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

More information at **https://insaflu.insa.pt/covid19**

Situation Report

July 26th, 2022

The National Institute of Health Doutor Ricardo Jorge, I.P. (INSA) has analysed **39622** SARS-CoV-2 genome sequences so far.

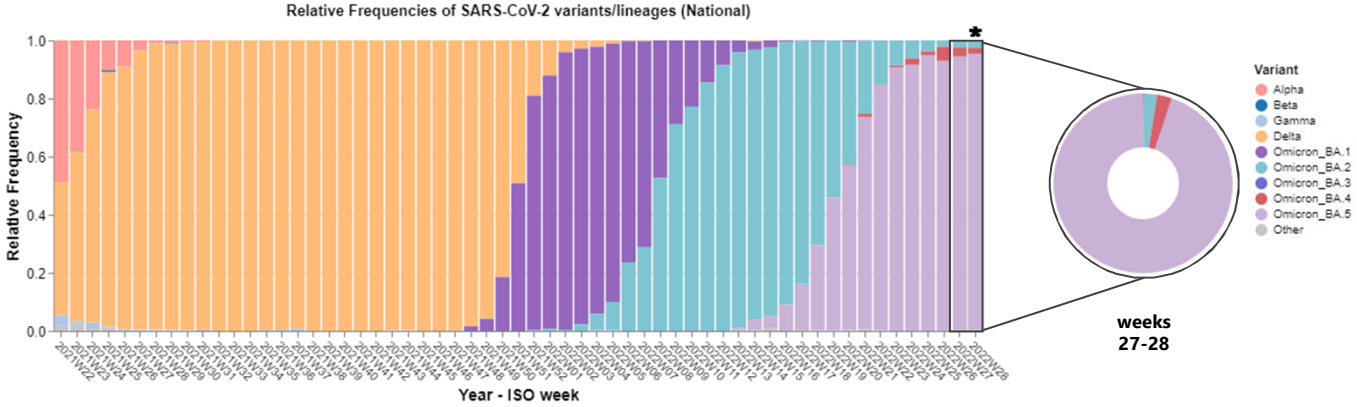

Figure 1: **Evolution of the weekly relative frequency of the SARS-CoV-2 variants circulating in Portugal between ISO weeks 22 (31/05/21 - 06/06/21) and 28 (11/07/22 - 17/07/22).** The frequencies presented for the last week under analysis (ISO week 28*) might change in the next report, given that some 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 is dominant in Portugal** since week 19 (09/05/22 - 15/05/22) and presents a **relative frequency of 95%** according to the most recent national sequencing survey on week 28 (11/07/22 - 17/07/22).

- **Lineage BA.4 of the variant Omicron** revealed an increase in relative frequency in week 26, but it has been **decreasing in the two latest sequencing surveys** (weeks 27 and 28), **representing 2.7%** of the sequences.

- **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 has been continuously decreasing, representing **2.4% of the sequences in weeks 27 and 28**. We have been monitoring the circulation of BA.2 lineages with an additional mutation in position L452 of Spike protein (associated with resistance to neutralizing antibodies). Among those, it is highlighted the circulation of **BA.2.12.1**, which has been presenting fluctuating relative frequencies during the last weeks, with values **always <2%**. Of note, no sequences of the sub-lineage of interest BA.2.75 have been detected so far in Portugal.

- It is estimated that the circulation of **lineage BA.1 of the variant Omicron** (dominant between weeks 51/2021 and 7/2022) is **currently residual.**

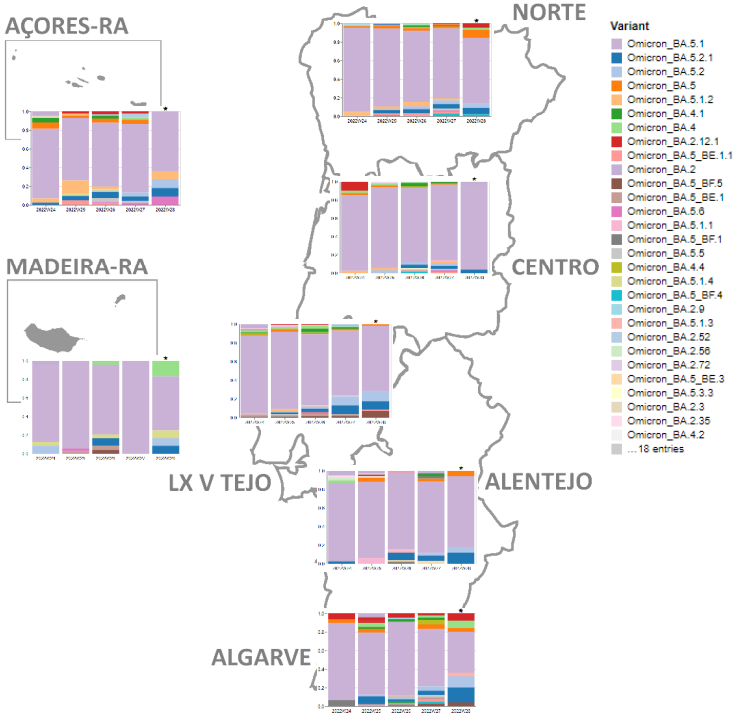

Figure 2: **Evolution of the weekly relative frequency of SARS-CoV-2 lineages in each Health Region, between ISO weeks 24 (13/06/22 - 19/06/22) and 28 (11/07/22 - 17/07/22).** *It is expected that the frequencies presented for the last week under analysis (ISO week 28*) might change in the next report, given that some data from that period is still being processed.* ***This and other graphs can be explored interactively on the website.***

Autorship

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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://cov-lineages.org/lineage_list.html
https://outbreak.info/
https://www.gisaid.org/

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