

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Compositions of different LAMP reaction mixes used throughout this study.

File name: Supplementary Data 2

Description: RT-LAMP primer sequences used throughout this study.

File name: Supplementary Data 3

Description: Diagnostic parameters of compared SARS-CoV-2 LAMP assays on low viral load extracted RNA and direct gargle samples.

File name: Supplementary Data 4

Description: : Vivid COVID-19 LAMP In silico cross-reactivity analysis.

File name: Supplementary Data 5

Description: Detailed patient sample information for variant-specific samples used in this study.

File name: Supplementary Data 6

Description: : Diagnostic parameters of ZBP RTLAMP (RNA and direct) and Vivid COVID-19 LAMP.

File name: Supplementary Data 7

Description: Comparison of 10 key features between Vivid COVID-19 LAMP and other state-of-the-art LAMP tests.

File name: Supplementary Data 8

Description: Summarized data of field testing performed with Vivid COVID-19 LAMP in Slovakia.

File name: Supplementary Data 9

Description: Confusion matrices (3x3) with raw numerical data comparing system performance with a human operator.

File name: Supplementary Data 10

Description: Source data behind the graphs in the paper.

File name: Supplementary Video 1

Description: Clip demonstrating software for the reported mobile POCT system.