**Purpose of the EQA:**

* Assess the accuracy of RSV sequencing.
* Measure the quality of viral sequencing.

Appendix 1 provides a summary of the procedures for specimen preparation, data submission, and analysis, along with details on result validation, quality metrics, and laboratory compliance.

Specimens for this EQA were distributed by UK NEQAS Microbiology as part of the WHO Molecular Detection of RSV Distribution 5791. Specimens with detectable virus are either sequenced in-house or sent to a reference laboratory following routine procedures.

As part of the sequencing result submission, participants complete a survey on sequencing technology. FASTA, FASTQ and/or BAM files are evaluated for sequencing quality metrics, including read coverage and accuracy based on the comparison to GISAID reference sequences EPI\_ISL\_412866 (RSV A) or EPI\_ISL\_1653999 (RSV B) (see Appendix 1 for definitions).

Each participant receives a report outlining the comparison to: 1-a reference lab which sequenced the distributed samples, and 2-against the aggregated results submitted by other participants.

Additionally, the comparison to GISAID reference sequences enables lineage assignment of the submitted sequence data using Nextclade (<https://clades.nextstrain.org/dataset>).

A total of 79 specimen sets were distributed with 75 (94.9%) participants returning results within the specified period. Overall performance for this distribution was excellent with 90.8% of participants returning the intended result for the detection of RSV part, whilst 89.9% of participants returned a correct result for the RSV typing part of the EQA.

In the Figures on page 3 and subsequent pages results are presented for the different Quality Metrics

Turn around time: The time taken to report your results was 11-days. This information is provided for your own use and does not form part of your

**Enquiries:** Pre-distribution test results are available should you experience a technical failure and wish to discuss the results. Written enquiries about this distribution should be addressed to Dr Sanjiv Rughooputh at the email address below.

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