Changes to list of SARS-CoV-2 variants of concern, variants of interest, and variants under monitoring

ECDC reviews the variants list at least weekly and if changes are indicated, these are detailed here. When not listed, it indicates that the weekly review did not result in any changes.

06 October 2023

- Added XBB.1.5-like+L455F+F456L as variant under monitoring (VUM)
- Added DV.7.1 (sub-lineage of BA.2.75 carrying L455F) as variant under monitoring (VUM)
- Changed classification of CH.1.1 (BA.2.75 sub-lineage) from VUM to De-escalated variant

24 August 2023

- Added BA.2.86 as a variant under monitoring (VUM)
  BA.2.86 has a high number of spike mutations that are distinct from ancestral BA.2 and currently circulating XBB-derived variants. Phylodynamic analysis indicates that BA.2.86 emerged recently (various unpublished analyses indicate the last common ancestor of BA.2.86 emerging in May-July 2023). Given that by August 2023 BA.2.86 has been detected in several countries in different regions, with no known epidemiological link to a common source, it may be associated with an elevated growth rate compared to current circulating variants, though this is associated with a high degree of uncertainty. The mechanism of any growth advantage likely includes immune escape as BA.2.86 carries many spike changes compared to XBB.1.5-like variants that have dominated recently and also compared to previous Omicron variants.

10 August 2023

- Changed classification of XBB.1.5-like lineages + F456L from VUM to Variant of Interest
- Changed classification of BQ.1 from VOI to De-escalated variant
- Changed classification of XBB from VOI to De-escalated variant

27 July 2023

- Expanded FE.1 lineage to XBB.1.5-like lineages + F456L as a variant under monitoring

01 June 2023

- Added FE.1 (sub-lineage of XBB) as a variant under monitoring (VUM)

20 April 2023

- Changed classification of XAY from VUM to De-escalated variant
- Changed classification of XBC from VUM to De-escalated variant
- Changed classification of BN.1 from VUM to De-escalated variant

23 March 2023

- Added XBB.1.16 as a variant under monitoring (VUM)
- Updated XBB.1.5 to XBB.1.5-like lineages (characterised by S:Q183E, S:F486P and S:F490S) and added a footnote on the umbrella of lineages that are covered with this classification

9 March 2023

- Changed classification of BF.7 from VUM to De-escalated variant
- Changed classification of BA.2.3.20 from VUM to De-escalated variant

3 March 2023

- Changed classification of BA.2 from VOC to De-escalated variant
- Changed classification of BA.4 from VOC to De-escalated variant
- Changed classification of BA.5 from VOC to De-escalated variant

ECDC de-escalates BA.2, BA.4 and BA.5 from its list of variants of concern (europa.eu)

23 February 2023

- Updated References for VOI

9 February 2023

- Added Footnote for BA.2.75: Omicron-Omicron Recombinants XBF and XBK that share the same spike as BA.2.75 are monitored under BA.2.75 lineages

26 January 2023

- Added Delta Omicron recombinant XAY as a variant under monitoring (VUM)

12 January 2023

- Added XBB.1.5 as a variant of interest (VOI)
- Updated the legend of XBB, that sub-lineages of XBB excluding XBB.1.5

9 January 2023

- Added in the footnote of XBB (VOI) – that sub-lineages of XBB including XBB.1.5 also included

21 December 2022

- Added BN.1 as a variant under monitoring with a foot note about spike mutation proxy R346T, K356T, F490S
- Added CH.1.1 as a variant under monitoring with a foot note about spike mutation proxy K444T, L452R and NSP16-Q28R

8 December 2022

- Added XBB as a variant of interest
- Added BA.2.30 as a variant under monitoring
- Added BF.7 as a variant under monitoring
- Added XBC as a variant under monitoring
- Changed the classification of B.1.1.529 + N460X, F490X from VUM to De-escalated variant (this monitoring will now be continued through the lineages circulating that carries this mutation, XBB that is now assigned as VOI and BA.2.75 following as VOI)
- Changed the classification of B.1.1.529 + K444X, N460X from VUM to De-escalated variant (this monitoring will now be continued through the lineages circulating that carries this mutation, BQ.1 following as VOI)
- Changed the classification of B.1.1.529 + R346X from VUM to De-escalated variant (this monitoring will now be continued through the lineages circulating that carries this mutation, BF.7 (now assigned as VUM and BQ.1 following as VOI)

20 October 2022

- Added BQ.1 as a variant of interest
- Combined the monitoring of BA.4 + R346X and BA.5 + R346X as one variant under monitoring assigned
- B.1.1.529 + R346X

14 October 2022

- Added B.1.1.529 + N460X, F490X as a variant under monitoring

6 October 2022

- Added B.1.1.529 + K444X, N460X as a variant under monitoring

22 September 2022

- Changed classification of BA.2 + L452X from VOI to De-escalated variant
- Changed classification of XAK from VUM to De-escalated variant
- Added BA.5 + R346X as a variant under monitoring

25 August 2022

- Added BA.4 + R346X as a variant under monitoring
- Added BA.5 + R346X as a variant under monitoring

11 August 2022

- Changed classification of BA.1 (Omicron) from VOC to De-escalated variant
- Changed classification of BA.3 (Omicron) from VUM to De-escalated variant
- Added references for severity for BA.5
- Added references for immunity for BA.2.75

28 July 2022

- Added recombinant XAK as a variant under monitoring

14 July 2022

- Re-classified BA.2.75 from a variant under monitoring to a variant of interest

7 July 2022

- Added BA.2.75 as a variant under monitoring

9 June 2022

- Changed classification of B.1.617.2 (Delta) from VOC to De-escalated variant
- Changed classification of BA.2 + L452X from VUM to VOI
- Changed the transmission status of BA.4 and BA.5 from sporadic/travel to community

12 May 2022

- Changed classification of Omicron sub-lineages BA.4 and BA.5 from VOI to VOC
- Added spike mutation of interest R493Q for BA.4 and BA.5

5 May 2022

- Changed classification of XD from VUM to De-escalated variants
- References were added for immunity of BA.4, BA.5 and BA.2+L452X

21 April 2022

- Added BA.2 + L452X as a variant under monitoring

7 April 2022

- The major sub-lineages of Omicron (currently BA.1, BA.2, BA.3, BA.4 and BA.5) are monitored separately
- References of studies of Omicron where the sub-lineage could not be identified were removed
- References were added for transmissibility of BA.1
- References were added for severity of BA.2
- Omicron sub-lineages BA.1 and BA.2 remains as variants of concern
- Omicron sub-lineage BA.3 was classified as a variant under monitoring
- Omicron sub-lineages BA.4 and BA.5 was added to the list of variants of interest
- Changed classification of recombinant XF from VUM to De-escalated variant

31 March 2022

- Changed classification of B.1.351 (Beta) and P.1 (Gamma) from VOCs to De-escalated variants
- Changed classification of B.1.640 from VUM to De-escalated variant.

11 March 2022

- Added recombinant AY.4 x BA.1 (XF) as a variant under monitoring

3 March 2022

- Added recombinant AY.4.2.2 x BA.1.1 (XD) as a variant under monitoring with reference providing genomic characterization

17 February 2022

- Replaced references with 2 new references- for Evidence impact on transmissibility for Omicron and changed assessment from *Unclear* to *Increased* (removed footnote)
- Added references -for Evidence impact on immunity for Omicron
- Replaced references with new references -for Evidence impact on immunity for Severity and removed the footnote
- Changed classification of B.1.621 (Mu), C.37 (Lambda) and AY.4.2 from VOI to De-escalated variants
- Changed classification of B.1.1.318, B.1.617.2+K417N, C.1.2, B.1.617.2+E484X, B.1.617.2+Q613H, B.1.617.2+Q677H from VUM to De-escalated variants
- Since VOI table is empty now, removed the table in the webpage

20 January 2022

- Changed *Transmission in EU/EEA* for Omicron from *Community* to *Dominant.*
- Added references (5 references) for Evidence impact on severity for Omicron and changed assessment from *Unclear* to *Reduced* severity
- Changed footnotes for both Evidence on transmission and severity for Omicron
- Changed classification of C.36 + L452R and P.1 + P681H from VUM to De-escalated variants

5 January 2022

- Changed *Transmission in EU/EEA* for Delta from *Dominant* to *Community.*
- Added references for Evidence impact on transmissibility and severity for Omicron
- Changed category annotations to increased, reduced, similar, unclear, or no evidence

13 December 2021

- Changed *Transmission in EU/EEA* for B.1.1.529 from *Sporadic/Travel* to *Community.*

3 December 2021

- Added reference for Evidence for impact on immunity for Omicron

26 November 2021

- Added B.1.1.529 as a variant of concern

25 November 2021

- Added B.1.1.529 as a variant of interest

11 November 2021

- Clarified the Description of the tables regarding categories within a category
- Re-classified AY.4.2 from a variant under monitoring to a variant of interest
- Added B.1.640 as a variant under monitoring
- Updated the list of references

20 October 2021

- Added B.1.617.2+ Q677H as a variant under monitoring
- Added AY.4.2 as a variant under monitoring
- Expanded B.1.617.2+E484Q monitoring to include all amino acid substitutions of position 484

8 October 2021

- Changed classification of B.1.620 from VOI to De-escalated variants
- Changed classification of AT.1 from VUM to De-escalated variants

3 September 2021

- Changed classification of B.1.1.7 (Alpha) and B.1.1.7+E484K from VOC to De-escalated variants
- Changed classification of variants B.1.525 (Eta), B.1.617.1 (Kappa), and P.3 (Theta) from VOI to De-escalated variants B.1.617.3, B.1.214.2, A.23.1+E484K, A.27, A.28, C.16, B.1.351+P384L, B.1.351+E516Q, B.1.1.7+L452R, B.1.1.7+S494P, B.1.526, B.1.526.1 (lineage withdrawn from Pango), B.1.526.2 (lineage withdrawn from Pango), P.2, B.1.1.519, AV.1 from VUM to De-escalated variants.
- Added WHO naming to C.1.2 (Mu).

26 Aug 2021

- Added B.1.617.2+E484Q as a variant under monitoring
- Added B.1.617.2+Q613H as a variant under monitoring
- Added clarification that listed lineages also include all sublineages unless otherwise specified
- Added links to the Pango lineage website, specific for each lineage.

29 July 2021

- Added C.1.2 as a variant under monitoring

22 July 2021

- Changed classification of C.37 (Lambda) from VUM to VOI. Added references to pre-print publications for evidence of impact on immunity for C.37.
- Added a new category of variants (De-escalated variants)
- Changed classification of B.1.427/B.1.429 (Epsilon) from VOI to De-escalated variants
- Changed classification of B.1.616 from VOI to De-escalated variants

24 June 2021

- Added B.1.617.2+K417N as a variant under monitoring

18 June 2021

- Added WHO naming to C.37 (Lambda)
- Added references on vaccine escape for B.1.617.2 (Delta)

03 June 2021

- Changed classification of B.1.617.3 from VOI to the variant under monitoring (VUM) category
- P.1+P681H added to the variant under monitoring (VUM) category

24 May 2021

- Changed classification of B.1.617.2 from VOI to VOC
- Added reference to pre-print for evidence for immunity for B.1.617.2
- Added reference to UK technical briefing 12 to evidence for B.1.617.2

20 May 2021

- Mutations affecting the S1 part of the spike protein S1/S2 junction domain (residues 613-705) have been added to the mutations of interest lists for each variant. The mutations of interest now include changes to spike protein residues 319-541 and 613-705, and any additional unusual changes specific to the variant.
- Changed *Transmission in EU/EEA* for B.1.617.2 from *Sporadic/Outbreak* to *Community.*
- Added reference to Public Health England technical briefing 11 to the evidence for increased transmissibility for B.1.617.2.
- Added reference to pre-print publications for evidence of impact on immunity for B.1.617.1.
- Added B.1.1.519 (first detected in Mexico) and AV.1 (first detected in the UK) to the monitoring category.

11 May 2021

- Added references to Public Health England technical briefings 9-10 to the evidence for increased transmissibility for B.1.617.2.