

SUPPLEMENTAL DIGITAL CONTENT 3

This table also appears in the Supplemental Digital Content 2 in the complete set of evidence tools.

Table 12. Pulse pressure variation in predicting fluid responsiveness in patients with sepsis or septic shock

Sensitivity		0.72 (95% CI: 0.61 to 0.81)		Prevalence		40% ⁵			
Specificity		0.91 (95% CI: 0.83 to 0.95)							
Outcome	No of studies (No of patients)	Study design	Factors that may decrease quality of evidence					Effect per 1,000 patients tested pre-test probability of 40%	Test accuracy QoE
			Risk of bias	Indirectness	Inconsistency	Imprecision	Publication bias		
True positives (patients with Fluid responsiveness)	5 studies 219 patients	cross-sectional (cohort type accuracy study)	serious ¹	not serious	not serious	serious ²	none	288 (244 to 324)	⊕⊕○○ LOW
False negatives (patients incorrectly classified as not having Fluid responsiveness)								112 (76 to 156)	
True negatives (patients without Fluid responsiveness)	5 studies 219 patients	cross-sectional (cohort type accuracy study)	serious ¹	not serious ³	not serious	serious ⁴	none	546 (498 to 570)	⊕⊕○○ LOW
False positives (patients incorrectly classified as having Fluid responsiveness)								54 (30 to 102)	

1. We downgraded the quality of evidence for risk of bias by one level, most studies were at high risk of bias with QUADAS Tool
2. We downgraded the quality for imprecision by one level, 112 per 1000 tested patients will have a false negative results, the CI of pooled sensitivity was wide
3. Although the reference test was not a static measure in included studies, we did not downgrade the quality of evidence because we can indirectly compare with other static measures
4. We downgraded the quality of evidence by one level for imprecision, small number of patients and the CI of the pooled specificity included values below the desired threshold
5. Prevalence of fluid responsiveness is estimated to be 40%, data from Bentzer P, Griesdale DE, Boyd J, MacLean K, Sirounis D, Ayas NT. Will This Hemodynamically Unstable Patient Respond to a Bolus of Intravenous Fluids? JAMA. 2016;316(12):1298-309.