

Children's Mercy COVID-19 Venous Thromboembolism (VTE) Prophylactic Guidelines

Indications for pharmacologic VTE prophylaxis:

COVID-19 PCR positivity or high concern for COVID-19 despite negative test

PLUS one or more of the following risk factors:

- 1. Patients admitted to the Intensive Care Unit AND
 - a. < 12 years with central line or respiratory failure requiring intubation
 - b. \geq 12 years
 - c. Any age and additional risk factors for VTE including those listed below
- 2. Patients admitted with a diagnosis of Multisystem Inflammatory Syndrome in Children (MIS-C)
- 3. Patients with VTE risk factors:
 - a. History of previous thrombosis
 - b. Central venous catheter
 - c. Personal or family history of thrombophilia
 - d. Immobility
 - e. Medical diagnosis with increased VTE risk (such as, but not limited to, sickle cell disease, active malignancy, autoimmune disorders, inflammatory bowel disease, nephrotic syndrome)
 - f. Obesity
 - g. Medications (PEG-asparaginase, estrogen containing therapy)
 - h. Requiring supplemental oxygen

If patients meet above criteria, please consult the Inpatient Coagulation Consult Service for anticoagulation prophylaxis recommendations:

- 1. Patients who are already on anticoagulation at prophylaxis or treatment dosing and are clinically stable should continue current regimen
- 2. For clinically stable patients:
 - a. Lovenox at prophylactic dosing per the LMWH Clinical Pathway as found on scope with goal LMWH prophylactic range of 0.1-0.3 units/mL

OR

- b. Rivaroxaban at prophylactic dosing per the Rivaroxaban Clinical Pathway as found on scope
- 3. For clinically unstable patients:
 - a. Heparin at 10-15 units/kg/hr without a loading dose with goal prophylactic standard heparin level of 0.1-0.3 units/mL

OR

b. Bivalirudin if renal function adequate at 0.1 mg/kg/hr with goal standard heparin level of 0.1-0.3

Use of anti-platelet therapy such as aspirin in conjunction with pharmacologic therapy should be a multi-disciplinary discussion involving the primary service, Cardiology, Infectious Disease, Rheumatology, and Hematology



Patients at very high risk for VTE may be increased to therapeutic dosing ranges as per the discretion of the Coagulation Service

Duration of anticoagulation prophylaxis typically will be until hospital discharge but may be extended at the discretion of the Coagulation Service