Abdominal Injuries Severity Scale

**Splenic injury scale**

**Grade I**
- **Hematoma:** Subcapsular, nonexpanding, <10% surface area
- **Laceration:** Capsular tear, nonbleeding, <1 cm parenchymal depth

**Grade II**
- **Hematoma:** Subcapsular, nonexpanding, 10-50% surface area; intraparenchymal, nonexpanding, <2 cm in diameter
- **Laceration:** Capsular tear, active bleeding; 1-3 cm parenchymal depth that does not involve trabecular vessel

**Grade III**
- **Hematoma:** Subcapsular, >50% surface area or expanding; ruptured subcapsular hematoma with active bleeding; intraparenchymal hematoma >2 cm or expanding
- **Laceration:** >3 cm parenchymal depth or involving trabecular vessel

**Grade IV**
- **Hematoma:** Ruptured intraparenchymal hematoma with active bleeding
- **Laceration:** Laceration involving segmental or hilar vessels producing major devascularisation (>25% of spleen)

**Grade V**
- **Laceration:** Completely shattered spleen
- **Vascular:** Hilar vascular injury that devascularizes spleen

**Liver injury scale**

**Grade I**
- **Hematoma:** Subcapsular, nonexpanding, <10% surface area
- **Laceration:** Capsular tear, nonbleeding, <1 cm parenchymal depth

**Grade II**
- **Hematoma:** Subcapsular, nonexpanding, 10%-50% surface area; intraparenchymal, nonexpanding, <2 cm in diameter
- **Laceration:** Capsular tear, active bleeding; 1-3 cm parenchymal depth, <10 cm in length

**Grade III**
- **Hematoma:** Subcapsular, >50% surface area or expanding; ruptured subcapsular hematoma with active bleeding; intraparenchymal hematoma >2 cm or expanding
- **Laceration:** >3 cm parenchymal depth

**Grade IV**
- **Hematoma:** Ruptured intraparenchymal hematoma with active bleeding
- **Laceration:** Parenchymal disruption involving 25-50% of hepatic lobe
- **Vascular:** Parenchymal disruption involving >50% of hepatic lobe

**Grade VI**
- **Vascular:** Juxtahepatic venous injuries (i.e., retrohepatic vena cava / major hepatic veins)

**Renal injury scale**

**Grade I**
- **Contusion:** Microscopic or gross hematuria; urologic studies normal
- **Hematoma:** Subcapsular, nonexpanding without parenchymal laceration

**Grade II**
- **Hematoma:** Nonexpanding perirenal hematoma confined to renal retroperitoneum
- **Laceration:** <1 cm parenchymal depth of renal cortex without urinary extravasation

**Grade III**
- **Laceration:** >1 cm parenchymal depth of renal cortex without collecting system rupture or urinary extravasation

**Grade IV**
- **Laceration:** Parenchymal laceration extending through the renal cortex, medulla, and collecting system
- **Vascular:** Main renal artery or vein injury with contained hemorrhage

**Grade V**
- **Laceration:** Completely shattered kidney
- **Vascular:** Avulsion of renal hilum, which devascularizes kidney

**Duodenum injury scale**

**Grade I**
- **Hematoma:** Involving single portion of duodenum
- **Laceration:** Partial thickness, no perforation

**Grade II**
- **Hematoma:** Involving more than one portion
- **Laceration:** Disruption <50% of circumference

**Grade III**
- **Laceration:** Disruption 50-70% circumference D2; Disruption 50-100% circumference D1, D3, D4

**Grade IV**
- **Laceration:** Disruption >75% circumference of D2; involves ampulla or distal common bile duct

**Grade V**
- **Laceration:** Massive disruption of duodenum-pancreatic complex
- **Vascular:** Devascularisation of duodenum