





# Early "D Dimer" diagnosis aids in management of COVID-19 patients

Coagulation in patients hospitalized with COVID-19 is characterized by elevations in fibrinogen and D Dimer levels. In clinical diagnostics, D Dimer testing is used as a sensitive method for ruling out Pulmonary Embolism (PE) as well as Deep Vein Thrombosis (DVT)<sup>1</sup>.



- Mortality rate is high in patients with high D Dimer in patient having COVID-19 infection, with Pulmonary embolism<sup>2</sup>.
- COVID-19 Patients with D-dimer level of less than 1000 ng per millilitre have low risk for pulmonary embolism<sup>3</sup>.
- Elevated D Dimer value has prognostic importance in COVID-19 infection<sup>3</sup>.
- D Dimer value with APTT, PT and Fibrinogen values expresses the clotting state of body<sup>4</sup>.

The most significant poor prognostic feature in patients with COVID-19 is the development of Coagulopathy. Several studies on the disease prognosis have indicated that COVID-19 associated coagulopathy is characterized by an elevated D Dimer which starts rising from day 4 of the infection. Major steps in management should include early diagnosis and follow up of DIC by applying the ISHT score (platelet count, PT, fibrinogen and D Dimer).

Dr. Renu Saxena

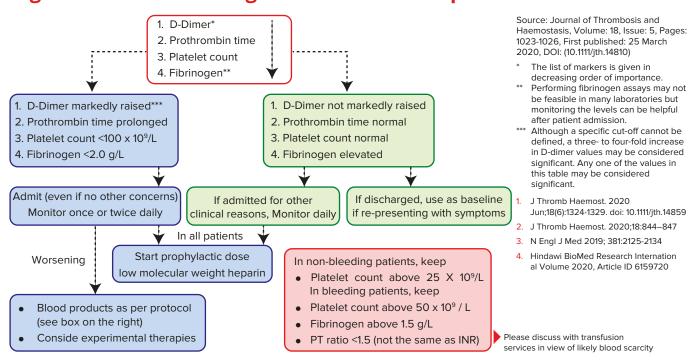
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While monitoring COVID patients, D dimer should be given utmost importance. It rises to four times the normal value in patients who are admitted. At such times it is critical to monitor that the fibrinogen level doesn't fall. So it's important to monitor both fibrinogen and D Dimer.

Dr. Jyoti Kotwal

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# Algorithm for the management of COVID-19 patients



### **Erba D Dimer R**

Transasia-Erba Group provides high quality Immuno-turbidimetry assay for D Dimer detection. This assay is faster with higher sensitivity and specificity.



### **Key Features**

### Usage description

Erba D Dimer kit is an immunoturbidimetric assay intended for the D Dimer determination.

### Stability

The reagents are ready for use and are stable for 4 weeks at +2 - $+8^{\circ}$  C on opening the vial.

#### Indications

Erba D Dimer R reagents are well suited for exclusion of DVT, PE Monitoring and change in D Dimer concentration.

### • Test Principle

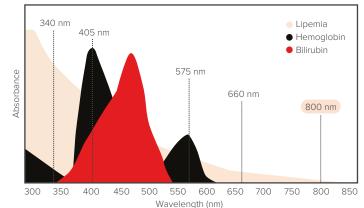
D Dimer present in the sample agglutinates, with the monoclonal antibodies bound to specific latex particles. The immuno-complex formed is measured photo-optically at 800 nm with low interferences.

#### Components

**D Dimer Buffer (R1)**: Containing buffer and preservatives.

**D Dimer Latex (R2):** Latex particle coated with anti-D-Dimer monoclonal antibodies.

# **Spectra of Interfering Substances**



- Heterophilic Blocking Reagent (HBR) is used in Buffer, reducing unspecified binding by RF antibody.
- 800 nm reading removes any interferences, including HIL.
- Interferences by RF, upto 1300 IU/mL does not affect the readings and give false elevated values.

# Required volume per test

Test	ECL 105	ECL 412	ECL 760
Sample	15 μL	15 μL	15 μL
D Dimer R, R1	75 μL	75 μL	75 μL
D Dimer R, R2	60 μL	60 μL	50 μL
D Dimer Diluent	-	-	50 μL

Erba D Dimer R testing are pre-programmed and can easily be performed on ECL series systems.

# **Erba Coagulation Line**



**ECL 412** 

A Modern and Advanced Analyzer in Hemostasis



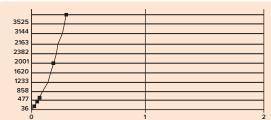
**ECL 760** 

Advanced Fully Automated
Random Access Coagulation Analyzer



**ECL 105** 

Single Channel Coagulation Analyzer



		1	2	3	4	5	6
	T ng/ml	121.8	243.6	487.2	974.4	1948.8	3897
	R dod	0.010	0.030	0.069	0.132	0.252	0.334
	Calc ng/ml	121.8	243.6	487.2	974.4	1948.8	3897

**Typical Calibration Curve for D Dimer** 

# Ordering Information

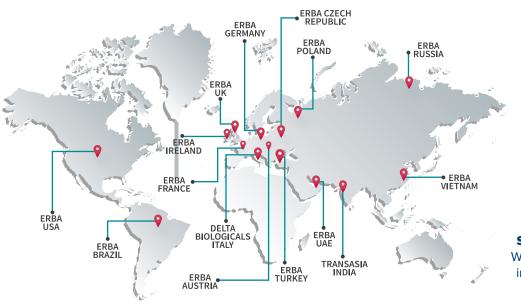
EBS Code	Name of the product	Pack size	No. of tests/kit	Open Vial Stability
131768	Erba D Dimer	R1: 1x7 mL R2: 1x4 mL	65	4 weeks
131880	Erba D Dimer Calibrator	R1: 1x1 mL R2: 1x7 mL	6 point calibrations	12 hours
131776	Erba D Dimer Control N + P	N: 5x1 mL P: 1x7 mL	-	2 days#
131779*	Erba Clean I	50 mL	-	1 month

\*Only for fully automated system ECL 760

After reconstitution and kept at 2°-8°C

# Transasia - Erba Group

### **Global Footprint**



### **India Advantage**

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**Customer Support**Least downtime



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