

597 ICU patients with suspected severe sepsis

169 patients did not meet diagnostic criteria

428 severe sepsis patients

Technical staff not available in 55 patients

268 patients with one or more exclusion criteria:

- Code status limitations: 42 (16%)
- Unable to obtain consent: 41 (15%)
- Refusal by patient or surrogate: 14 (5%)
- History of severe cardiomyopathy: 30 (11%)
- Chronic dialysis dependent renal failure: 35 (13%)
- History of transplantation: 28 (10%)
- History of advanced liver disease: 8 (3%)
- Organic nitrate therapy: 41 (15%)
- Current active bleeding: 14 (5%)
- Severe anemia: 22 (8%)
- Pregnancy or HRT: 9 (3%)
- > 48 hours since diagnosis: 26 (10%)
- Vascular access device in target extremity: 35 (13%)
- Skin breakdown or soft tissue inflammation of target extremity: 2 (1%)

105 severe sepsis patients enrolled

3 patients died before measurements could be obtained

7 patients with inadequate doppler signal or 2D image

95 severe sepsis patients analyzed