Department

Recently, **three SARS-CoV-2 variants** have emerged, causing interest among scientists:

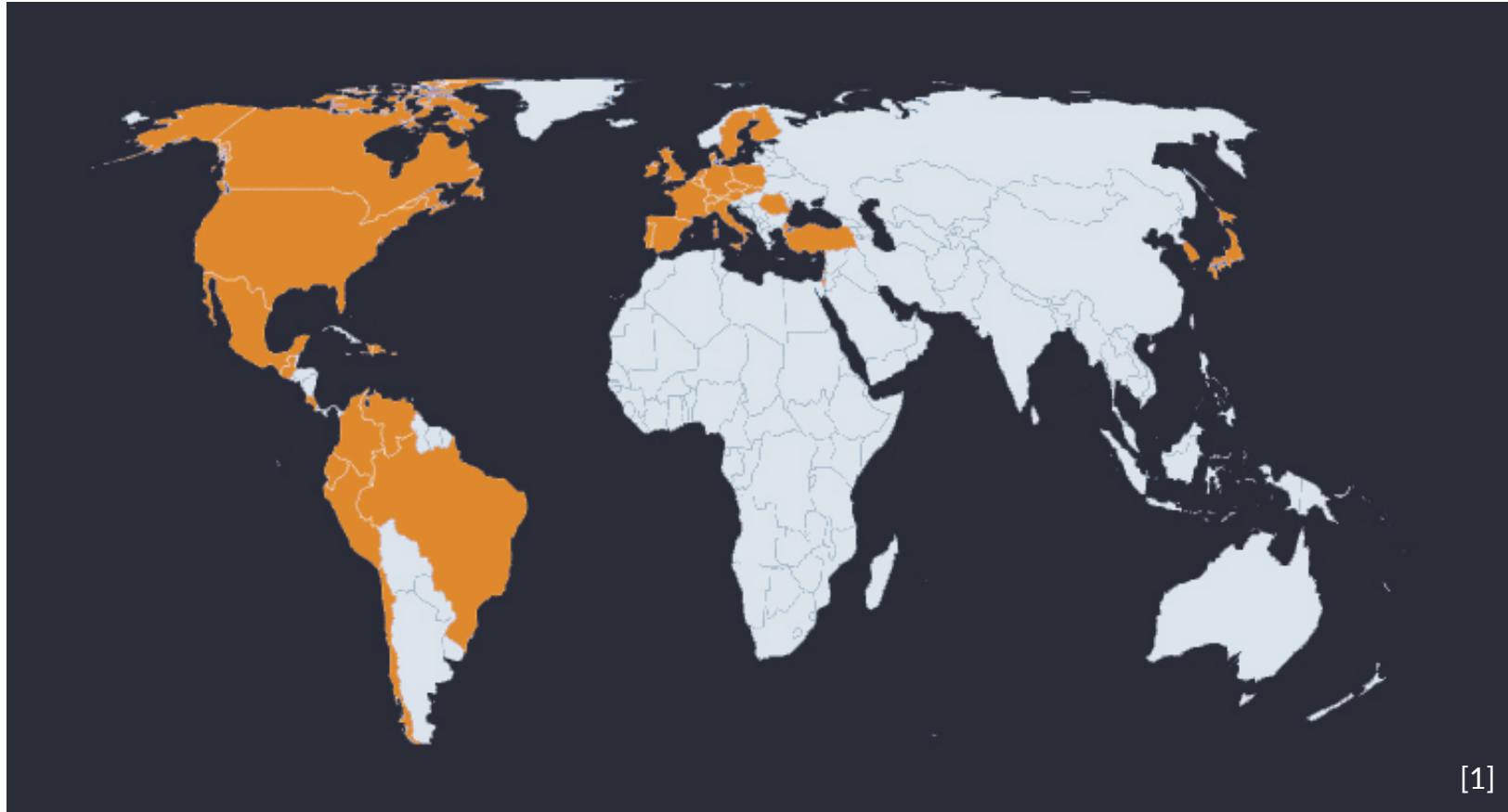


## Emerging COVID-19 Variants of Interest





variant  
B.1.621

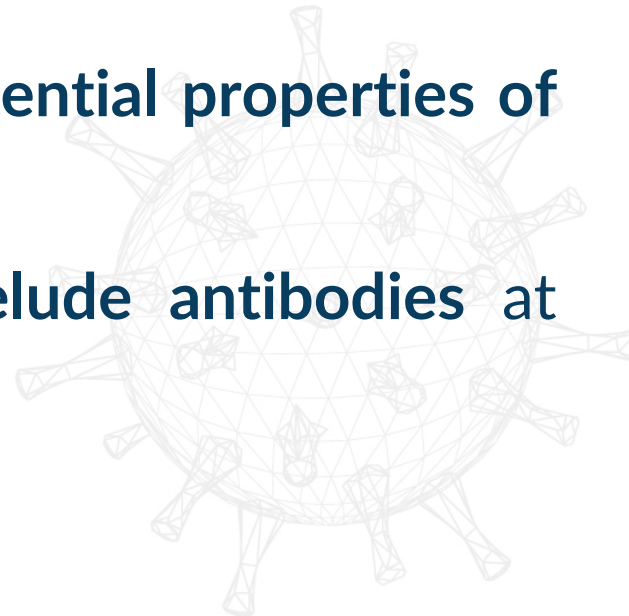
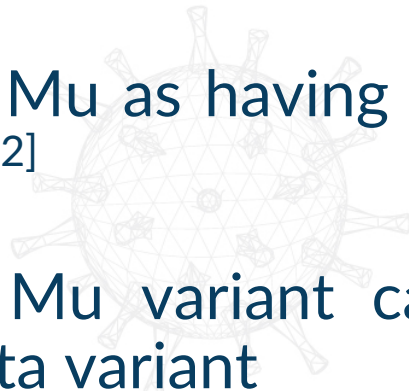


[1]

Mu  
variant  
B.1.621



- first discovered in **January 2021 in Columbia**<sup>[1]</sup>
- it has spread to at least **43 countries**
- on August 30, was classified as a **variant of interest** by WHO
- WHO described Mu as having "**potential properties of immune escape**"<sup>[2]</sup>
- specifically, the Mu variant can **elude antibodies** at levels like the Beta variant



**Mu  
variant  
B.1.621**



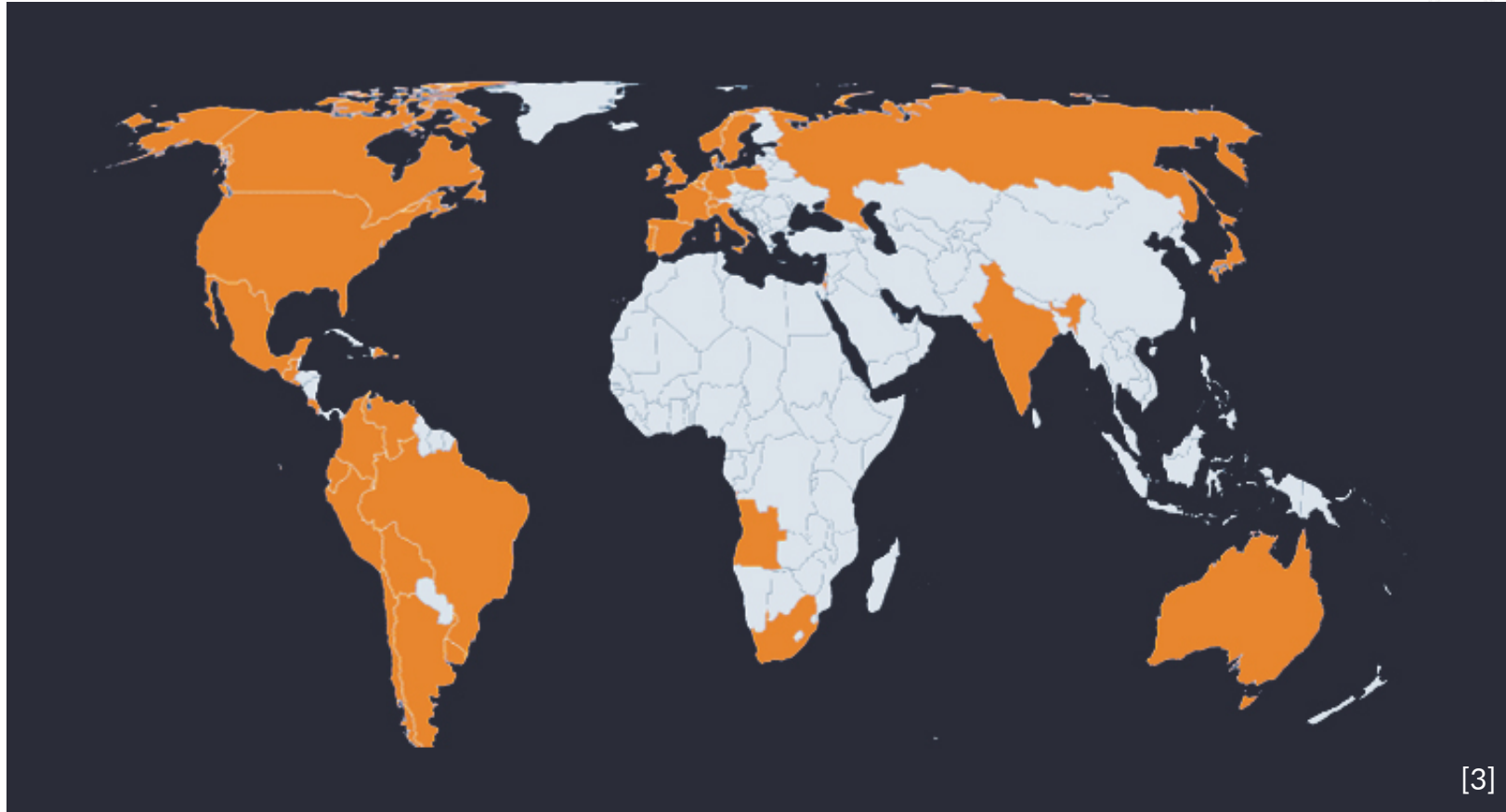
- worldwide footprint has been limited to **less than 0.1%**
- in South America, the caseload consisting of
  - **13% of cases in Ecuador** and
  - **39% in Columbia**
- in the US, it makes up **less than 0.2%** of recent infections<sup>[2]</sup>

## Mu variant B.1.621





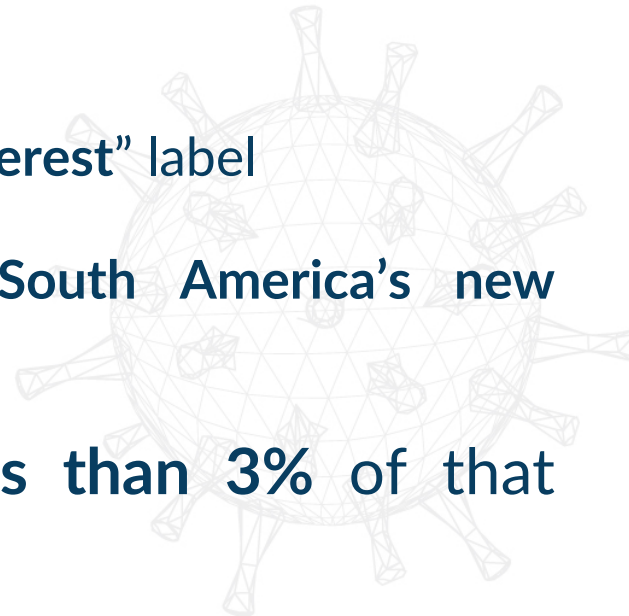
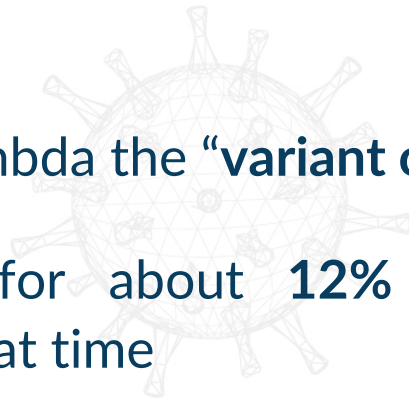
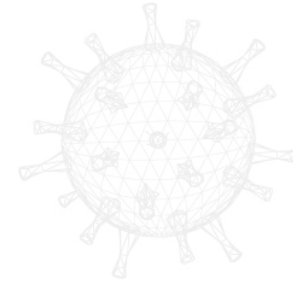
variant  
C.37



Lambda  
variant  
C.37



- identified in **Peru in December 2020**
- makes up **64% of Peru's COVID-19 infections**
- **less than 0.5% of worldwide cases**<sup>[3]</sup>
- presence in **at least 40 countries**<sup>[4]</sup>
- in late June,
  - WHO gave Lambda the “**variant of interest**” label
  - it accounted for about **12% of South America's new infections** at that time
- since then, it has receded to **less than 3%** of that continent's new cases



**Lambda  
variant  
C.37**



- it carries several **spike protein mutations** that:

- make it more infectious and
- more resistant to antibodies
  - from prior infections and vaccines <sup>[5]</sup>



- the mRNA vaccines, **Pfizer and Moderna**, do maintain a **similar rate of efficacy** against the Lambda variant as with the original virus.

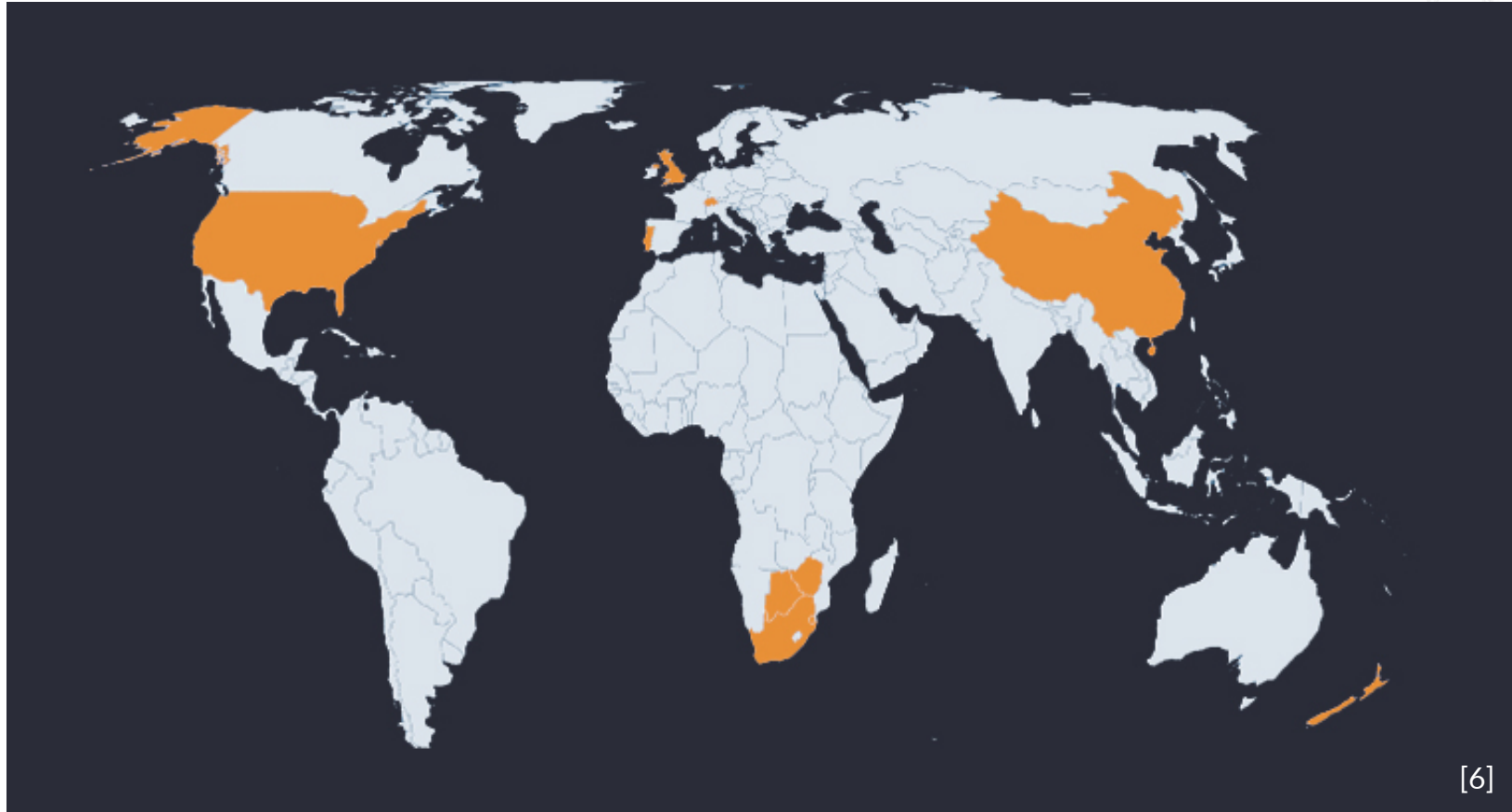
- **monoclonal antibody** treatments to have the same effectiveness <sup>[6]</sup>

## Lambda variant C.37





variant  
C.1.2



Not named  
variant  
C.1.2






- first appeared in **South Africa in May 2021**
- **1.6%** of the country's cases in June
- **2%** of the country's cases in July<sup>[7]</sup>
- since then, C.1.2 has **declined in South Africa** but **spread to 10 more countries**



**Not named  
variant  
C.1.2**



- 
- labeled by WHO as Alerts for Further Monitoring.
  - it has **many mutations** in common with some variants of concern like **Delta and Beta**
  - antibody-evading mutations that are not found yet in other variants<sup>[7]</sup>
  - more research is needed to identify how effective current vaccines are against C.1.2 infections
- 
- 

**Not named  
variant  
C.1.2**

A **proactive approach** is the best way to keep ahead of new SARS-CoV-2 variants. So far, **mRNA vaccines** are the **most effective** for preventing and reducing the severity of infections.

**Masking and distancing** are also effective in minimizing the spread and protecting ourselves, our families and our communities.

## Emerging COVID-19 Variants of Interest



# References



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- 06 <https://outbreak.info/situation-reports?pango=C.1.2&loc=ZAF&selected=ZAF> [better link is coming tomorrow]
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