

Supplementary Online Content

Patel P, DeCuir J, Abrams J, Campbell AP, Godfred-Cato S, Belay ED. Clinical characteristics of multisystem inflammatory syndrome in adults: a systematic review. *JAMA Netw Open*. 2021;4(9):e2126456. doi:10.1001/jamanetworkopen.2021.26456

eAppendix. US MIS-C Surveillance Case Report Form

eTable 1. Literature Review Search Strategy

eTable 2. Quality Rating Scheme for Studies (Modified From the Oxford Centre for Evidence-Based Medicine for Ratings of Individual Studies)

This supplementary material has been provided by the authors to give readers additional information about their work.

eAppendix. US MIS-C Surveillance Case Report Form

U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL
AND PREVENTION
ATLANTA, GA 30329

Multisystem Inflammatory Syndrome Associated
with COVID-19 Case Report Form



MIS ID (REQUIRED): Health Department ID:

NNDSS ID (local_record_id/case_id): Tools for CRF data submission to supplement NNDSS case notification/data: DCIPHER RedCap

Abstractor name: NCOV ID (if available): Date of abstraction:

SECTION 1 – INCLUSION CRITERIA

- 1.1 Age <21, AND
- 1.2 Fever >38.0°C for ≥24 hours, or report of subjective fever lasting ≥24 hours, AND
- 1.3 Laboratory markers of inflammation (including, but not limited to one or more; an elevated C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), fibrinogen, procalcitonin, d-dimer, ferritin, lactic acid dehydrogenase (LDH), or interleukin 6 (IL-6), elevated neutrophils, reduced lymphocytes and low albumin, AND
- 1.4 Evidence of clinically severe illness requiring hospitalization, with multisystem (≥2) organ involvement (check all applicable below): AND
 - 1.4.1 Cardiac (e.g. shock, elevated troponin, BNP, abnormal echocardiogram, arrhythmia)
 - 1.4.2 Renal (e.g. acute kidney injury or renal failure)
 - 1.4.3 Respiratory (e.g. pneumonia, ARDS, pulmonary embolism)
 - 1.4.4 Hematologic (e.g. elevated D-dimers, thrombophilia, or thrombocytopenia)
 - 1.4.5 Gastrointestinal (e.g. elevated bilirubin, elevated liver enzymes, or diarrhea)
 - 1.4.6 Dermatologic, (e.g. rash, mucocutaneous lesions)
 - 1.4.7 Neurological, (e.g. CVA, aseptic meningitis, encephalopathy)
- 1.5 No alternative plausible diagnosis; AND
- 1.6 Positive for current or recent SARS-COV-2 infection by (check all applicable below): OR
 - 1.6.1 RT-PCR
 - 1.6.2 Serology
 - 1.6.3 Antigen test
- 1.7 COVID-19 exposure within the 4 weeks prior to the onset of symptoms
 - 1.7.1 If yes, date of first exposure within the 4 weeks prior: (MM/DD/YYYY): Unknown

SECTION 2 – PATIENT DEMOGRAPHICS

- 2.1 State of Residence:
- 2.2 Patient zip code/postal code (primary residence):
- 2.3 Date of birth (MM/DD/YYYY):
- 2.4 Sex: Male Female
- 2.5 Ethnicity: Hispanic or Latino Not Hispanic or Latino Refused or Unknown
- 2.6 Race (mark all that apply, selecting more than one option as necessary):
 - 2.6.1 White
 - 2.6.2 Black or African American
 - 2.6.3 American Indian
 - 2.6.4 Alaska Native or Aboriginal Canadian
 - 2.6.5 Native Hawaiian
 - 2.6.6 Other Pacific Islander
 - 2.6.7 Asian
 - 2.6.8 Other
 - 2.6.9 Refused or Don't know
- 2.7 Height: inches
- 2.8 Weight: lbs
- 2.9 BMI:
Comorbidities:
 - 2.10.1 Immunosuppressive disorder/malignancy Yes No
 - 2.10.2 Obesity Yes No
 - 2.10.3 Type 1 diabetes Yes No
 - 2.10.4 Type 2 diabetes Yes No
 - 2.10.5 Seizures Yes No
 - 2.10.6 Congenital heart disease Yes No
 - 2.10.7 Sickle cell disease Yes No
 - 2.10.8 Chronic lung disease Yes No
 - 2.10.9 Other congenital malformations Yes No
 - 2.10.10 Other (specify):
- 2.11 Hospital admission date (MM/DD/YYYY):
 - 2.11.1 Number of days in the hospital:
- 2.12 If admitted to the ICU, admission date (MM/DD/YYYY):
 - 2.12.1 Number of days in the ICU:
- 2.13 Patient outcome: Died Discharged Still admitted
 - 2.13.2 Hospital discharge or death date (MM/DD/YYYY):

SECTION 3 – CLINICAL SIGNS AND SYMPTOMS

- 3.1 Did the patient have preceding COVID-like illness? Yes No
 3.1.1 Date of symptom onset (MM/DD/YYYY): _____
- 3.2 Date of symptom onset of MIS (MM/DD/YYYY): _____
- 3.3 Fever ≥ 38.0°C: Yes No
 3.3.1 Date of fever onset (MM/DD/YYYY): _____
 3.3.2 Highest Temperature: _____ °C
 3.3.3 Number of days febrile: _____

Signs and symptoms during present illness

- | | |
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| <p>3.4.1 Cardiac</p> <p>3.4.1.1 Shock <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.1.2 Elevated troponin <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.1.3 Elevated BNP or NT-proBNP <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.2 Renal</p> <p>3.4.2.1 Acute kidney injury <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.2.2 Renal failure <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.3 Respiratory</p> <p>3.4.3.1 Cough <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.3.2 Shortness of breath <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.3.3 Chest pain/tightness <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.3.4 Pneumonia <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.3.5 ARDS <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.3.6 Pulmonary embolism <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.4 Hematologic</p> <p>3.4.4.1 Elevated D-dimers <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.4.2 Thrombophilia <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.4.3 Thrombocytopenia <input type="radio"/> Yes <input type="radio"/> No</p> | <p>3.4.5 Gastrointestinal</p> <p>3.4.5.1 Abdominal pain <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.5.2 Vomiting <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.5.3 Diarrhea <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.5.4 Elevated bilirubin <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.5.5 Elevated liver enzymes <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.6 Dermatologic</p> <p>3.4.6.1 Rash <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.6.2 Mucocutaneous lesions <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.7 Neurological</p> <p>3.4.7.1 Headache <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.7.2 Altered mental state <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.7.3 Syncope/near syncope <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.7.5 Meningitis <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.7.6 Encephalopathy <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.8 Other</p> <p>3.4.8.1 Neck pain <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.8.2 Myalgia <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.8.3 Conjunctival injection <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.8.4 Periorbital edema <input type="radio"/> Yes <input type="radio"/> No</p> <p>3.4.8.5 Cervical lymphadenopathy >1.5 cm diameter <input type="radio"/> Yes <input type="radio"/> No</p> |
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SECTION 4 – COMPLICATIONS

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| <p>4.1 Arrhythmia <input type="radio"/> Yes <input type="radio"/> No
 If yes:</p> <p>4.1.1 Ventricular arrhythmia: <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.1.2 Supraventricular arrhythmia: <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.1.3 Other arrhythmia (specify): _____</p> <p>4.2 Congestive heart failure <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.3 Myocarditis <input type="radio"/> Yes <input type="radio"/> No</p> | <p>4.4 Pericarditis <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.5 Liver failure <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.6 Deep vein thrombosis or PE <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.7 ARDS <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.8 Pneumonia <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.9 CVA or stroke <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.10 Encephalitis or aseptic meningitis <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.11 Shock <input type="radio"/> Yes <input type="radio"/> No</p> <p>4.12 Hypotension <input type="radio"/> Yes <input type="radio"/> No</p> |
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SECTION 5 – TREATMENTS

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| <p>5.1 Low flow nasal cannula <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.2 High flow nasal cannula <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.3 Non-invasive ventilation <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.4 Intubation <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.5 Mechanical ventilation <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.6 ECMO <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.7 Vasoactive medications (e.g. epinephrine, milrinone, norepinephrine, or vasopressin) (specify): _____ <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.8 Steroids <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.9 Immune modulators (e.g. anakinra, tocilizumab) (specify): _____ <input type="radio"/> Yes <input type="radio"/> No</p> | <p>5.10 Antiplatelets (e.g. aspirin, clopidogrel) <input type="radio"/> Yes <input type="radio"/> No
 (specify): _____</p> <p>5.11 Anticoagulation (e.g. heparin, enoxaparin, warfarin) <input type="radio"/> Yes <input type="radio"/> No
 (specify): _____</p> <p>5.12 Dialysis <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.13 First IVIG <input type="radio"/> Yes <input type="radio"/> No</p> <p>5.14 Second IVIG <input type="radio"/> Yes <input type="radio"/> No</p> |
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SECTION 6 – STUDIES

6.1 Blood Test Results

6.1.1	Fibrinogen	Highest value: <input type="text"/>	units: <input type="text"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Normal	<input type="checkbox"/> High
6.1.2	CRP	Highest value: <input type="text"/>	units: <input type="text"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Normal	<input type="checkbox"/> High
6.1.3	Ferritin	Highest value: <input type="text"/>	units: <input type="text"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Normal	<input type="checkbox"/> High
6.1.4	Troponin	Highest value: <input type="text"/>	units: <input type="text"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Normal	<input type="checkbox"/> High
6.1.5	BNP	Highest value: <input type="text"/>	units: <input type="text"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Normal	<input type="checkbox"/> High
6.1.6	NT-proBNP	Highest value: <input type="text"/>	units: <input type="text"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Normal	<input type="checkbox"/> High
6.1.7	D-dimer	Highest value: <input type="text"/>	units: <input type="text"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Normal	<input type="checkbox"/> High
6.1.8	IL-6	Highest value: <input type="text"/>	units: <input type="text"/>	<input type="checkbox"/> Low	<input type="checkbox"/> Normal	<input type="checkbox"/> High
6.1.9	Serum White Blood Count	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		
6.1.10	Platelets	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		
6.1.11	Neutrophils	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		
6.1.12	Lymphocytes	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		
6.1.13	Bands	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		

6.2 CSF Studies

6.2.1	White blood count	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		
6.2.2	Protein	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		
6.2.3	Glucose	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		

6.3 Urinalysis

6.3.1	Urine White blood count	Highest value: <input type="text"/>	Lowest value: <input type="text"/>	units: <input type="text"/>		
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6.4 Echocardiogram (check if seen on ANY echocardiogram)

6.4.1	<input type="checkbox"/> Not done
6.4.2	<input type="checkbox"/> Normal results
6.4.3	<input type="checkbox"/> Coronary artery aneurysms
6.4.3.1	Max coronary artery Z-score: <input type="text"/>
6.4.4	<input type="checkbox"/> Coronary artery dilatation
6.4.5	<input type="checkbox"/> Cardiac dysfunction (decreased function), specify type:
6.4.5.1	<input type="checkbox"/> left ventricular dysfunction
6.4.5.2	<input type="checkbox"/> right ventricular dysfunction
6.4.6	<input type="checkbox"/> Pericardial effusion
6.4.7	<input type="checkbox"/> Pleural effusion
6.4.8	<input type="checkbox"/> Mitral regurgitation, specify type: <input type="radio"/> mild <input type="radio"/> moderate <input type="radio"/> severe
6.4.9	<input type="checkbox"/> Other (specify): <input type="text"/>

6.5 Date of first test showing coronary artery aneurysm or dilatation (MM/DD/YYYY):

6.6 Abdominal imaging Ultrasound CT Not done

6.6.1	<input type="checkbox"/> Normal
6.6.2	<input type="checkbox"/> Mesenteric lymphadenopathy
6.6.3	<input type="checkbox"/> Free fluid
6.6.4	<input type="checkbox"/> Other (specify): <input type="text"/>

6.7 Chest imaging Chest x-ray CT Not done

6.7.1	<input type="checkbox"/> Normal
6.7.2	<input type="checkbox"/> Pneumonia
6.7.3	<input type="checkbox"/> Atelectasis
6.7.4	<input type="checkbox"/> Pleural effusion
6.7.5	<input type="checkbox"/> Other (specify): <input type="text"/>

SARS-COV-2 testing

6.8	RT-PCR:	<input type="radio"/> Positive	<input type="radio"/> Negative	<input type="radio"/> Not done
6.8.1		If performed, date (MM/DD/YYYY): <input type="text"/>		
6.9	Antigen:	<input type="radio"/> Positive	<input type="radio"/> Negative	<input type="radio"/> Not done
6.9.1		If performed, date (MM/DD/YYYY): <input type="text"/>		
6.10	IgG:	<input type="radio"/> Positive	<input type="radio"/> Negative	<input type="radio"/> Not done
6.10.1		If performed, date (MM/DD/YYYY): <input type="text"/>		
6.11	IgM:	<input type="radio"/> Positive	<input type="radio"/> Negative	<input type="radio"/> Not done
6.11.1		If performed, date (MM/DD/YYYY): <input type="text"/>		
6.12	IgA:	<input type="radio"/> Positive	<input type="radio"/> Negative	<input type="radio"/> Not done
6.12.1		If performed, date (MM/DD/YYYY): <input type="text"/>		

eTable 1. Literature Review Search Strategy

Search Query: We would like to summarize recent reports of multisystem inflammatory syndrome in adults also reported as Kawasaki-like illness in adults.

Search Strategy:

Database	Strategy	Records 12/14/2020	Records 05/25/2021
Medline (OVID) 1946-	((Multisystem* OR multi-system*) ADJ5 inflammat*) OR severe inflammation OR (multi* ADJ5 organ ADJ5 dysfunction) OR (multi* ADJ5 system ADJ5 dysfunction) OR (multi* ADJ5 organ ADJ5 failure) OR (multi* ADJ5 system ADJ5 failure) OR MIS-A OR Kawasaki OR swelling OR (inflammat* AND shock) OR (inflammat* AND hypotension) OR (inflammat* AND cardiogenic) OR (inflammat* ADJ5 cardiac) OR cardiogenic shock OR vasodilatory shock OR pauci-inflammat* OR (inflammat* ADJ5 (myocardi* OR stroke OR thrombo* OR pericardi* OR valvulitis OR coronary OR arrythmia* OR liver)) AND Exp adult/ OR (adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women).ti,ab. AND Limit COVID-19 (validated filter) (202012* OR 2021*).dt	273	353
Embase (OVID) 1988-	((Multisystem* OR multi-system*) ADJ5 inflammat*) OR severe inflammation OR (multi* ADJ5 organ ADJ5 dysfunction) OR (multi* ADJ5 system ADJ5 dysfunction) OR (multi* ADJ5 organ ADJ5 failure) OR (multi* ADJ5 system ADJ5 failure) OR MIS-A OR Kawasaki OR swelling OR (inflammat* AND shock) OR (inflammat* AND hypotension) OR (inflammat* AND cardiogenic) OR (inflammat* ADJ5 cardiac) OR cardiogenic shock OR vasodilatory shock OR pauci-inflammat* OR (inflammat* ADJ5 (myocardi* OR stroke OR thrombo* OR pericardi* OR valvulitis OR coronary OR arrythmia* OR liver)) AND Exp adult/ OR (adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women).ti,ab. AND Limit COVID-19 (validated filter) (202012* OR 2021*).dc	885 -237 duplicates =648 unique items	1431 -252 duplicates =1179 unique items

	Not pubmed/medline		
Global Health (OVID)	<p>(novel coronavir* OR novel corona virus* OR 2019 coronavirus OR coronavirus disease OR coronavirus 2019 OR betacoronavir* OR covid19 OR covid 19 OR nCoV OR novel CoV OR CoV 2 OR CoV2 OR sarscov2 OR sars-cov OR sarscov OR 2019nCoV OR 2019-nCoV OR wuhan virus*) OR (((wuhan OR hubei OR huanan) AND (severe acute respiratory OR pneumonia*) AND outbreak*) AND 2020*.up) OR ((coronavirus OR pandemic).mp AND 2020*.up)</p> <p>AND</p> <p>((Multisystem* OR multi-system*) ADJ5 inflammat*) OR severe inflammation OR (multi* ADJ5 organ ADJ5 dysfunction) OR (multi* ADJ5 system ADJ5 dysfunction) OR (multi* ADJ5 organ ADJ5 failure) OR (multi* ADJ5 system ADJ5 failure) OR MIS-A OR Kawasaki OR swelling OR (inflammat* AND shock) OR (inflammat* AND hypotension) OR (inflammat* AND cardiogenic) OR (inflammat* ADJ5 cardiac) OR cardiogenic shock OR vasodilatory shock OR pauci-inflammat* OR (inflammat* ADJ5 (myocardi* OR stroke OR thrombo* OR pericardi* OR valvulitis OR coronary OR arrythmia* OR liver))</p> <p>AND</p> <p>Exp adult/ OR (adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women).ti,ab.</p> <p>AND</p> <p>(202012* OR 2021*).up</p>	<p>32</p> <p>-25 duplicates</p> <p>=7 unique items</p>	<p>118</p> <p>-54 duplicates</p> <p>=64 unique items</p>
CAB Abstracts (OVID)	<p>(novel coronavir* OR novel corona virus* OR 2019 coronavirus OR coronavirus disease OR coronavirus 2019 OR betacoronavir* OR covid19 OR covid 19 OR nCoV OR novel CoV OR CoV 2 OR CoV2 OR sarscov2 OR sars-cov OR sarscov OR 2019nCoV OR 2019-nCoV OR wuhan virus*) OR (((wuhan OR hubei OR huanan) AND (severe acute respiratory OR pneumonia*) AND outbreak*) AND 2020*.up) OR ((coronavirus OR pandemic).mp AND 2020*.up)</p> <p>AND</p> <p>((Multisystem* OR multi-system*) ADJ5 inflammat*) OR severe inflammation OR (multi* ADJ5 organ ADJ5 dysfunction) OR (multi* ADJ5 system ADJ5 dysfunction) OR (multi* ADJ5 organ ADJ5 failure) OR (multi* ADJ5 system ADJ5 failure) OR MIS-A OR Kawasaki OR swelling OR (inflammat* AND shock) OR (inflammat* AND hypotension) OR (inflammat* AND cardiogenic) OR (inflammat* ADJ5 cardiac) OR cardiogenic shock OR vasodilatory shock OR pauci-inflammat* OR (inflammat* ADJ5 (myocardi* OR stroke OR thrombo* OR pericardi* OR valvulitis OR coronary OR arrythmia* OR liver))</p> <p>AND</p>	<p>2</p> <p>-2 duplicates</p> <p>=0 unique items</p>	<p>14</p> <p>-14 duplicates</p> <p>=0 unique items</p>

	<p>Exp adult/ OR (adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women).ti,ab.</p> <p>AND</p> <p>(202012* OR 2021*).up</p>		
<p>PsycInfo (OVID) 1987-</p>	<p>(novel coronavir* OR novel corona virus* OR 2019 coronavirus OR coronavirus disease OR coronavirus 2019 OR betacoronavir* OR covid19 OR covid 19 OR nCoV OR novel CoV OR CoV 2 OR CoV2 OR sarscov2 OR sars-cov OR sarscov OR 2019nCoV OR 2019-nCoV OR wuhan virus*) OR (((wuhan OR hubei OR huanan) AND (severe acute respiratory OR pneumonia*) AND outbreak*) AND 2020*.up) OR ((coronavirus OR pandemic).mp AND 2020*.up)</p> <p>AND</p> <p>((Multisystem* OR multi-system*) ADJ5 inflammat*) OR severe inflammation OR (multi* ADJ5 organ ADJ5 dysfunction) OR (multi* ADJ5 system ADJ5 dysfunction) OR (multi* ADJ5 organ ADJ5 failure) OR (multi* ADJ5 system ADJ5 failure) OR MIS-A OR Kawasaki OR swelling OR (inflammat* AND shock) OR (inflammat* AND hypotension) OR (inflammat* AND cardiogenic) OR (inflammat* ADJ5 cardiac) OR cardiogenic shock OR vasodilatory shock OR pauci-inflammat* OR (inflammat* ADJ5 (myocardi* OR stroke OR thrombo* OR pericardi* OR valvulitis OR coronary OR arrythmia* OR liver))</p> <p>AND</p> <p>(adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women)</p> <p>AND</p> <p>(202012* OR 2021*).up</p>	<p>0</p>	<p>1</p> <p>-0 duplicates</p> <p>=1 unique items</p>
<p>CINAHL (EbscoHost)</p>	<p>("novel coronavir*" OR "novel corona virus*" OR "2019 coronavirus" OR betacoronavir* OR covid19 OR "covid 19" OR nCoV OR "novel CoV" OR "CoV 2" OR CoV2 OR sarscov2 OR sars-cov OR sarscov OR 2019nCoV OR 2019-nCoV OR "wuhan virus*") OR (((wuhan OR hubei OR huanan) AND ("severe acute respiratory" OR pneumonia*) AND outbreak*) AND PY 2020) OR ((coronavirus OR pandemic) AND PY 2020)</p> <p>AND</p> <p>((Multisystem* OR multi-system*) N5 inflammat*) OR "severe inflammation" OR (multi* N5 organ N5 dysfunction) OR (multi* N5 system N5 dysfunction) OR (multi* N5 organ N5 failure) OR (multi* N5 system N5 failure) OR MIS-A OR Kawasaki OR swelling OR (inflammat* AND shock) OR (inflammat* AND hypotension) OR (inflammat* AND cardiogenic) OR (inflammat* N5 cardiac) OR "cardiogenic shock" OR "vasodilatory shock" OR pauci-inflammat*</p>	<p>83</p> <p>-70 duplicates</p> <p>=13 unique items</p>	<p>71</p> <p>-43 duplicates</p> <p>=28 unique items</p>

	<p>AND</p> <p>(MH adult+) OR (TI (adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women)) OR (AB (adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women))</p> <p>Dec 2020 – May 2021</p>		
Academic Search Complete	<p>("novel coronavir*" OR "novel corona virus*" OR "2019 coronavirus" OR betacoronavir* OR covid19 OR "covid 19" OR nCoV OR "novel CoV" OR "CoV 2" OR CoV2 OR sarscov2 OR sars-cov OR sarscov OR 2019nCoV OR 2019-nCoV OR "wuhan virus*") OR (((wuhan OR hubei OR huanan) AND ("severe acute respiratory" OR pneumonia*) AND outbreak*) AND PY 2020) OR ((coronavirus OR pandemic) AND PY 2020)</p> <p>AND</p> <p>((Multisystem* OR multi-system*) N5 inflammat*) OR "severe inflammation" OR (multi* N5 organ N5 dysfunction) OR (multi* N5 system N5 dysfunction) OR (multi* N5 organ N5 failure) OR (multi* N5 system N5 failure) OR MIS-A OR Kawasaki OR swelling OR (inflammat* AND shock) OR (inflammat* AND hypotension) OR (inflammat* AND cardiogenic) OR (inflammat* N5 cardiac) OR "cardiogenic shock" OR "vasodilatory shock" OR pauci-inflammat*</p> <p>AND</p> <p>(MH adult+) OR (TI (adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women)) OR (AB (adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women))</p> <p>December 2020 – May 2021</p>	<p>64</p> <p>-42 duplicates</p> <p>=22 unique items</p>	<p>171</p> <p>-97 duplicates</p> <p>=74 unique items</p>
Scopus	<p>TITLE-ABS("novel coronavir*" OR "novel corona virus*" OR "2019 coronavirus" OR betacoronavir* OR covid19 OR "covid 19" OR nCoV OR "CoV 2" OR cov2 OR sarscov2 OR sars-cov OR sarscov OR 2019nCoV OR 2019-nCoV OR "novel CoV" OR "wuhan virus") AND TITLE-ABS(((Multisystem* OR multi-system*) W/5 inflammat*) OR "severe inflammation" OR (multi* W/5 organ W/5 dysfunction) OR (multi* W/5 system W/5 dysfunction) OR (multi* W/5 organ W/5 failure) OR (multi* W/5 system W/5 failure) OR MIS-A OR Kawasaki OR swelling OR (inflammat* AND shock) OR (inflammat* AND hypotension) OR (inflammat* AND cardiogenic) OR (inflammat* W/5 cardiac) OR "cardiogenic shock" OR "vasodilatory shock" OR pauci-inflammat*) AND (TITLE-ABS(adult* OR senior* OR aged OR elder* OR man OR woman OR men OR women) OR (LIMIT-TO (EXACTKEYWORD,"Adult") OR LIMIT-TO (EXACTKEYWORD,"Aged") OR LIMIT-TO (EXACTKEYWORD,"Very Elderly") OR LIMIT-TO (EXACTKEYWORD,"Aged, 80 And Over"))) AND NOT INDEX(medline)</p>	<p>129</p> <p>-122 duplicates</p> <p>=7 unique items</p>	<p>88</p> <p>-68 duplicates</p> <p>=20 unique items</p>

WHO Global COVID Literature Database	<p>("multisystem inflammatory syndrome" AND adult*) OR ("multi-system inflammatory syndrome" AND adult*) OR MIS-A OR (Kawasaki* AND Adult*)</p> <p>entry_date:([20201214 TO 20210525])</p>	<p>92</p> <p>-68 duplicates</p> <p>=14 unique items</p>	<p>163</p> <p>-124 duplicates</p> <p>=39 unique items</p>

Notes: Duplicates were identified using the Endnote automated "find duplicates" function with preference set to match on title, author and year, and removed from your Endnote library. There will likely be additional duplicates found that Endnote was unable to detect.

eTable 2. Quality Rating Scheme for Studies (Modified From the [Oxford Centre for Evidence-Based Medicine](#) for Ratings of Individual Studies)

Quality Rating Scheme for Studies and Other Evidence	
1	Properly powered and conducted randomized clinical trial; systematic review with meta-analysis
2	Well-designed controlled trial without randomization; prospective comparative cohort trial
3	Case-control studies; retrospective cohort study
4	Case series with or without intervention; cross-sectional study
5	Opinion of respected authorities; case reports