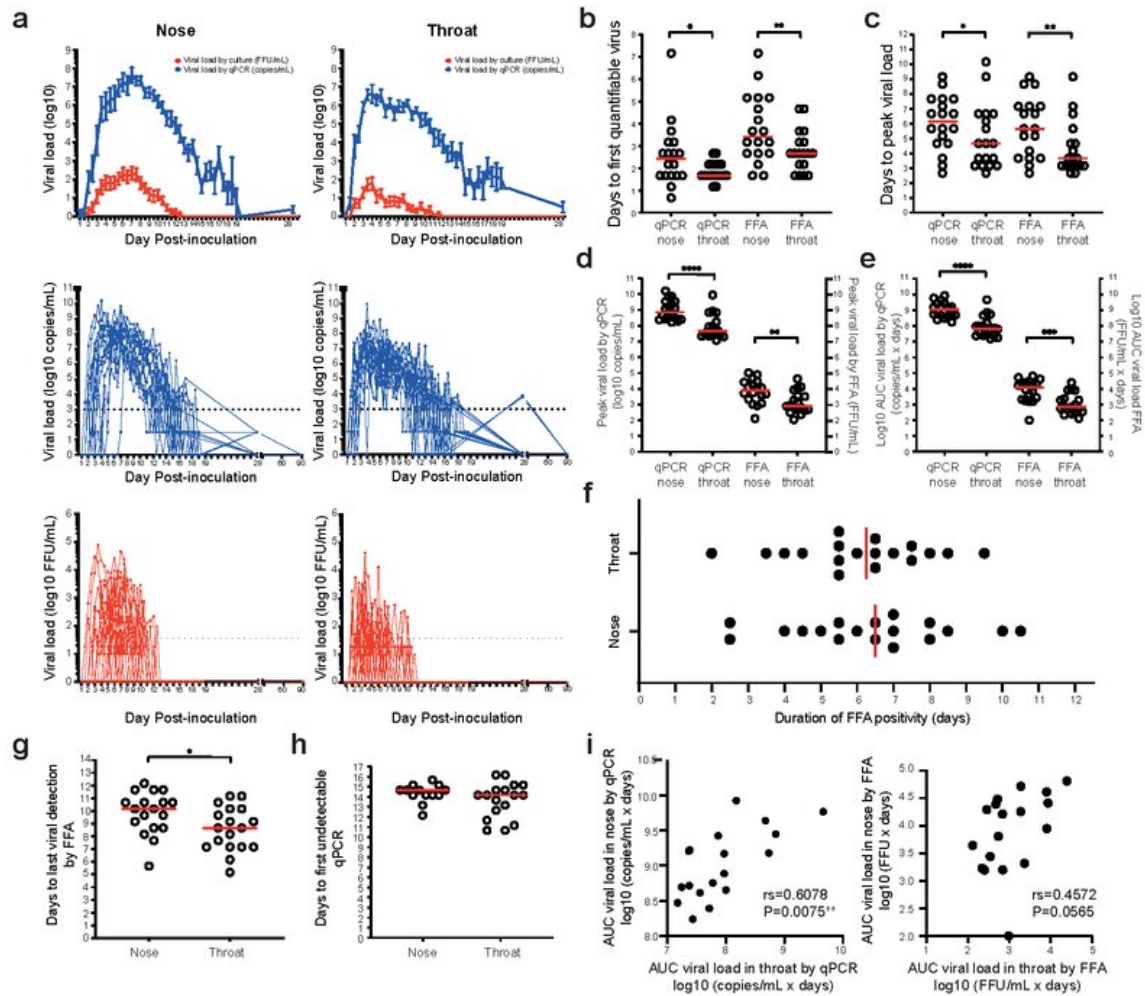


# **COVID-19 human challenge study reveals detailed insights into course of infection**

February 2 2022

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Figure 2



**Figure 2: Viral shedding after a short incubation period peaks rapidly following human SARS-CoV-2 challenge.** Healthy adult volunteers were challenged intranasally with SARS-CoV-2. In the 18 infected individuals, (a) VL in twice-daily nose and throat swab samples was measured by qPCR (blue) and focus-forming assay (FFA, red). Results are expressed as mean +/- S.E.M. Dotted lines represent the lower limit of quantification. (b) Median time to first quantifiable virus (c) peak VL are shown in red. (d) Peak and (e) cumulative (AUC) VL by qPCR and FFA in the nose and throat are compared. Wilcoxon matched-pairs signed rank tests are used to test significance. (f) Total duration of viral detection by FFA in nose and throat are shown. Medians are shown in red. (g) Median time to the last viral detection by FFA post-inoculation is shown in red. (h) Median time to the first undetectable VL by qPCR in the individuals who became undetectable while in quarantine is shown in red. (i) AUC VL by qPCR and FFA are correlated in nose vs. throat. Spearman's r and P values are shown. \*P<0.05, \*\*P<0.01, \*\*\*P<0.0001, \*\*\*\*P<0.0001.

Viral shedding after a short incubation period peaks rapidly following human SARS-CoV-2 challenge. Healthy adult volunteers were challenged intranasally with SARS-CoV-2. In the 18 infected individuals, (a) VL in twice-daily nose and throat swab samples was measured by qPCR (blue) and focus-forming assay (FFA, red). Results are expressed as mean  $\pm$  S.E.M. Dotted lines represent the lower limit of quantification. (b) Median time to first quantifiable virus (c) peak VL are shown in red. (d) Peak and (e) cumulative (AUC) VL by qPCR and FFA in the nose and throat are compared. Wilcoxon matched-pairs signed rank tests are used to test significance. (f) Total duration of viral detection by FFA in nose and throat are shown. Medians are shown in red. (g) Median time to the last viral detection by FFA post-inoculation is shown in red. (h) Median time to the first undetectable VL by qPCR in the individuals who became undetectable while in quarantine is shown in red. (i) AUC VL by qPCR and FFA are correlated in nose vs. throat. Spearman's  $r$  and  $P$  values are shown. \* $P$

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