

ABSTRACT FORM ECAT SYMPOSIUM 15 – 16 SEPTEMBER 2022

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Title:

D-Dimer: Quality of laboratory testing and its implications in clinical practice

Abstract:

Numerous, large-scale, methodologically rigorous, diagnostic management studies have used D-dimer in the outpatient diagnosis of venous thromboembolism (VTE), the prediction of recurrent VTE, and more recently in risk-stratifying illness severity in COVID-19.

Currently, there are over 30 D-dimer assays in use world-wide. They are not standardized (calibrated to a common reference preparation) or harmonized (reported using a shared consensus value). As a direct consequence of this, results from the many clinical studies using one or more D-dimer assays are NOT generalizable to practice settings where different D-dimer assays are used, a fact not understood by many clinical users of D-dimer assays. In addition “real-life” studies suggest that D-dimer use is often not leading to desired clinical outcomes such as reduction in imaging for VTE, as well as other unintended consequences.

Dr. Selby will highlight the ongoing and significant laboratory variability between D-dimer assays using recent international, laboratory performance data and the clinical impact of this on the real-world use of D-dimer. As indications for D-dimer increase, as well as the practice of adjusting VTE exclusion cut-offs based on age and clinical probability of VTE, there is an urgent need to increase clinician awareness around this issue and operationalize existing solutions to close this knowledge-to-action gap.