# Positive RT-PCR Test Results in Patients Recovered From COVID-19

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### **Definition:**

Eligible for hospital discharge or discontinuation of quarantine:

- (1) Normal temperature lasting longer than 3 days
- (2) Resolved respiratory symptoms
- (3) Substantially improved acute exudative lesions on chest CT scan
- (4) Two (2) consecutively negative RT-PCR test results separated by at least 1 day.

Protocol after hospital discharge:

- (1) Home quarantine for 5 days
- (2) Follow up RT-PCR 5-13 days after hospital discharge
- (3) Three Follow up RT-PCR 4-5 days later if RT-PCR after hospital discharge was positive

## **Study population:**

4 recovered patient with mild to moderate COVID-19 (1 hospitalized patient and 3 medical personnel patient)

Date and Place of Hospitalization January 1 to February 15, 2020. Wuhan, China

#### **Treatment:**

All received oseltamivir

#### **Results:**

50% male, ages 30-36

Three out of 4 (75%) had fever, cough during diagnosis of COVID

The 4<sup>th</sup> asymptomatic underwent thin-section CT due to exposure to

infected patients.

CT imaging of all patients showed ground-glass opacification or mixed ground-glass opacification and consolidation.

The RT-PCR tests repeated 5 to 13 days after hospital discharge were all positive.

All patients had 3 repeat RT-PCR tests performed over the next 4 to 5 days and all were positive.

The patients continued to be asymptomatic and chest CT findings showed no change.

They did not report contact with any person with respiratory symptoms. No family member was infected.

Time from symptom onset to recovery ranged from 12 to 32 days.

#### **Conclusion:**

1. Although the patients had 2 negative RT-PCR test results before hospital discharge. All had positive RT-PCR test results 5 to 13 days later. At least a proportion of recovered patients still may be virus carriers, hence continued patient management may need to be reevaluated.

## Limitation:

1. Small number of patients with mild or moderate infection.