We congratulate Ohlmann et al.\textsuperscript{1} for their article covering the value of d-dimer in diagnosis and prognosis of acute aortic dissection (AAD). In contrast, we assessed the value of d-dimer testing for exclusion of AAD. A d-dimer $<$0.1 $\mu$g/mL will exclude AAD with 100% sensitivity.\textsuperscript{2} From a practical point view, our findings seem important for several reasons:

1. According to the current guidelines, echocardiography, computed tomography, magnetic resonance imaging, and even angiography are recommended in any case of suspected aortic dissection. These diagnostic procedures are more or less invasive and expensive, with limited availability at different settings.\textsuperscript{3} We do agree that in patients, who present in critical care condition or with high pre-test probability for AAD, an aggressive approach is mandatory in rapid diagnosis of AAD. However, at least in patients with a low likelihood for AAD, applying d-dimer testing as a rapid point of care test will help to risk-stratify patients at a very early time-point and to triage patients for more sophisticated diagnostic steps.

2. As already known in the clinical setting of pulmonary embolism and deep venous thrombosis,\textsuperscript{4} d-dimer measurement is only unidirectional because of its lack of specificity; in suspected AAD, a negative result should be used in the diagnostic pathway to exclude disease. A positive result will be found in patients with AAD and other life-threatening or non-serious clinical conditions, demanding further investigations. This fact somewhat might limit the clinical utility of the d-dimer testing in AAD.

3. We are aware that d-dimer assays with predefined cut-off levels will differ in sensitivity and negative predictive value in patients with suspected AAD. Therefore, as in pulmonary embolism, the capabilities and limitations of the particular d-dimer test applied have to be considered.\textsuperscript{4}

In summary, we believe that the availability of a rapid bedside test with 100% negative predictive value in a catastrophic cardiovascular disease is highly desirable. This seems to be the real clinical value of d-dimer testing in AAD.

References