**Introduction:**
Consensus clinical guidelines recommend maintaining mean arterial pressure (MAP) ≥65 mmHg for vasodilatory shock (VS) patients. This study uses the Medical Information Mart for Intensive Care (MIMIC-III) database to examine treatment and outcomes in patients with severe VS in a real-world setting.

**Methods:**
We identified patients in the MIMIC-III database which contains information for 61,532 admissions to intensive care units (ICU) at Beth Israel Deaconess Medical Center (BIDMC) in Boston, Massachusetts between 2001 and 2012. Inclusion criteria: 1) aged ≥18 years, 2) treated with vasopressors for ≥6 hours. Exclusion criteria: cardiac surgery, vasoplegia, cardiogenic shock, intra-aortic balloon pump, extracorporeal membrane oxygenation, large amount of blood transfusion, cardiac tamponade or pulmonary embolism. The primary outcome was mortality.

**Results:**
There were 5,922 ICU admissions. Among these patients, those who consistently maintained MAP above 65 mmHg (n=167, 3%), 60 mmHg (n=418, 7%), and 55 mmHg (n=949, 16%) while in ICU had lower mortality rates than patients with one or more MAP excursions below these thresholds (n=5755, n=5504, and n=4973, respectively): 11% vs 31% for MAP <65 (p<0.0001); 10% vs 32% for MAP <60 (p<0.0001); and 10% vs 34% for MAP <55 (p<0.0001). When assessing the exposure of hypotension for ≥2 continuous hours, ICU mortality rates were 31% for 65 threshold (n=4741), 34% for 60 threshold (n=3498), and 41% for 55 threshold (n=2090). ICU mortality rates were 41%, 52% and 66% for patients with MAP below 65 (n=1686), 60 (n=746), and 55 (n=354), respectively, for ≥8 continuous hours.

**Conclusion:**
Most patients did not have MAP control based on current clinical guidelines, and not achieving the recommended target MAP was associated with worse outcomes. However, since association does not imply causation, trials aimed at more aggressively achieving a MAP ≥65 are warranted, and quality of care initiatives aimed at improving MAP control for patients with VS may be helpful.