Clinical Images and Case Reports Journal

Clinical Image | Vol 4 Iss 10

Covid 19 Diagnostics: Images of the Borderline CT Values and Resolution Through Retesting

Gospodinovic H[1*], Grego E[1], Jovanović V[2] and Jovanović S[3]

[1]Department of Molecular Microbiology, IPH Serbia, Belgrade, Serbia

[2]Center for Disease Control, IPH Serbia, Belgrade, Serbia

[3]Student of the PhD Program at the Faculty of Medicine at the University of Belgrade, Belgrade, Serbia

[*]**Corresponding author:** Gospodinovic H, Department of Molecular Microbiology, IPH Serbia, Belgrade, Serbia. E-mail: hristina_gospodinovic@batut.org.rs

Received: September 15, 2022; **Accepted:** September 26, 2022; **Published:** October 05, 2022

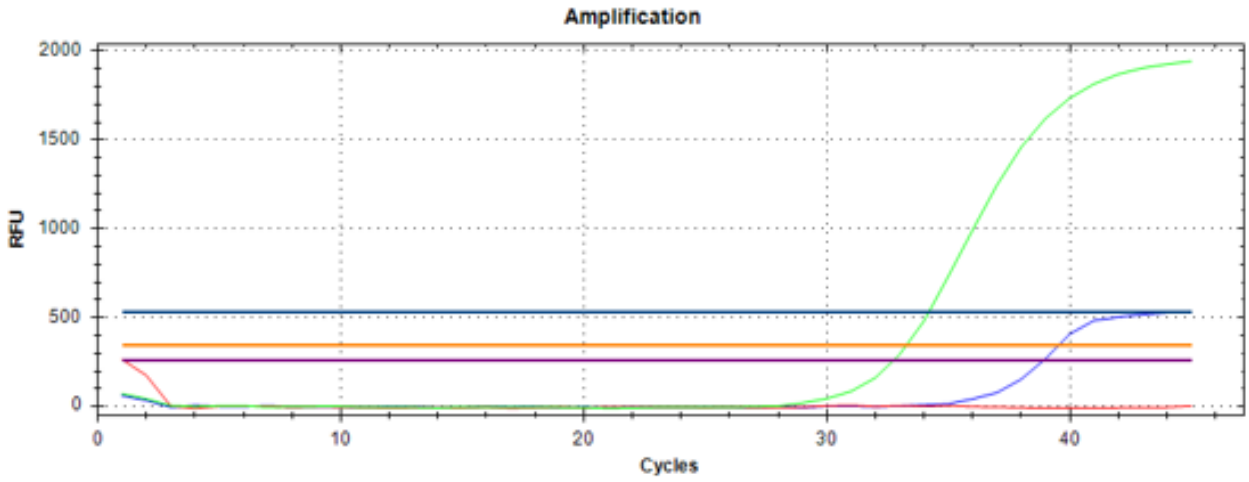

Figure 1: Bio-Rad CFX96 thermal cycler (Bio-Rad Laboratories, Inc.) [1]. Here, we present the RT-PCR results of the sample with a high Ct value of the N gene (Ct of 39.56). The cut-off (Ct) value of the kit is set as 40 [2]. The Ct value of IC detection in the CY5 channel was 32.77. We decided to retest the sample due to the high Ct value of the N target gene and lack of ORF1ab amplification. Retesting of borderline samples with Ct values in the intermediate cut-off zone is needed to confirm the results. The sample was retested using the Xpert Xpress SARS-CoV-2 assay [3]. The results are shown in Figure 2.

Copyright: *All articles published in Clinical Images and Case Reports Journal are the property of Literature Publishers, and is protected by copyright laws. Copyright © 2022, Literature Publishers, All Rights Reserved.*

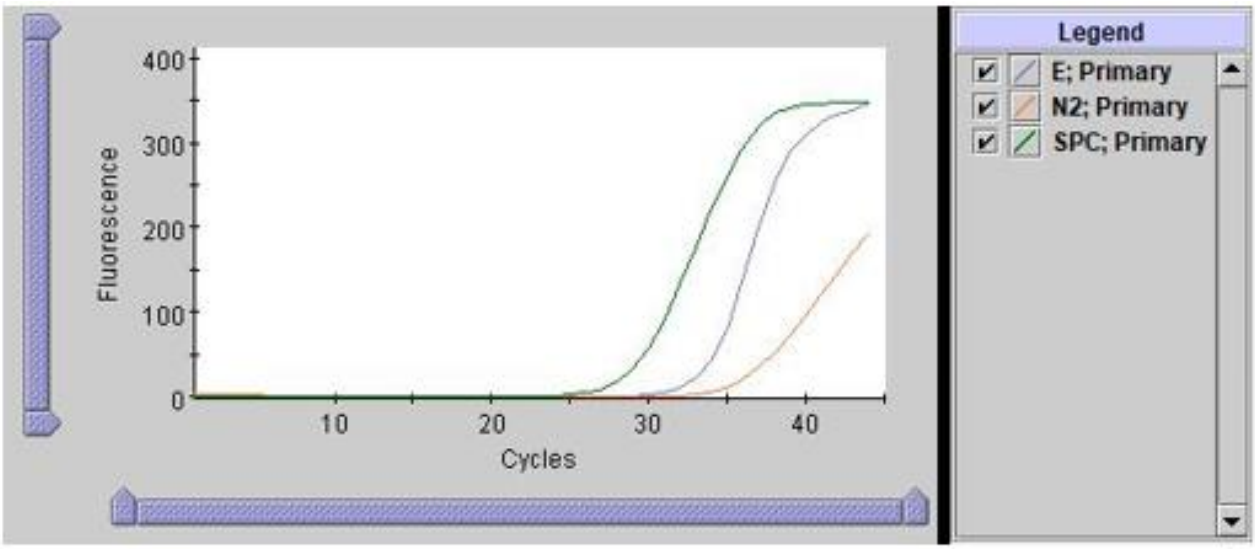

Figure 2: Xpert Xpress SARS-CoV-2 test (Cepheid GeneXpert) [3]. After retesting, the Ct value of the N2 target gene was 37.6, and that of the E gene was 33.6. The Ct value of the Sample Processing Control (SPC) was 28.8. The results indicate strong positivity and appropriate conditions for the RT-PCR reaction.

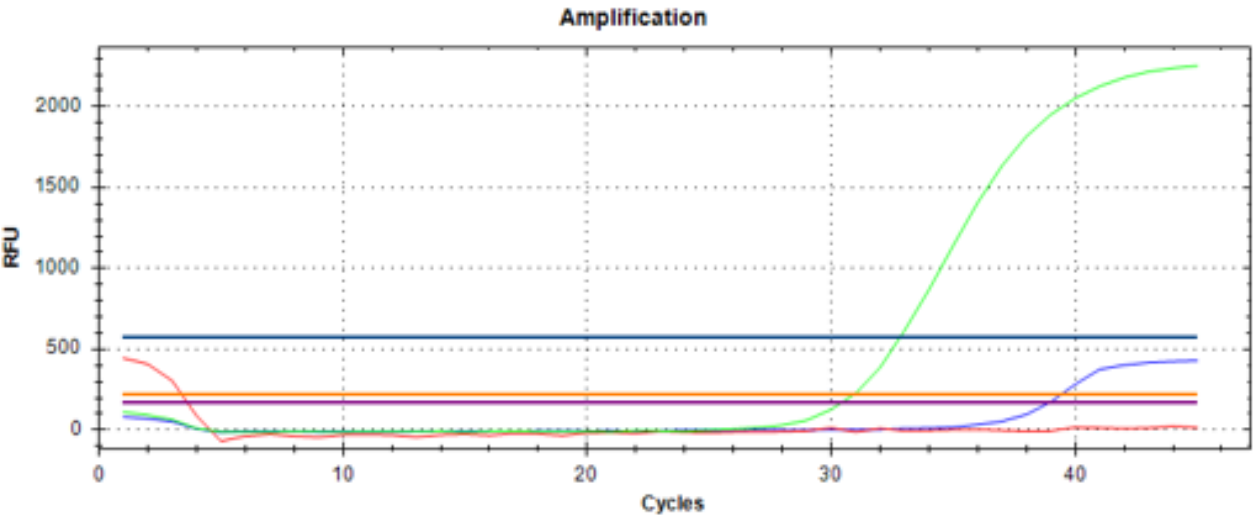

Figure 3: Bio-Rad CFX96 thermal cycler (Bio-Rad Laboratories, Inc.) [1]. The green amplification curve indicates IC with a Ct value of 30.40. The Ct value of the N target gene (blue amplification curve) was 39.41. The ORF1ab target gene was not detected. The sample was retested using the Xpert Xpress SARS-CoV-2 test. The results are presented in Figure 4.

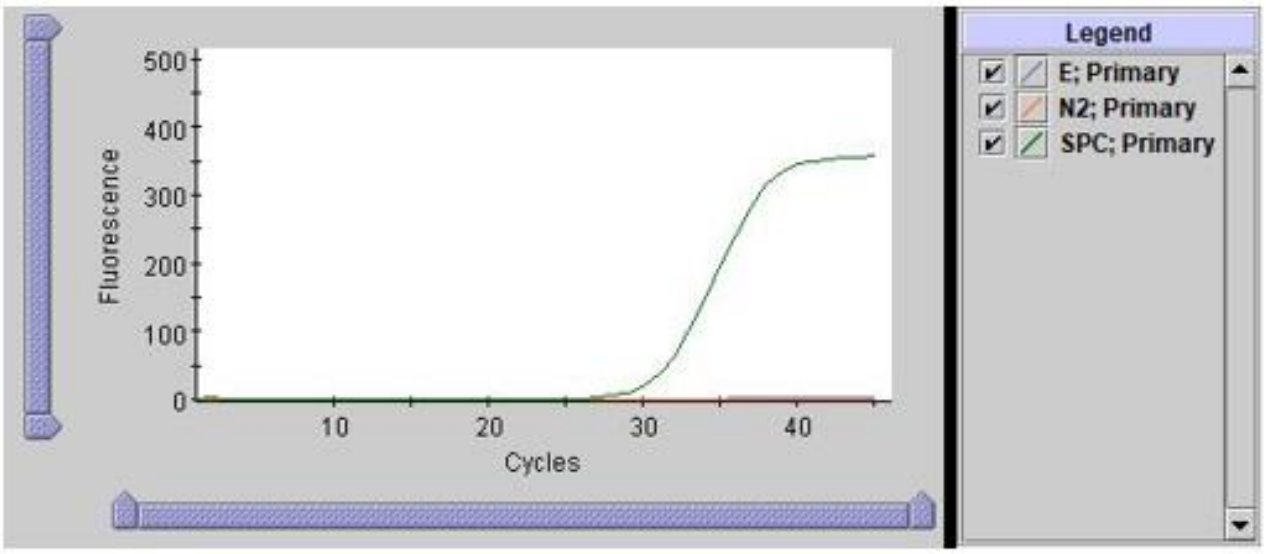

Figure 4: Xpert Xpress SARS-CoV-2 test (Cepheid GeneXpert) [3]. After retesting, the Ct value of the N2 target gene was 0.0, and that of the E gene was 0.0. The Ct value of the SPC was 30.7. Negative results were obtained for the retested sample.

The value of retesting is to resolve results that have high Ct values and minimize the risks of making the wrong diagnosis.

REFERENCES

1. Bio-Rad. https://www.bio-rad.com/en-in/product/cfx96-touch-real-time-pcr-detection-system?ID=LJB1YU15
2. https://www.fda.gov/media/137651/download
3. https://www.fda.gov/media/136314/download