

Viral load dynamics and disease severity in patients infected with SARS-CoV-2 in Zhejiang province, China, January–March 2020: retrospective cohort study

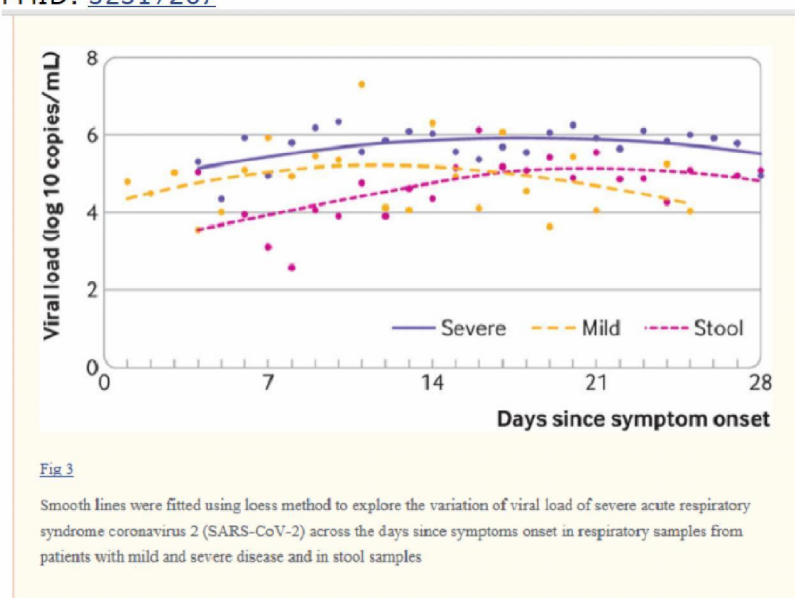
Shufa Zheng, et al

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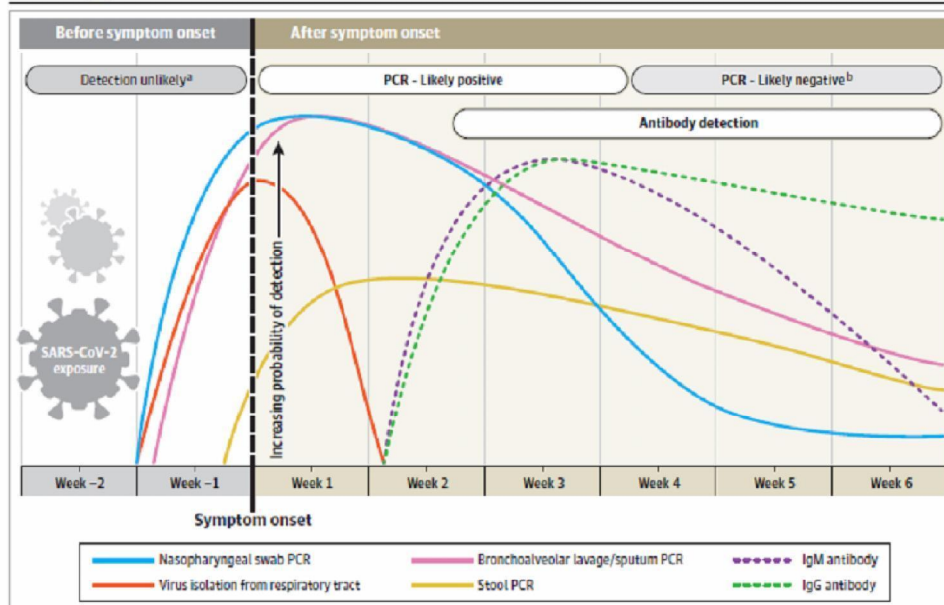
Rates of SARS-CoV-2 detection in the respiratory samples gradually decreased from 95% in the first week of symptom onset to 54% in the fourth week,

Interpreting Diagnostic Tests for SARS-CoV-2

Nandini Sethuraman, et al

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Figure. Estimated Variation Over Time in Diagnostic Tests for Detection of SARS-CoV-2 Infection Relative to Symptom Onset



This positivity starts to decline by week 3 and subsequently becomes undetectable. However, the Ct values obtained in severely ill hospitalized patients are lower than the Ct values of mild cases, and PCR positivity may persist beyond 3 weeks after illness onset when most mild cases will yield a negative result. (Ref= Zheng et al)

Real-time RT-PCR in COVID-19 detection: issues affecting the results

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Alireza Tahamtana and Abdollah Ardebilib

In the second patient, SARS-CoV-2 was detected in both URT and LRT specimens on day 14 of symptom onset. However, the initial viral loads were relatively lower than those of patient 1 in whom the test was performed on day 2 of symptom onset. From day 18 (URT specimen) and day 20 (LRT specimen), realtime RT-PCR became undetectable for two consecutive days, respectively.

(verwijst naar 9. Kim JY, Ko JH, Kim Y, et al. Viral Load Kinetics of SARS-CoV-2 infection in first two patients in Korea. *J Korean Med Sci.* 2020 Feb 24;35(7):e86. .

Yang Liu, et al

Viral dynamics in mild and severe cases of COVID-19

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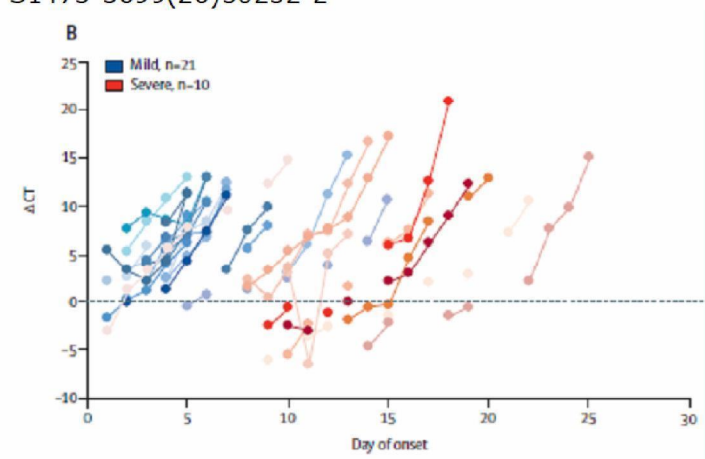


Figure: Viral dynamics in patients with mild and severe COVID-19

A) ΔCT values ($Ct_{\text{upper}} - Ct_{\text{lower}}$) from patients with mild and severe COVID-19 at different stages of disease onset. Median, quartile 1, and quartile 3 are shown. (B) ΔCT values of serial samples from patients with mild and severe COVID-19. COVID-19=coronavirus disease 2019. * $p < 0.005$.

Mild cases were found to have an early viral clearance, with 90% of these patients repeatedly testing negative on RT-PCR by day 10 post-onset. By contrast, all severe cases still tested positive at or beyond day 10 post onset.

SARS-CoV-2 Viral Load in Upper Respiratory Specimens of Infected Patients

Lirong Zou, M.Sc. et al

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