



# Genomic surveillance report

Update for Belgium, 21/06/2022

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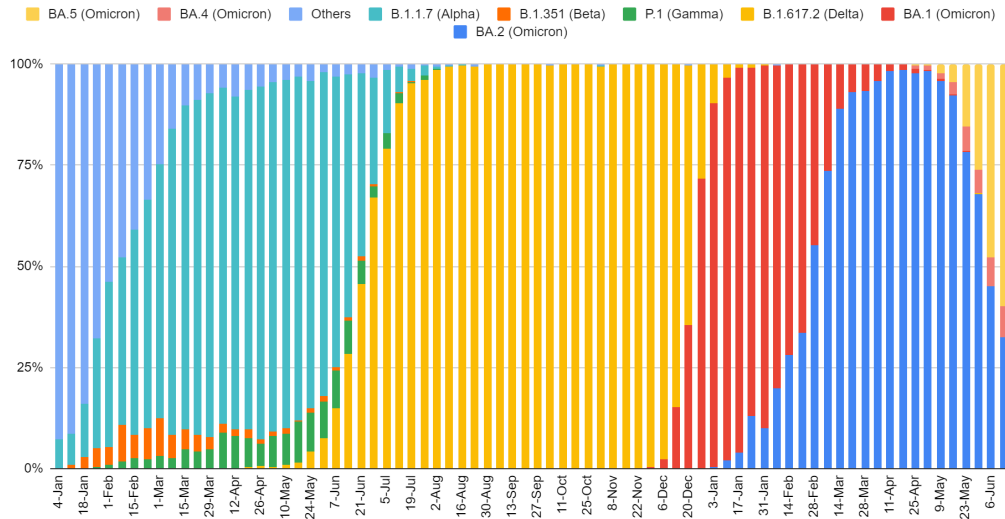
*Belgian Sequencing Consortium:*

*Cliniques Universitaires Saint-Luc, Centre Hospitalier CHU UCL Namur, ULB, UMon, UNamur, ULiège, UGent, UZA/UAntwerpen, Jessa ZH, AZ Delta, AZ Klina, IPG, AZ St Lucas Gent, OLZ Aalst, Briant network, ZNA, AZ St Jan Brugge, UZ Brussel, LHUB-ULB, UZ Leuven/KU Leuven and Sciensano HealthData.*

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## Executive summary

Omicron BA.5 is the dominant lineage in Belgium. This recent shift is associated with an increase in the number of infections ( $R_t > 1.1$ , increasing positivity rate) and an increase in the number of hospital admissions.

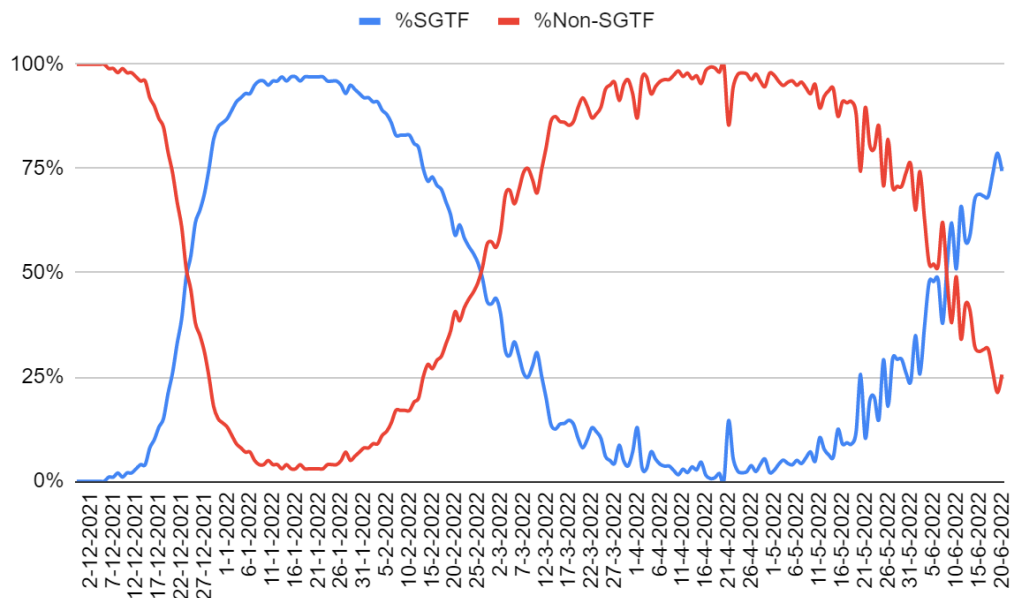


# 1 Epidemiological context and indicators related to diagnostic activities

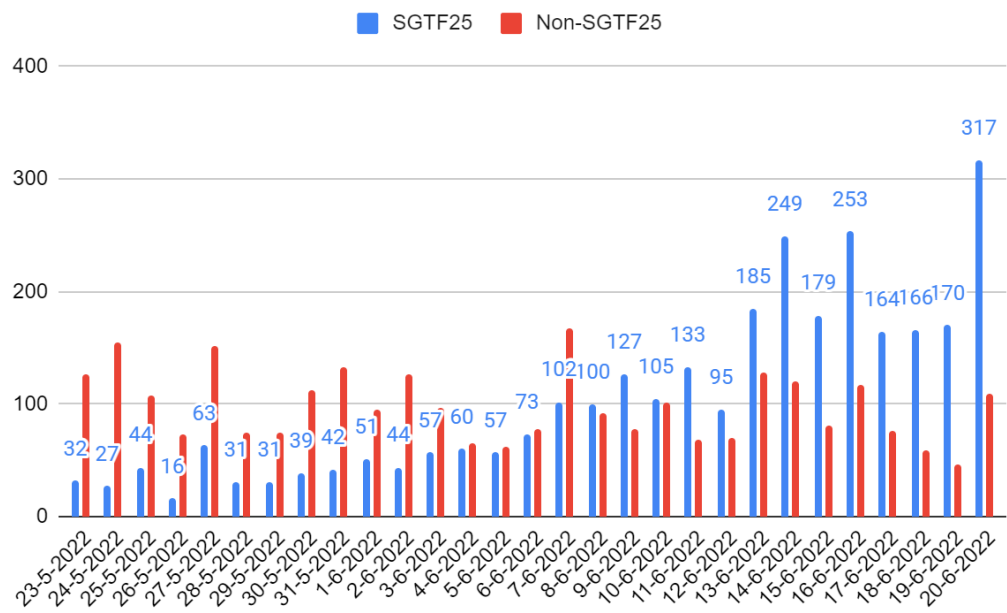
Omicron BA.2 can be distinguished from BA.4 and BA.5 using some specific diagnostic PCR kits as the latter variants present the deletion 69/70 in the S gene and therefore are characterized by an SGTF.

In the current epidemiological context, samples without SGTF are most likely to be BA.2 infections (including BA.2.12.1). These samples currently represent 26% of positive tests in the country (declining share week by week). SGTF samples are presumed to be predominantly Omicron BA.5 and, to a lesser extent, BA.4. These samples represent 74% of the most recent samples analyzed. (Figure 1)

Although the current testing policies do not allow precise estimations, the current doubling time of BA.5/BA.4 positive samples observed at the level of federal platform laboratories is between 7 and 10 days.



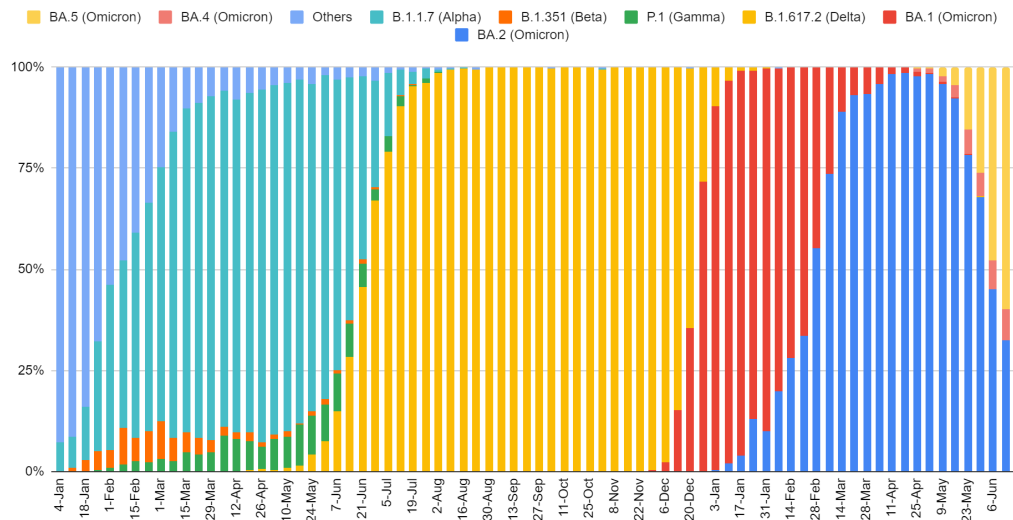
**Figure 1:** S gene target failure (SGTF, in blue: BA.1 & BA.1.1, BA.4 and BA.5, and potentially BA.2 with 69/70 deletion) and others (red: currently considered predominantly BA.2) among positive samples reported by the federal platform laboratories.



**Figure 2:** S gene target failure (SGTF, in blue: BA.4 and BA.5, and potentially BA.2 with 69/70 deletion) and others (red: currently considered predominantly BA.2) among positive samples reported by the federal platform laboratories.

## 2 Monitoring of Variants of Concern in Belgium

During the last two weeks of baseline surveillance - 06/06/2022 to 19/06/2022 - (912 sequences collected at this stage), BA.5 represented 49% (increasing trend), BA.2 represented 43% (decreasing trend) and BA.4 represented 7% (discreet increasing trend).



**Figure 3:** Share of variants of concern per week in Belgium