

Genetic diversity of the novel coronavirus SARS-CoV-2 (COVID-19) in Portugal

More information at <https://insaflu.insa.pt/covid19>



Situation Report

September 6th, 2022

The National Institute of Health Doutor Ricardo Jorge, I.P. (INSA) has analysed **41147** SARS-CoV-2 genome sequences so far.

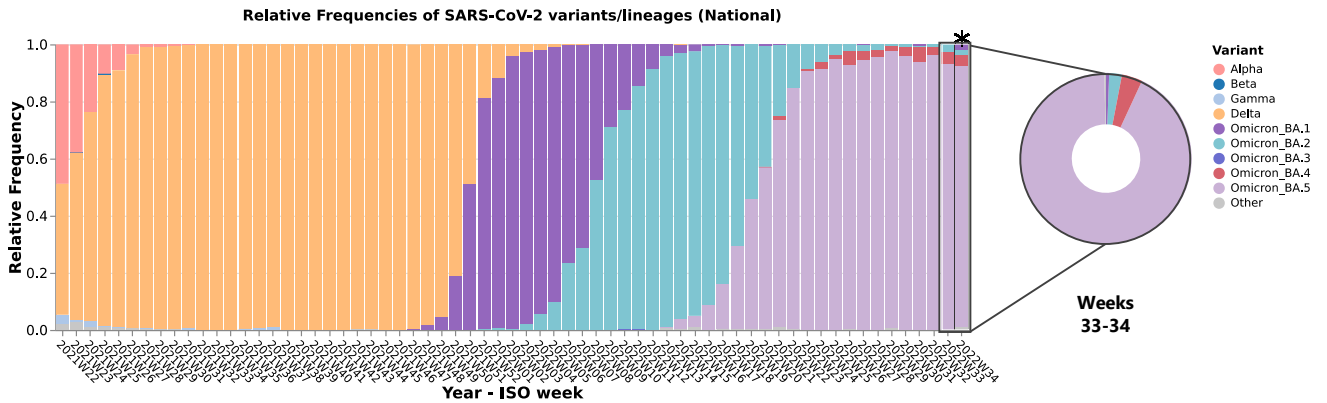


Figure 1: Evolution of the weekly relative frequency of the SARS-CoV-2 variants circulating in Portugal between ISO weeks 22 (31/05/21 - 06/06/21) and 34 (22/08/22 - 28/08/22). The frequencies presented for the last week under analysis (ISO week 34*) might change in the next report, given that some data from that period is still being processed. *This and other graphs can be explored interactively on the website.*

Main highlights

- **Lineage BA.5 of the variant Omicron** (including its multiple sub-lineages) is **dominant in Portugal** since week 19 (09/05/22 - 15/05/22) and presents a **relative frequency of 91.4%** according to the most recent national sequencing survey on week 34 (22/08/22 - 28/08/22).
- **Lineage BA.4 of the variant Omicron** has revealed a **stable relative frequency** in the latest sequencing surveys, **representing 3.9%** of the sequences analysed in weeks 33 and 34.
- **Lineage BA.2 of the variant Omicron** was **dominant in Portugal between weeks 8 (21/02/22 - 27/02/22) and 19 (09/05/22 - 15/05/22)**. Since then, its relative frequency decreased continuously, representing **2.4% of the sequences in weeks 33 and 34**. We have been monitoring the circulation of BA.2 sublineages with an additional mutation in position L452 of Spike protein (associated with resistance to neutralizing antibodies). Among those, we highlight the circulation of **BA.2.12.1**, although its **relative frequency has not exceeded 2% so far**. Of note, we detected, so far in Portugal, **5 sequences of the lineage BA.2.75**, in two separate regions (NORTE and LXVTEJO). This lineage was brought to attention due to its high prevalence in some countries.

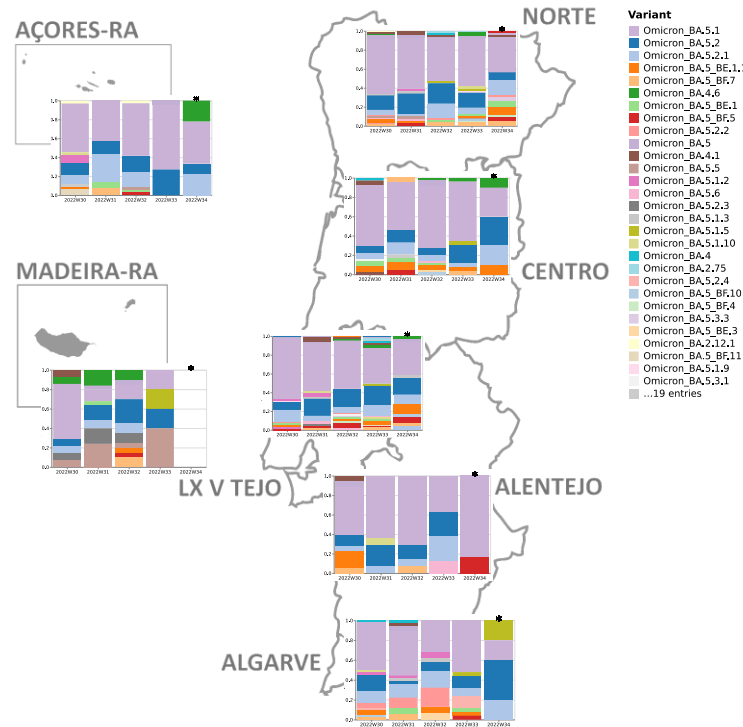


Figure 2: Evolution of the weekly relative frequency of SARS-CoV-2 lineages in each Health Region, between ISO weeks 30 (18/07/22 - 24/07/22) and 34 (22/08/22 - 28/08/22). Regional relative frequencies must be interpreted with caution due to the low number of samples in some of the regions. It is expected that the frequencies presented for the last week under analysis (ISO week 34*) might change in the next report, given that some data from that period is still being processed. *These and other graphs can be explored interactively on the website.*

Autorship

Genomics and Bioinformatics Unit
Department of Infectious Diseases
NATIONAL INSTITUTE OF HEALTH DOUTOR RICARDO JORGE
Avenida Padre Cruz, 1649-016 Lisboa, PORTUGAL

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Useful links

<https://www.ecdc.europa.eu/en/covid-19/situation-updates/variants-dashboard>
<https://www.who.int/activities/tracking-SARS-CoV-2-variants>
https://covid-lineages.org/lineage_list.html
<https://outbreak.info/>
<https://www.gisaid.org/>