Model accuracy was evaluated using sensitivity, specificity, and the area under the curve measures. To predict hourly bed requirements, the clinical probability-adjusted D-dimer results in a 1.0% (95% CI 0.5-1.9%) false-negative rate for both the age-adjusted D-dimer and clinical probability-adjusted D-dimer rule. The false-negative rate for the age-adjusted D-dimer rule was 0.3% (95% CI 0.1-0.9%). The false-negative rate of the clinical probability-adjusted D-dimer was 1.0% (95% CI 0.5-1.9%).

Conclusion: The false-negative rates for both the age-adjusted D-dimer and clinical probability-adjusted D-dimer are low. The clinical probability-adjusted D-dimer results in a 13% absolute reduction in CT scanning compared to age-adjusted D-dimer.

Keywords: D-dimer, clinical decision rule, pulmonary embolism