List of Tables

**Table 1** **Clinical characteristics of the tested patients, including age, sex, comorbid condition, symptoms, and breath sample type.** All the positive and negative COVID-19 patients have been tested and confirmed using reverse transcription-quantitative polymerase chain reaction (RT-qPCR).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Characteristics** | **RT-qPCR-confirmed positive COVID-19**  **(*n*p(+) = 43)** | **RT-qPCR-confirmed negative COVID-19 (*n*p(-) = 40)** | **Total number** | ***p*-value** |
| Age distribution (years old) |  |  |  | 0.239 |
| 0 – 17 | 2 | 0 | 2 |  |
| 18 – 44 | 27 | 22 | 49 |  |
| 45 – 64 | 13 | 18 | 31 |  |
| 65 – 74 | 1 | 0 | 1 |  |
| Sex distribution |  |  |  | 0.000 |
| Male | 30 | 6 | 36 |  |
| Female | 13 | 34 | 47 |  |
| Comorbidities |  |  |  | 0.554 |
| Cardiovascular problems | 4 | 3 | 7 |  |
| Allergy and atopic conditions | 0 | 1 | 1 |  |
| Endocrine metabolic problem | 1 | 0 | 1 |  |
| Respiratory problems | 0 | 0 | 0 |  |
| No pre-existing comorbid | 38 | 36 | 74 |  |
| Symptoms |  |  |  | 0.667 |
| Patients with symptoms | 9 | 6 | 15 |  |
| Asymptomatic patients | 34 | 34 | 68 |  |
| Breath samples |  |  |  |  |
| Positive COVID-19 detected | 318 | 12 | 330 |  |
| Negative COVID-19 detected | 15 | 270 | 285 |  |

**Table 2** **Key parameters of GeNose C19 obtained from the most optimum machine learning algorithm (i.e., DNN) of all breath samples (training and testing datasets)**. These include sensitivity, specificity, and area under the curve (AUC).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **2 × 2 Tables** | | **RT-qPCR** | | **Total** | **Sensitivity**  **(95% CI)** | **Specificity**  **(95% CI)** | **AUC**  **(95% CI)** |
| **(Positive)** | **(Negative)** |
| **GeNose C19** | **(Positive)** | 318 | 12 | 330 | 95.5  (92.7 – 97.3) | 95.7  (92.7 – 97.5) | 95.6  (93.7 – 97.1) |
| **(Negative)** | 15 | 270 | 285 |
| **Total** | | 333 | 282 | 615 |