The patient was a 34-year-old man who presented in shock to the Emergency Department after sustaining at least 12 gunshot wounds to his torso as well as upper and lower extremities.

**Diagnosis**
Based on the presence of right sided thoracoabdominal wounds and suspected trajectory of the bullets, major hepatic and vena cava injury was suspected. Additionally, major vascular injury of the right lower extremity was expected from a through and through gunshot wound proximal to the knee with a tourniquet in place. There was severe soft tissue damage to the right upper extremity without active bleeding. The final diagnoses were right diaphragm injury, grade II liver laceration, right popliteal artery transection, and right forearm fracture/dislocation with complex soft tissue injury.

**Course of Care**
In the field, the patient's blood pressure was within normal range. The patient had several gunshot wounds to upper extremity, lower extremity, thoracoabdominal area and epigastrium. In the ED, the patient had narrowing pulse pressure and quickly became unstable with tachycardia and blood pressure of approximately 80 to 90 mmHg. The attending physician wanted to stabilize the patient with an ER-REBOA™ Catheter in the ED. At the time, an ER-REBOA™ Catheter was not stocked in the ED for placement in the trauma bay. The patient was taken to the OR, where he remained hypotensive. An ER-REBOA™ Catheter was then inserted into the right common femoral artery using the 7 Fr arterial introducer sheath. Although the patient had a weak pulse, access was obtained on the first stick percutaneously and without requiring ultrasound guidance. The catheter was advanced 50 cm into Zone I based on measurement from groin to sternal notch. Anesthesia assisted in preparing the arterial line setup for monitoring REBOA during balloon inflation.

Before induction of anesthesia, the balloon was inflated. The physician recalled the “Start 2, Start 8, don't overinflate” mnemonic and injected 8 cc of saline into the balloon port of the ER-REBOA™ Catheter. An exploratory laparotomy was performed, and the balloon could be felt within the aorta while inflated. During induction, the inflated balloon supported the patient and blood pressure held steady, with no fluctuation. Systolic blood pressure after balloon inflation increased to a range of 130-140 mmHg.
During the laparotomy, a grade II liver laceration was found as well as a right diaphragm injury. The balloon remained inflated for approximately 20 minutes until the liver was packed and the exploration of the abdomen was completed. The physician communicated clearly with anesthesia to prepare for balloon deflation and a potential drop in SBP. Deflation of the balloon was slow at 0.5 cc at one-minute intervals. Initially, systolic dropped by 20-30 mmHg. The patient remained stable. The first 2 cc of volume deflated from the balloon appeared to cause the greatest decrease. The final 6 cc of volume deflation was routine, with no unusual drops. There was no bleeding in the abdomen after deflation of the balloon. Temporary abdominal closure was performed. The operation continued with exploration of the lower extremity injury and insertion of a femoral artery shunt. In total, 8 pRBC, 6 FFP and one platelet unit were transfused. Additional blood products were transfused postoperatively in the ICU.

Patient Outcome
The patient experienced no REBOA-related complications. He underwent several operations for his upper extremity injury and was eventually transferred to the rehabilitation unit for further care for his orthopedic injuries.

Considerations
- This was the attending’s first placement of the ER-REBOA™ catheter in a clinical setting. An upper extremity arterial line can be helpful to demonstrate the improvement in systemic blood pressure after balloon inflation.
- Before inflating the balloon with saline, the ER-REBOA™ Catheter needs to be held in place firmly to prevent the catheter from pushing back from the aortic pressure.
- REBOA is best performed before the patient decompensates.
- Using the 7Fr sheath, ER-REBOA™ is fairly minimally invasive, with no upsizing or arterial repair necessary as compared with other catheters.
- In this case, the ER-REBOA™ Catheter prevented further hemodynamic decompensation of the patient before his injuries could be addressed. REBOA does not replace thoracotomy in someone with suspected severe chest trauma.