



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Cwm Taf Morgannwg
University Health Board



Freedom of Information Request: Our Reference CTMUHB_184_24

You asked:

Please can you provide the following information, if not held by yourselves, please provide contact details for source required.

1. What is the manufacturer/NHS recommended cycles of amplification for PCR tests that are/were used since the start of the pandemic
2. What amount of amplification cycles were used at the beginning of the pandemic, middle and end of the pandemic ie may 2020 2021 2022 2023

Our response:

This information provided relates to Respiratory PCR tests (including SARS-CoV-2) that are run in the Cwm Taf Morgannwg University Health Board hospitals laboratories.

The number of cycles used by each instrument/method is set by the manufacturer.

Seegene and Cepheid supplied systems cycles 45 times and a positive is considered to be any result that shows a signal below 40 cycles. Both systems have been in use with no change to number of cycles throughout the pandemic and continue to be in use.

Launch supplied system cycles 40 times and a positive is considered to be any result that shows a signal below 38 cycles. This method has a pre incubation period prior to thermocycling hence the lower CT. This system was used until 15/04/2021. This system is no longer in use.

BioFire cartridge based PCR system does not produce CT values, results are given as positive or negative. This system was used throughout the pandemic and until 31/10/2023. This system is currently not in use.

ePlex cartridge based PCR system does not produce CT values, results are given as positive or negative. This system was used until 19/12/2021. This system is no longer in use.