COVID-19-associated coagulopathy: Safety and efficacy of prophylactic anticoagulation therapy in hospitalized adults with COVID-19



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Background:

- Patients hospitalized with COVID-19 have an elevated risk of thrombosis
- Despite use of standard prophylactic anticoagulation, patients continue to have a high rate of thrombotic events

Methods:

- Randomized, open-labeled
- Inclusion criteria:
 - ICU patients or
 - International Society of Thrombosis and Hemostasis (ISTH) Overt DIC score ≥3
- Primary objective:
 - All-cause mortality at 30 days

Race 47% 42% 45% 5% 3% 3% Caucasian Hispanic Asian other American



Standard prophylactic dose of enoxaparin

40 mg SC daily BMI $< 30 \text{ kg/m}^2$

30 mg SC twice daily or 40 mg SC twice daily BMI \geq 30 kg/m²

Arm 2



Intermediate-dose enoxaparin

1 mg/kg SC daily $BMI < 30 kg/m^2$

0.5 mg/kg SC twice daily BMI ≥30 kg/m2

Conclusions:

- Hispanics represent a high proportion of hospitalized patients with COVID-19 compared to the general population in Iowa
- Enrolled patients have multiple risk factors for thrombosis:
 - ICU admission
 - **Elevated BMI**
 - Elevated d-dimer

Future Directions:

- Enrollment to this trial is ongoing, NCT04360824
- As safety and efficacy data mature, this study will help to clarify the dose of prophylactic enoxaparin for VTE prophylaxis in patients hospitalized with COVID-19

Results:

- Majority of patients were Caucasian or Hispanic
- Median age of 61 with majority (74%) aged 50 or older
- Average BMI of 32.6
- Median baseline d-dimer of 3.05 (range 0.39 to 40.32)
- 21/38 (55%) initially admitted to ICU





