

Figure S1. Diagram of states and transitions in the multi-state model.

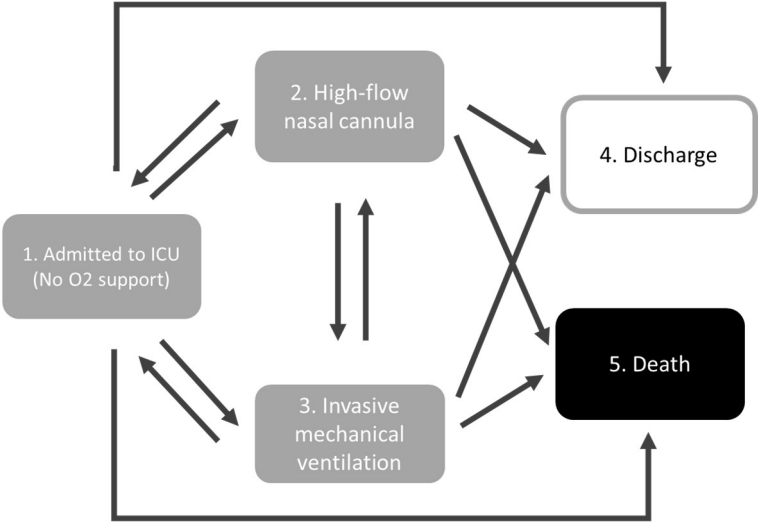


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Gede Ketut Sajinadiyasa Dyah Kanyawati	Sanglah General Hospital
Marcello Salgado	Santa Casa de Misericordia de Juiz de Fora
Assad Sassine	Santa Casa de Misericórdia de Vitoria
Bhirowo Yudo	Sardjito Hospital
Scott McCaul	Scripps Memorial Hospital La Jolla
Bongjin Lee	Seoul National University Children's Hospital
Sang Min Lee	Seoul National University Hospital
Arnon Afek	Sheba Medical Center
Shimaa E Fattouh	Sherbin General Hospital
Yoshiaki Iwashita	Shimane University Hospital
Hammad Fadlalmola	Soba University Hospital
Bambang Pujo Semedi Neurinda Permata Kusumastuti	Soetomo General Hospital (FK UNAIR)
Noureldin Mohamed Mansour	Souad Kafafi University Hospital
Jack Metiva	Spectrum Health Western Governors University
Nicole Van Belle	St. Antonius Hospital
Ignacio Martin-Loeches	St James's University Hospital
Dr Mohammed Al-Sadawi	Stony Brook University
Cenk Kirakli	Suat Seren Chest Diseases and Surgery Practice and Training Centre
Al-Touny Shimaa	Suez Canal University Hospitals
Lenny Ivatt	Swansea Hospital

Chia Yew Woon	Tan Tock Seng Hospital
Hyun Mi Kang	The Catholic University of Seoul St Mary Hospital
Timothy Smith	The Christ Hospital
Erskine James	The Medical Centre Navicent Health
Nawar Al-Rawas	Thomas Jefferson University Hospital
Yudai Iwasaki	Tohoku University
Hamza Ashour	Traghen Hospital
Kenny Chan King-Chung	Tuen Mun Hospital
Vadim Gudzenko	UCLA Medical Centre (Ronald Regan)
Beate Hugi-Mayr	Universitätsspital Bern, Universitätsklinik für Herz- und Gefäßchirurgie
Fabio Taccone	Universite Libre de Bruxelles
Fajar Perdhana	University Airlangga Hospital (Adult)
Yoan Lamarche	University de Montreal (Montreal Heart Institute)
Joao Miguel Ribeiro	University Hospital CHLN
Nikola Bradic	University Hospital Dubrava
Klaartje Van den Bossche	University Hospital Leuven
Oude Lansink	University Medical Center Groningen
Gurmeet Singh	University of Alberta (Mazankowski Heart Institute)
Gerdy Debeuckelaere	University of Antwerp
Henry T. Stelfox	University of Calgary and Alberta Health Services
Cassia Yi	University of California at San Diego
Jennifer Elia	University of California, Irvine
Thomas Tribble	University of Kentucky Medical Center
Shyam Shankar	University of Missouri
Raj Padmanabhan	University of Pittsburgh Medical Centre
Bill Hallinan	University of Rochester Medical Centre (UR Medicine)
Luca Paoletti	University of South Carolina
Yolanda Leyva	University of Texas Medical Branch
Tatuma Fykuda	University of the Ryukyus
Jenelle Badulak	University of Washington in Seattle
Jillian Koch	University of Wisconsin & American Family Children's Hospital
Lisa Janowaik	UTHealth (University of Texas)
Amy Hackman	UT Southwestern
Deb Hernandez	Valley Children's Hospital (Madera)
Jennifer Osofsky	Vassar Brothers Medical Center (VBMC)
Katia Donadello	Verona Integrated University Hospital
Aizah Lawang	Wahidin Sudirohusodo Hospital
Josh Fine	WellSpan Health - York Hospital
Benjamin Davidson	Westmead Hospital
Andres Oswaldo Razo Vazquez	Yale New Haven Hospital
Ibrahim Abdehaleem	Zagazig University Hospital

Table S2. Normality testing for tabulated variables using Kolmogorov-Smirnov (K.S) testing

	K.S test statistic	P-Value
Age (years)	0.06	<0.01
BMI (kg/m ²)	0.11	<0.01
SOFA score	0.16	<0.01
SpO2 (%)	0.48	<0.01
Respiratory rate (breaths/min)	0.11	<0.01
Length of hospital stay (days)	0.17	<0.01
Nasal Flow	0.16	<0.01
MV Flow	0.11	<0.01
Nasal Duration	0.16	<0.01
MV Duration	0.21	<0.01