

# THE LANCET

## Respiratory Medicine

### **Supplementary appendix**

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Gorman E, Connolly B, Couper K, et al. Non-invasive respiratory support strategies in COVID-19. *Lancet Respir Med* 2021; published online April 16. [http://dx.doi.org/10.1016/S2213-2600\(21\)00168-5](http://dx.doi.org/10.1016/S2213-2600(21)00168-5).

**Table: Guideline recommendations on non-invasive ventilation strategies for adult patients with COVID-19 acute hypoxaemic respiratory failure**

	Organisation	Guideline	Overview of non-invasive respiratory strategies*		
			HFNO	CPAP	BIPAP/NIV
<b>GLOBAL</b>					
	<b>World Health Organization</b>	Clinical management of COVID 19 (May 2020) <a href="https://www.who.int/publications/i/item/clinical-management-of-covid-19">https://www.who.int/publications/i/item/clinical-management-of-covid-19</a>	Conditional recommendation	Conditional recommendation	Conditional recommendation
	<b>Surviving Sepsis Campaign</b>	Guidelines on the Management of Critically Ill Adults with Coronavirus Disease 2019 (COVID-19) (January 2021) <a href="https://journals.lww.com/ccmjournal/Abstract/9000/Surviving_Sepsis_Campaign_Guidelines_on_the.95371.aspx">https://journals.lww.com/ccmjournal/Abstract/9000/Surviving_Sepsis_Campaign_Guidelines_on_the.95371.aspx</a>	Weak recommendation	Not specifically mentioned	Weak recommendation
<b>UK</b>					
	<b>NHS England~</b>	Guidance for the role and use of non-invasive respiratory support in adult patients with COVID-19 (November 2020) <a href="https://www.nice.org.uk/Media/Default/About/COVID-19/Specialty-guides/specialty-guide-NIV-respiratory-support-and-coronavirus.pdf">https://www.nice.org.uk/Media/Default/About/COVID-19/Specialty-guides/specialty-guide-NIV-respiratory-support-and-coronavirus.pdf</a> ; <a href="https://www.nice.org.uk/guidance/ng191/chapter/Recommendations">https://www.nice.org.uk/guidance/ng191/chapter/Recommendations</a>	Does not support	Supports	Only for hypercapnic acute-on-chronic ventilatory failure
	<b>British Thoracic Society/Intensive Care Society</b>	Respiratory care in patients with Acute Hypoxaemic Respiratory Failure associated with COVID-19 (January 2021) <a href="https://www.brit-thoracic.org.uk/covid-19/covid-19-information-for-the-respiratory-community/">https://www.brit-thoracic.org.uk/covid-19/covid-19-information-for-the-respiratory-community/</a>	Supports (trial enrolment suggested#)	Supports (trial enrolment suggested#)	Not specifically mentioned
	<b>Faculty of Intensive Care Medicine/Intensive Care Society/Association of Anaesthetists/Royal College of Anaesthetists</b>	Clinical guide for the management of critical care for adults with COVID-19 during the coronavirus pandemic (October 2020) <a href="https://icmanaesthesiacovid-19.org/clinical-guide-for-the-management-of-critical-care-for-adults-with-covid-19-during-the-coronavirus-pandemic">https://icmanaesthesiacovid-19.org/clinical-guide-for-the-management-of-critical-care-for-adults-with-covid-19-during-the-coronavirus-pandemic</a>	Supports in the context of trial enrolment#	Supports	Consider for hypercapnic acute-on-chronic ventilatory failure



EUROPE					
	<b>Italian Thoracic Society/Italian Respiratory Society</b>	Managing the respiratory care of patients with COVID-19 (March 2020) <a href="https://ers.app.box.com/s/j09ysr2kdhmkcu1ulm8y8dxnosm6yi0h">https://ers.app.box.com/s/j09ysr2kdhmkcu1ulm8y8dxnosm6yi0h</a>	Supports	Supports	Supports
	<b>Societe de Pneumologie de Langue Francaise</b>	Procedure for pulmonary management of non-ICU patients hospitalized in the context of the COVID-19 pandemic (April 2020) <a href="https://splf.fr/covid-19-docs-english-version/">https://splf.fr/covid-19-docs-english-version/</a>	Conditional recommendation	Conditional recommendation	Conditional recommendation
	<b>Irish Thoracic Society</b>	Respiratory Management of Patients with COVID-19 (January 2021) <a href="https://irishthoracicsociety.com/wp-content/uploads/2020/03/Respiratory-Mgt-Guideline-V2-Jan-2021.20.01.pdf">https://irishthoracicsociety.com/wp-content/uploads/2020/03/Respiratory-Mgt-Guideline-V2-Jan-2021.20.01.pdf</a>	Supports	Supports	Only for hypercapnic acute-on-chronic ventilatory failure
	<b>German Respiratory Society</b>	Position statement for the State-of-the-Art Application of Respiratory Support in Patients with COVID-19 (June 2020) <a href="https://www.karger.com/Article/FullText/509104">https://www.karger.com/Article/FullText/509104</a>  German recommendations for critically ill patients with COVID-19 (April 2020) <a href="https://link.springer.com/article/10.1007/s00063-020-00689-w">https://link.springer.com/article/10.1007/s00063-020-00689-w</a>	Conditional recommendation	Conditional recommendation	Conditional recommendation
AUSTRALIA/NEW ZEALAND					
	<b>Australia and New Zealand Intensive Care Society/National COVID-19 Clinical Evidence Taskforce</b>	COVID-19 Guidelines (January 2021) <a href="https://www.anzics.com.au/coronavirus-guidelines/">https://www.anzics.com.au/coronavirus-guidelines/</a> <a href="https://covid19evidence.net.au/">https://covid19evidence.net.au/</a> <a href="https://www.anzics.com.au/coronavirus-guidelines/">https://www.anzics.com.au/coronavirus-guidelines/</a>	;	Not specifically mentioned	Conditional recommendation

NORTH AMERICA					
	<b>Government of Canada</b>	Clinical management of patients with moderate to severe COVID 19 – interim guidance (August 2020) <a href="https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/clinical-management-covid-19.html">https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/clinical-management-covid-19.html</a>	Conditional recommendation	Not specifically mentioned	Conditional recommendation
	<b>National Institutes of Health (NIH)</b>	Care of critically ill patients with COVID-19 (December 2020) <a href="https://www.covid19treatmentguidelines.nih.gov/critical-care/">https://www.covid19treatmentguidelines.nih.gov/critical-care/</a>	Moderate recommendation	Not specifically mentioned	Moderate recommendation
ASIA					
	<b>China National Health Commission</b>	Chinese Clinical Guidance for COVID-19 Pneumonia Diagnosis and Treatment (March 2020) <a href="http://kify.meetingchina.org/msite/news/show/cn/3337.html">http://kify.meetingchina.org/msite/news/show/cn/3337.html</a>	Supports	Not specifically mentioned	Supports

Notes: \*Most recent version of available guidelines used, please refer to links to source documents for full detail. Where documents are available as formal guidelines, specific wording with regards to strength of recommendation are used. Where documents are available as guidance for clinical pathways, use of the term ‘Supports’ has been used where a modality is included in the content. ~This guidance is now being incorporated into NICE Guideline NG191 COVID-19 rapid guideline: managing COVID-19; as of 12<sup>th</sup> April 2021 NICE is reviewing the evidence for respiratory support and further recommendations will be added to updated guideline versions available at the link provided. #Perkins GD, Couper K, Connolly B, et al. RECOVERY- Respiratory Support: Respiratory Strategies for patients with suspected or proven COVID-19 respiratory failure; Continuous Positive Airway Pressure, High-flow Nasal Oxygen, and standard care: A structured summary of a study protocol for a randomised controlled trial. *Trials* 2020;21(1):687. doi: 10.1186/s13063-020-04617-3

Abbreviations: HFNO = high-flow nasal oxygen, CPAP = continuous positive airway pressure, BIPAP = bilevel positive airway pressure, NIV = non-invasive ventilation