

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

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



Situation Report

December 10th, 2024

The National Institute of Health Doutor Ricardo Jorge, I.P. (INSA) has analysed **50537** SARS-CoV-2 genome sequences so far.

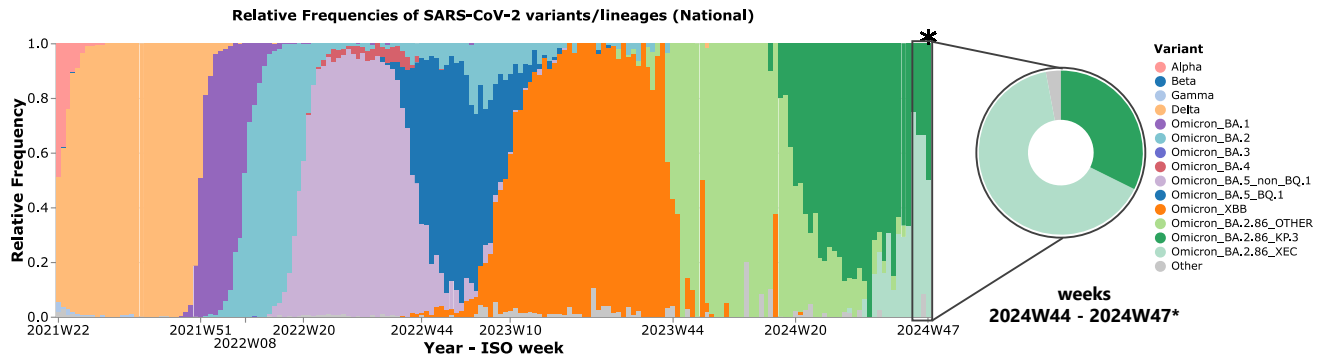


Figure 1: Evolution of the weekly relative frequency of the SARS-CoV-2 variants circulating in Portugal between ISO weeks 22/2021 (31/05/21 - 06/06/21) and 47/2024 (17/11/24 - 24/11/24), with emphasis on the latest weeks. *The presented relative frequencies refer to the period of ISO weeks 44/2024 to 47/2024. **This and other graphs can be explored interactively on the website.**

Main highlights

- The **lineage BA.2.86** of the *Omicron* variant has been **dominant in Portugal since week 44 of 2023**, following its first detection in week 33/2023. among its lineages, the KP.3 (and its sub-lineages), recently included in the list of variants of interest by the ECDC (<https://www.ecdc.europa.eu/en/covid-19/variants-concern>) stands out by being dominant in the past weeks, but shows now a **declining trend**, with a **relative frequency of 32.4%** of the sequences analyzed between weeks 44/2024 and 47/2024 (**Figure 1**).
- The **recombinant XEC lineage** of the *Omicron* variant, which resulted from the recombination between two BA.2.86 sublineages (KS.1.1 and KP..3.3) was recently added to the ECDC's variants under monitoring list, and thus is presented here independently from its ancestral lineage for better monitoring and interpretation of this report. It was first detected in Portugal in week 31/2024 (**Figure 2**) and in the latest sampling (weeks 44/2024 to 47/2024), it showed an **increasing trend in relative frequency, becoming dominant since week 44 with 64.7%** of the sequences analyzed between weeks 44/2024 and 47/2024. Simultaneously, this lineage has been detected in several countries, with a **growing trend globally**.

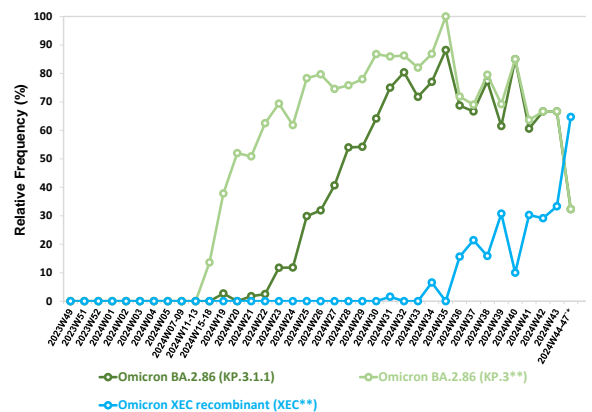
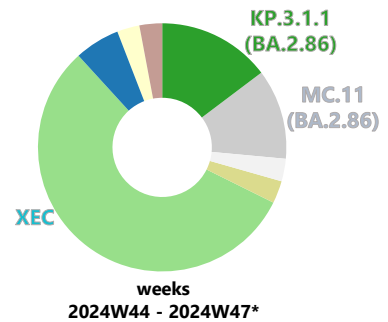


Figure 2: Evolution of the relative frequency of some sub-lineages of interest circulating in Portugal. The circular graph shows the distribution of the relative frequencies of SARS-CoV-2 sub-lineages in the period of ISO weeks 44/2024 and 47/2024 (28/10/24 - 24/11/24) highlighting the most frequent sub-lineages in this period. The evolution of relative frequencies of KP.3 and KP.3.1.1 lineages and the recombinant lineage XEC during the last weeks is shown in the line plot. *The presented relative frequencies correspond to the sub-lineages and their descendants. **Other graphs can be explored interactively on the website.**

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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/>