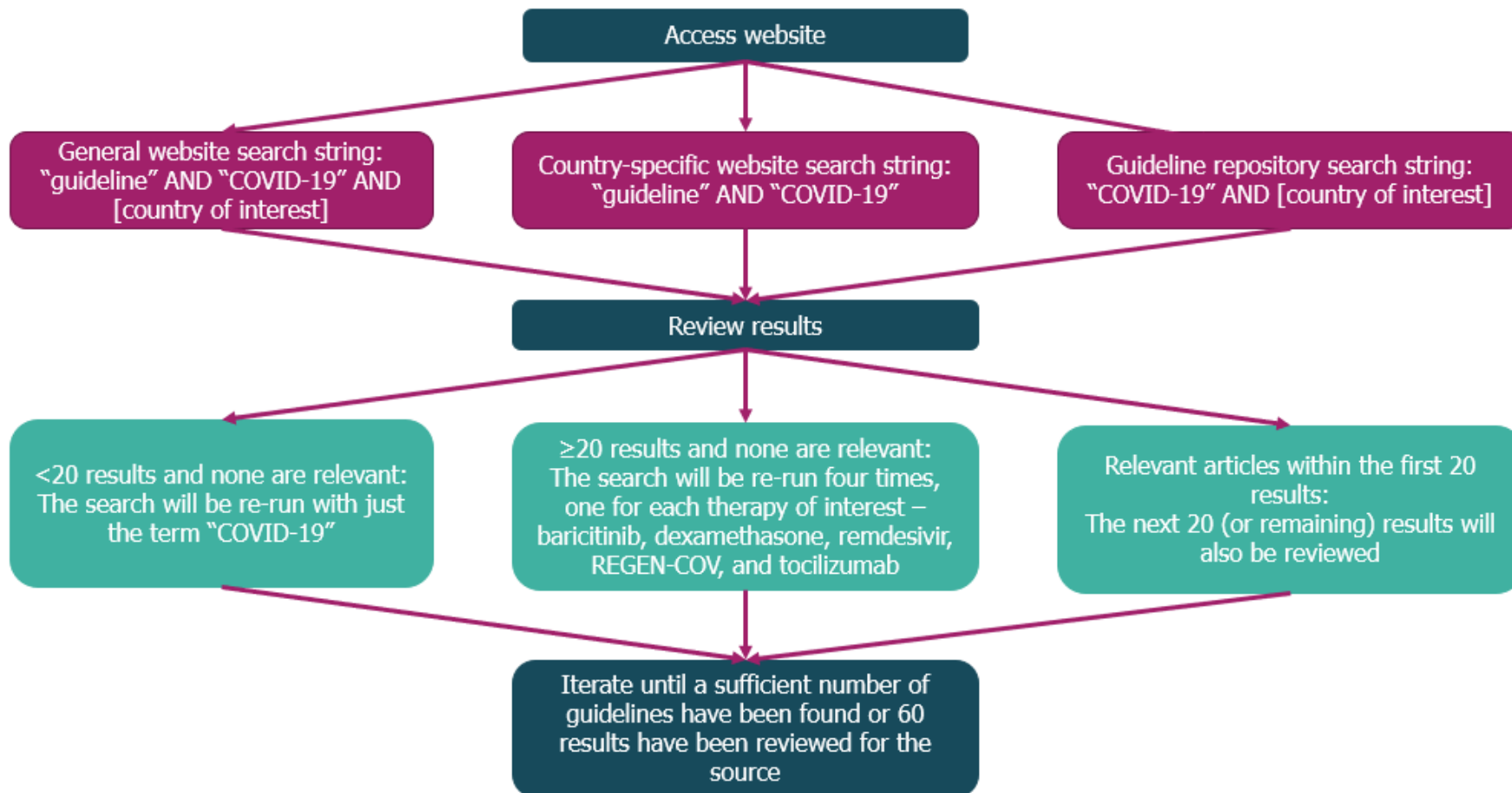


1 **SUPPLEMENTARY MATERIAL**

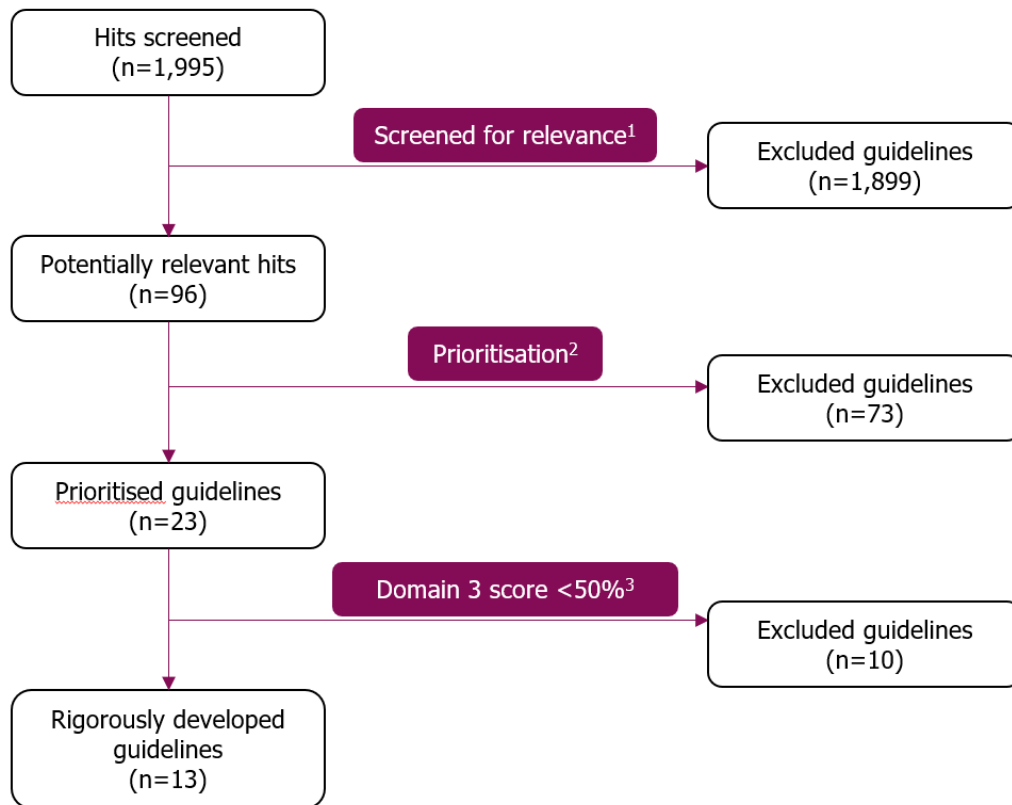
2 **Supplementary Figure 1: Summary of Search Strategy for the COVID-19 Guideline Review**



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4 Footnotes: Specific search strings were altered based on the syntax allowed for a specific website (for example, Boolean operators may not be used in certain websites).

1 **Supplementary Figure 2: Flow Chart for COVID-19 Guideline Inclusion/Exclusion**



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3 ¹Hits were relevant if they were guidelines.

4 ²Priority was given to guidelines which: were applicable to the broadest possible patient population and to an entire country or region, assessed multiple therapies of interest,
5 and directly assessed clinical data.

6 ³Agree-II Domain 3: Rigour of Development.

1 Supplementary Table 1: International and Country-Specific Sources

Country/Region	Source
All Countries/Regions	Google searches ¹
International	The Guidelines International Network (GIN) International Guideline Library (https://g-i-n.net/)
	Evidence Search (https://www.evidence.nhs.uk/)
	GuidelineCentral (https://www.guidelinecentral.com/)
	The Turning Research Into Practice (TRIP) database (https://www.tripdatabase.com/)
	World Health Organization (WHO) (https://www.who.int/)
	The International Society for Infectious Disease (ISID) (https://isid.org/)
	European Society of Clinical Microbiology and Infectious Diseases (ESCMID) (https://www.escmid.org/)
	European Respiratory Society (ERS) (https://www.ersnet.org/guidelines/)
	British Medical Journal (BMJ) (https://bestpractice.bmj.com/info/us/coronavirus_covid-19)
	Surviving Sepsis Campaign (SSC) (https://www.sccm.org/SurvivingSepsisCampaign/Resources/Resource-Library)
Brazil	Brazilian Ministry of Health (https://www.gov.br/saude/pt-br)
Canada	Clinical Practice Guidelines (CPG) Infobase (https://joulecma.ca/cpg/homepage)
	Government of Canada COVID-19 Website (https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19.html)
	Ontario COVID-19 Science Advisory Table (https://covid19-sciencetable.ca/)
France	Haute Autorité de Santé (HAS) (https://www.has-sante.fr/)
	La Société de Réanimation de Langue Française (SRLF) (https://www.srlf.org/recommandations-referentiels-epp)
	Ministère des Solidarités et de la Santé (https://solidarites-sante.gouv.fr/)
	Haut Conseil de la Santé Publique (HCSP) (https://www.hcsp.fr/Explore.cgi/Accueil)
Germany	Das Portal der wissenschaftlichen Medizin (https://www.awmf.org/leitlinien/aktuelle-leitlinien.html#FA)
	Robert Koch Institut (RKI) (https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/nCoV.html)

Country/Region	Source
	Federal Ministry of Health (https://www.bundesgesundheitsministerium.de/)
India	Ministry of Health and Family Welfare (MoHFW) (https://www.mohfw.gov.in/)
	Clinical Infectious Diseases Society (CIDS) (http://www.cidsindia.org/)
	Indian Council of Medical Research (ICMR) (https://www.icmr.gov.in/)
Italy	AGENAS National Agency for Regional Health Services (https://www.agenas.gov.it/)
	Agenzia Italiana del Farmaco (AIFA) (https://www.aifa.gov.it/)
	Ministry of Health (https://www.salute.gov.it/portale/nuovocoronavirus/homeNuovoCoronavirus.jsp)
	Società Italiana di Malattie Infettive e Tropicali (SIMIT) (https://www.simit.org/)
Japan	Ministry of Health, Labour and Welfare (MHLW) (https://www.mhlw.go.jp/index.html)
	The Japanese Association for Infectious Diseases (JAID) (https://www.kansensho.or.jp/)
Mexico	Mexican Ministry of Health (https://coronavirus.gob.mx/)
Turkey	Türkiye Enfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Uzmanlık Derneği (EKMUD) (https://ekmud.org.tr/)
	Ministry of Health (https://www.saglik.gov.tr/?_Dil=1)
	COVID-19 Data Portal (https://covid19.tubitak.gov.tr/)
UK	National Institute for Health and Care Excellence (NICE) (https://www.nice.org.uk/)
	UK Department of Health & Social Care (https://www.gov.uk/government/organisations/department-of-health-and-social-care)
US	Centers for Disease Control and Prevention (CDC) (https://www.cdc.gov/)
	Infectious Diseases Society of America (IDSA) (https://www.idsociety.org/)

1 **Abbreviations:** UK, United Kingdom; US, United States.

2 ¹ For all countries and regions, Google searches were conducted to supplement country-specific websites and guideline repositories.

1 Supplementary Table 2: Search Terms by Language

Language	Search Terms
English	<ul style="list-style-type: none"> • Guideline • COVID-19 • Baricitinib • Dexamethasone • Remdesivir • REGEN-COV • Casirivimab and imdevimab • Tocilizumab • [Country of interest]
French	<ul style="list-style-type: none"> • Ligne directrice • COVID-19 • Baricitinib • Dexaméthasone • Remdesivir • REGEN-COV • Casirivimab et imdevimab • Tocilizumab • [France]
German	<ul style="list-style-type: none"> • Leitlinie • COVID-19 • Baricitinib • Dexamethason • Remdesivir • REGEN-COV • Casirivimab und Imdevimab • Tocilizumab • [Deutschland]
Italian	<ul style="list-style-type: none"> • Linee guida • COVID-19 • Baricitinib • Desametasone • Remdesivir • REGEN-COV • Casirivimab e imdevimab • Tocilizumab • [Italia]
Japanese	<ul style="list-style-type: none"> • ガイドライン • 新型コロナウイルス • COVID-19 • バリシチニブ • デキサメタゾン • レムデシビル • REGEN-COV • カシリビマブとイムデビマブ • トシリズマブ • [日本]
Portuguese	<ul style="list-style-type: none"> • Diretriz • COVID-19 • Baricitinibe • Dexametasona • Remdesivir • REGEN-COV • Casirivimab e imdevimab • Tocilizumab • Brasil
Spanish	<ul style="list-style-type: none"> • Directriz • COVID-19 • Baricitinib • Dexametasona • Remdesivir • REGEN-COV • Casirivimab e imdevimab • Tocilizumab

Language	Search Terms
	<ul style="list-style-type: none">• [Mexico]
Turkish	<ul style="list-style-type: none">• Rehber• COVID-19• Barisitinib• Deksmetazon• Remdesivir• REGEN-COV• Casirivimab ve imdevimab• Tocilizumab• [Türkiye]

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1 **Supplemental Table 3: Eligibility Criteria**

Category	Inclusion Criteria	Exclusion Criteria
Population	<ul style="list-style-type: none"> Patients with a primary diagnosis of COVID-19 	<ul style="list-style-type: none"> Patients without a primary diagnosis of COVID-19
Interventions	Includes recommendations regarding at least one of the following therapies: <ul style="list-style-type: none"> Baricitinib Dexamethasone Remdesivir Casirivimab/imdevimab Tocilizumab 	Does not include recommendations regarding any of the following therapies: <ul style="list-style-type: none"> Baricitinib Dexamethasone Remdesivir Casirivimab/imdevimab Tocilizumab
Comparators	<ul style="list-style-type: none"> Any or none 	<ul style="list-style-type: none"> N/A
Outcomes	<ul style="list-style-type: none"> Guidelines must discuss the clinical management of COVID-19 in hospitalized patients (including ICU) 	<ul style="list-style-type: none"> Guidelines that do not discuss the clinical management of hospitalized patients with COVID-19 Guidelines that focus on the management of conditions other than COVID-19
Publication type	<ul style="list-style-type: none"> Official clinical practice guidelines or treatment guidelines 	<ul style="list-style-type: none"> Publications other than official clinical practice guidelines or treatment guidelines
Other considerations	<ul style="list-style-type: none"> Specifically produced for use in any of the countries of interest (Brazil, Canada, France, Germany, India, Italy, Japan, Mexico, Turkey, UK or the US) International guidelines 	<ul style="list-style-type: none"> Guidelines not specifically produced for use in the countries of interest or on an international level

2 **Abbreviations:** COVID-19, coronavirus disease 2019; ICU, intensive care unit; N/A, not applicable;
 3 UK, United Kingdom; US, United States.

1 **Supplementary Table 4: AGREE-II Domains and Items**

Domain	Item No.	Item Title
Domain 1: Scope and Purpose	1	The overall objective(s) of the guideline is (are) specifically described
	2	The health question(s) covered by the guideline is (are) specifically described
	3	The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described
Domain 2: Stakeholder Involvement	4	The guideline development group includes individuals from all relevant professional groups
	5	The views and preferences of the target population (patients, public, etc.) have been sought
	6	The target users of the guideline are clearly defined
Domain 3: Rigour of Development	7	Systematic methods were used to search for evidence
	8	The criteria for selecting the evidence are clearly described
	9	The strengths and limitations of the body of evidence are clearly described
	10	The methods for formulating the recommendations are clearly described
	11	The health benefits, side effects, and risks have been considered in formulating the recommendations
	12	There is an explicit link between the recommendations and the supporting evidence
	13	The guideline has been externally reviewed by experts prior to its publication
	14	A procedure for updating the guideline is provided
Domain 4: Clarity of Presentation^a	15	The recommendations are specific and unambiguous
	16	The different options for management of the condition or health issue are clearly presented
	17	Key recommendations are easily identifiable
Domain 5: Applicability	18	The guideline describes facilitators and barriers to its application
	19	The guideline provides advice and/or tools on how the recommendations can be put into practice
	20	The potential resource implications of applying the recommendations have been considered
	21	The guideline presents monitoring and/or auditing criteria
Domain 6: Editorial Independence	22	The views of the funding body have not influenced the content of the guideline
	23	Competing interests of guideline development group members have been recorded and addressed

2 **Footnote:** ^aFor this domain, this did not include details of the specific content of the recommendations
3 themselves, as this was captured as part of the full extractions for the high-quality guidelines.

1 **Supplementary Table 5: Summary of AGREE-II Quality Assessments (Standardized Domain Scores)***

Organization	Domain 1 Scope and Purpose	Domain 2 Stakeholder Involvement	Domain 3 Rigour of Development	Domain 4 Clarity of Presentation	Domain 5 Applicability	Domain 6 Editorial Independence	Overall	Key Weaknesses
AWMF (Germany, 2021)	83%	94%	91%	97%	40%	100%	100%	-
SITA/SIP (Italy, 2021)	94%	67%	91%	78%	15%	79%	83%	-
CIDS (India, 2021)	47%	64%	88%	100%	58%	67%	83%	-
IDSA (US, 2021)	92%	67%	86%	100%	33%	100%	75%	Lacks monitoring criteria
WHO (International, 2021)	83%	100%	83%	100%	79%	71%	100%	-
J-SSCG (Japan, 2021)	100%	67%	76%	94%	35%	88%	83%	-
ERS (International, 2021)	100%	53%	74%	100%	73%	58%	83%	-
SSC (International, 2021)	100%	64%	66%	100%	63%	100%	83%	-
MoH (Brazil, 2021)	100%	52%	62%	86%	58%	21%	75%	Lacks conflict of interest statement and funding source
NIH (US, 2021)	61%	67%	60%	100%	54%	46%	92%	-
NICE (UK, 2021)	94%	53%	57%	100%	58%	17%	75%	Lacks conflict of interest statement; limited detail for methods; lacked systematic approach
Government of Mexico (Mexico, 2021)	81%	50%	57%	100%	19%	8%	67%	Lacks external review, information regarding facilitators/barriers, implementation, source implication and funding statement
COVID-19 Advisory Ontario (Canada, 2021)	97%	42%	50%	100%	73%	33%	83%	-
EKMUD Non-Antiviral (Turkey, 2021)	8%	19%	24%	36%	0%	0%	17%	Not systematic or methodical; recommendations are ambiguous
HCSP (France, 2021)	17%	39%	23%	78%	4%	42%	50%	Lacks methodology for gathering evidence and setting recommendations; lacks clear target users and target population
COVRIIN (Germany, 2021)	28%	25%	22%	83%	4%	0%	42%	Lacks detail on methodology

Organization	Domain 1 Scope and Purpose	Domain 2 Stakeholder Involvement	Domain 3 Rigour of Development	Domain 4 Clarity of Presentation	Domain 5 Applicability	Domain 6 Editorial Independence	Overall	Key Weaknesses
FADOI (Italy, 2021)	53%	31%	20%	56%	0%	0%	17%	Lacks systematic methods and clarity on methods, conflict of interest and funding
JAID (Japan, 2021)	39%	11%	15%	39%	42%	0%	33%	Lacks methodology
MHLW (Japan, 2021)	31%	36%	15%	39%	42%	0%	33%	Lacks methodology
STAKOB (Germany, 2021)	36%	14%	14%	69%	27%	0%	50%	Lacks methodology and discussion of strength of evidence used
MoH (Turkey, 2021)	25%	19%	13%	89%	13%	0%	42%	Lacks details on methods, links to evidence, external review, conflict of interest statement, funding statement
EKMUD Antiviral (Turkey, 2021)	14%	3%	13%	61%	4%	0%	17%	Not systematic or methodical; recommendations are ambiguous
Government of India MHFW (India, 2021)	14%	0%	3%	83%	25%	0%	17%	Lacks explicit links to evidence, methodology, conflicts of interest, funding information

*Table is based on the guidelines identified in the initial searches (August 2021) and does not include updates; guidelines are ordered by Domain 3 standardized score; greyed out rows denote guidelines which scored <50% in Domain 3 and therefore were not considered to be of high quality.

Abbreviations: AWMF: Association of the Scientific Medical Societies in Germany; CIDS: Clinical Infectious Disease Society; COVID-19: coronavirus disease 2019; COVRIIN: Specialist Group of Intensive Care Medicine, Infectious Diseases and Emergency Medicine; EKMUD: Infectious Diseases & Clinical Microbiology Specialty Society of Turkey; ERS: European Respiratory Society; FADOI: Federation of Associations of Internist Hospital Managers; HCSP: High Council of Public Health; IDSA: Infectious Diseases Society of America; JAID: Japanese Association for Infectious Diseases; J-SSCG: Japanese Clinical Practice Guidelines for Management of Sepsis and Septic Shock; MHFW: Ministry of Health and Family Welfare; MHLW: Ministry of Health, Labour and Welfare; MoH: Ministry of Health; NICE: National Institute for Health and Care Excellence; NIH: National Institutes of Health; SIP: Italian Society of Pulmonology; SITA: Italian Society of Anti-Infective Therapy; SSC: Surviving Sepsis Campaign; STAKOB: Standing Working Group of Competence and Treatment Centers for Highly Contagious and Life-Threatening Diseases; WHO: World Health Organization.

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1 **Supplementary Table 6: Overview of High-Quality Guidelines and Recommendations***

Organization (Country, Date)	Mild (Hospitalized; no supplemental oxygen)	Moderate (Hospitalized; low-flow supplemental oxygen)	Severe (Hospitalized; NIV or high-flow oxygen)	Critical (Hospitalized; IMV or ECMO)
ERS (International, April 2021)[10]	RV DX TZ	RV DX TD	RV DX TD	RV DX TD
SSC (International, March 2021)[41]			RV DX	RV DX
WHO (International, January 2022)[9]	RV DX CI	RV DX CI	RV DX TZ BA	RV DX TZ BA CI
MoH Brazil (Brazil, May 2021)[38]	RV DX CI	RV DX	RV DX TZ	RV DX TZ CI
COVID-19 Advisory Ontario (Canada, August 2021)[30–34]	BA CI	RV DX TD BA	RV DX TD	RV DX TD BA CI
AWMF (Germany, October 2021)[24]	RV DX TZ BA CI	RV DX TZ BA	RV DX TD	RV DX TZ
CIDS (India, September 2021)[25–29]	RV DX TZ BA	RV DX TZ BD	RV DX TD BD	RV DX TD BD CI
SITA/SIP (Italy, May 2021)[40]	CI	RV DX	RV DX TD BR	CI
J-SSCG (Japan, September 2021)[37]	DX	RV DX TZ BA	RV DX TZ BA	RV DX TZ BA CI
Government of Mexico (Mexico, August 2021)[35]	DX BR CI	RV DX TD BR	RV DX TD BR	DX TD BR CI
NICE (UK, January 2022)[8]	RV DX CI	RV DX TD	RV DX TD DR	RV DX TD DR CI
IDSA (US, November 2021)[36]	RV DX	RV DX	RV DX TD BD BR	RV DX TD
NIH (US, December 2021)[8]	RV DX BD CI	RV DX BD DR CI	RV DX TZ BA DR BD BT BDR CI	RV DX TD BT BD BDR CI

2 ○ Monotherapy □ Combination therapy ● Recommended ● Not recommended ● Recommended only in some sub-populations ● Insufficient evidence or clinical trials only

3 *This table provides a simplified overview of recommendations only; for more comprehensive details, see subsequent tables within the results section of this article or refer
4 to the original guideline documents.

5 **Therapies:** BA: baricitinib; BD: baricitinib + dexamethasone; BDR: baricitinib + dexamethasone + remdesivir; BR: baricitinib + remdesivir; BT: baricitinib + tocilizumab;
6 CI: casirivimab + imdevimab; DR: dexamethasone + remdesivir; DX: dexamethasone; RV: remdesivir; TD: tocilizumab + dexamethasone; TZ: tocilizumab.

- 1 **Organizations:** AWMF: Association of the Scientific Medical Societies in Germany; CIDS: Clinical Infectious Disease Society; ERS: European Respiratory Society; IDSA:
- 2 Infectious Diseases Society of America; J-SSCG: Japanese Clinical Practice Guidelines for Management of Sepsis and Septic Shock; MoH: Ministry of Health; NICE:
- 3 National Institute for Health and Care Excellence; NIH: National Institutes of Health; SIP: Italian Society of Pulmonology; SITA: Italian Society of Anti-Infective Therapy;
- 4 SSC: Surviving Sepsis Campaign; WHO: World Health Organization.