

## **Diagnostic** (*chest CT, chest X-ray, bronchoscopy, PCR test, etc.*)

1. How many of these patients with abnormal chest CT had a ‘normal’ chest x-ray? Do we have data on that?
2. Was bronchoscopy performed for some of these patients and how did performance of PCR change based on sampling site if so?
3. How long would you wait before doing a second PCR test?
4. Noted that everyone with pneumonia was admitted, I think it said - was that by CT diagnosis, and was that because of concern for potential rapid progression? How we can safely decide who, if anyone with pneumonia from SARS-COV-2 could be treated at home - can we safely use pneumonia severity index (PSI) or maybe not?

## **ICU/Medical-Related** (*ARDS, ventilation, ECMO, etc.*)

5. Top 10 things that Dr. Peng & colleagues think we need to know and/or the top 10 lessons from your experiences in ICU?
6. What are the thresholds for ICU admission?
7. What is your experience with caring for patients under the age of 18 years—how many have been mechanically ventilated, survived, died?
8. Besides ARDS, is there significant other organ injury with COVID-19, in particular ventricular dysfunction, pulmonary hypertension, encephalopathy, secondary bacterial co-infection?
9. Are there any therapies for the critically ill patients with ARDS that appeared beneficial or harmful?
10. Any restrictions on rescue therapies for refractory hypoxemia in ARDS?
11. How often did you obtain lower respiratory samples (and with what technique), and how often was an upper sample negative but lower respiratory tract sample positive?
12. Any strategies on how to manage the \*cardiac complications\* of the ICU patients? Anything different than the usual?
13. Can you clarify the rate of co-infection with another virus for patients with confirmed COVID-19?
14. Any guidance on using not CCM-trained providers for critical illness?

### **【Ventilation and ECMO】**

15. Definition of “time-limited trial” of mechanical ventilation in this context (i.e. when does death seem inevitable?)
16. What is the survival rate for ECMO patients? What is the true survival of ventilated patients?
17. What is average time on ECMO? Average age of ECMO patients?
18. What proportion of ECMO patients received VV vs. VA ECMO?
19. For the small number of patients requiring ECMO or prolonged mechanical ventilation, how did you decide on criteria (limited resource)?

### **【immunosuppressed patients/cancer patients】**

20. Any data on characteristics and outcomes in immunosuppressed patients (transplant patients, cancer patients etc).
21. Do you have information regarding clinical presentation and outcomes among cancer patients including stem cell transplant recipients? Interested in knowing whether clinical symptoms/ presentation vary compared to general medical population.

### **Health care workers protection**

22. What are your lessons learned on the optimal and practical personal protective (PPE) equipment needs for the health care providers for patients in the ICU? In particular, should we assume full airborne precautions, or is droplet precaution sufficient?
23. What is the optimal number of times to don and doff PPE for the ICU nurses and physicians (only once, or can donning and doffing be learned to be done very safely and thus as needed)? *\*\*don – put on; doff – take off*
24. What is the rate of infection of healthcare workers in the ICU as more experience with the disease has evolved? Overall, what percent of the health care workers became positive for the virus?
25. What is the optimal shift rotation, in terms of number of hours, for nurses and physicians in the ICU?
26. What are health care workers advised to wear for general work in the ICU? In other words, are regular clothes allowed or do the staff wear hospital-issued clothing?

27. For the clinical laboratories doing testing, what level of precaution or PPE would be appropriate for preanalytical and analytical personnel?
28. What kind of PPE did your staff wear for a) intubation, b) NIV (Noninvasive ventilation), and c) HFNC (High flow nasal cannula) ?
29. What were the best ways to prevent risks for health care workers, especially once the usual PPE supplies were exhausted?

## **Treatments / Experimental Treatments / Clinical Trials**

30. Do you have any experience with experimental medical therapies, such as chloroquine (氯喹) , oseltamivir (奥司他韦), remdesivir (瑞德西韦) ?
31. Have you tried Xygris the old sepsis drug?
32. Which drugs are recommended for anticoagulation?
33. *For Dr. Cao* – Are you using therapeutic or prophylactic anticoagulation on these patients? IF therapeutic – is this only in patients with elevated D-dimer levels?
34. What is our current knowledge of the existence of the virus remaining in the body even after patients recover? Is there any evidence the virus, or the virus gene retains in human body? Which leads to those diseases re-occurrence on some patients after they recover?
35. Have you detected any mutations in the virus?
36. Are there reliable data regarding the effectiveness of traditional herbal therapy in treating COVID-19?

## **Hospital Resources Management**

37. For hospitals that have other emergency service requirements (like trauma centers), how was this handled with regards to ICU capacity?
38. How to manage excess inpatient volumes - including limiting eligibility for ICU care, cancelling semi-elective treatments and surgeries/procedures, and arranging overflow rooms for respiratory failure. Did you alter the administration of chemotherapy?
39. Was there consideration of regional distribution of patients to preserve some ICU capability?

40. What did you do for elective surgery? Did you cancel all elective cases? How did you prioritize other services?
41. It takes us 2 hours to sanitize the CT scanner after a COVID patient is imaged. Did you find any high-throughput ways to decrease that?
42. How many hospital/ICU beds per capita in Shanghai?
43. Which patients did you allocate to air-vented rooms vs negative pressure?
44. Were there any other resources that were unexpectedly consumed?
45. How many patients can be safely cared for by a physician and how did you structure the care teams (e.g. supervising specialist, non-specialists, etc.)?
46. What changes in usual practice did you adopt to enhance efficiency? (e.g. frequency of VS, labs, POC testing, bedside US)
47. How did you structure provider rotation to mitigate fatigue/burnout?
48. Do you think US current control measures are effective? What can the US learn from China in order to have enough testing?