

8. Recommendation

At the moment, there is **insufficient evidence to recommend use of ECMO on patients with COVID-19** in terms of decreasing mortality rate, decreasing hospitalization stay and resolution of symptoms. Moreover, the use of ECMO may increase the risk of bleeding; although this is an indirect evidence from ARDS-related studies before the COVID-19 pandemic.

Furthermore, the use of ECMO generally demands many resources in terms of:

- Personnel
TCVS, anesthesiologists, pulmonologist, intensivists, pathologists, rehabilitation physician, ICU nurses, respiratory therapist and laboratory technician, and other allied health personnel
- Equipment
Procurement and maintenance cost of the following machines: ECMO machine, telemetry, mechanical ventilator
- Infrastructure
Adapting to general spatial requirements of ECMO and COVID-19 infection prevention and control (IPC) measures: negative pressure room, HEPA filters, and separate ward
- Supplies
Blood products and PPEs for personnel
- Training cost for ECMO cannulation, and maintenance.

This is an interim recommendation based on existing evidence and may change based on the results of on-going and future studies on the use of ECMO on COVID-19.