

Injury Scales

AAST Liver Injury Scale (1994 REVISION)				
Grade		Injury Description	ICD-9	AIS90*
I	Hematoma	Subcapsular, nonexpanding, < 10% surface area	864.01 - 864.11	2
	Laceration	Capsular tear, nonbleeding, < 1 cm parenchymal depth	864.02 - 864.12	2
II	Hematoma	Subcapsular, nonexpanding, 10 – 50% surface area; intraparenchymal < 10 cm in diameter	864.01 - 864.11	2
	Laceration	Capsular tear, active bleeding; 1 - 3 cm parenchymal depth, < 10 cm in length	864.03 - 864.13	2
III	Hematoma	Subcapsular, > 50% surface area or expanding; ruptured subcapsular or parenchymal hematoma; intraparenchymal hematoma > 10 cm or expanding		3
	Laceration	> 3 cm parenchymal depth	864.04 - 864.14	3
IV	Laceration	Parenchymal disruption involving 25 – 75% of hepatic lobe or 1-3 Couinaud's segments within a single lobe	864.04 - 864.14	4
V	Laceration	Parenchymal disruption involving > 75% of hepatic lobe or > 3 Couinaud's segments within a single lobe		5
	Vascular	Juxtahepatic venous injuries, i.e., retrohepatic vena cava/central major hepatic veins		5
VI	Vascular	Hepatic avulsion		6

*Advance one grade for multiple injuries, up to Grade III

AAST Spleen Injury Scale (1994 REVISION)				
Grade		Injury Description	ICD-9	AIS90*
I	Hematoma	Subcapsular, nonexpanding, < 10% surface area	865.01 - 865.11	2
	Laceration	Capsular tear, nonbleeding, < 1 cm parenchymal depth	865.02 - 865.12	2
II	Hematoma	Subcapsular, nonexpanding, 10 – 50% surface area; intraparenchymal, < 5 cm in diameter	865.01 - 865.11	2
	Laceration	Capsular tear, active bleeding; 1 - 3 cm parenchymal depth which does not involve a trabecular vessel	865.02 - 865.12	2
III	Hematoma	Subcapsular, > 50% surface area or expanding; ruptured subcapsular or parenchymal hematoma with active bleeding; intraparenchymal hematoma > 5 cm or expanding		3
	Laceration	> 3cm parenchymal depth or involving trabecular vessels	865.03 - 865.13	3
IV	Laceration	Laceration involving segmental or hilar vessels producing major devascularization (> 25% of spleen)		4
V	Laceration	Completely shattered spleen	865.04 - 865.14	5
	Vascular	Hilar vascular injury which devascularizes spleen	865.04 - 865.14	5

*Advance one grade for multiple injuries up to Grade III

AAST Duodenum Injury Scale (1994 REVISION)				
Grade		Injury Description	ICD-9	AIS90*
I	Hematoma	Involving single portion of duodenum	863.21	2
	Laceration	Partial thickness, no perforation	863.21	3
II	Hematoma	Involving more than one portion	863.21	2
	Laceration	Disruption < 50% of circumference	863.31	4
III	Laceration	Disruption 50 – 75% circumference of D2 Disruption 50 – 100% circumference of D1, D3, D4	863.31	4
IV	Laceration	Disruption >75% circumference of D2 Involving ampulla or distal common bile duct	863.31	5
V	Laceration	Massive disruption of duodenopancreatic complex	863.31	5
	Vascular	Devascularization of duodenum	863.31	5

D1 = first portion of duodenum; D2 = second portion; D3 = third portion; D4 = fourth portion

*Advance one grade for multiple injuries up to Grade III

Injury Scales

AAST Pancreas Injury Scale (1994 REVISION)				
<i>Grade</i>		Injury Description	ICD-9	AIS90*
I	Hematoma	Minor contusion without duct injury	863.81 - 863.84	2
	Laceration	Superficial laceration without duct injury		2
II	Hematoma	Major contusion without duct injury or tissue loss	863.81 - 863.84	2
	Laceration	Major laceration without duct injury or tissue loss		3
III	Laceration	Distal transection or parenchymal injury with duct injury	863.92 - 863.94	3
IV	Laceration	Proximal (to patient's right of superior mesenteric vein) transection or parenchymal injury involving ampulla	863.91	4
V	Laceration	Massive disruption of pancreatic head	863.91	5

.81, .91 = head; .82, .92 = body; .83, .93 = tail

*Advance one grade for multiple injuries up to Grade III

AAST Kidney Injury Scale			
<i>Grade</i>		Injury description	
I	Contusion	Microscopic or gross hematuria, urologic studies normal	
	Hematoma	Subcapsular, nonexpanding without parenchymal laceration	
II	Hematoma	Nonexpanding peri-renal hematoma confirmed to renal retroperitoneum	
	Laceration	< 1.0 cm parenchymal depth of renal cortex without urinary extravasation	
III	Laceration	<1.0 cm parenchymal depth of renal cortex without collecting system rupture or urinary extravasation	
IV	Laceration	Parenchymal laceration extending through the renal cortex, medulla and collecting system	
	Vascular	Main renal artery or vein injury with contained hemorrhage	
V	Laceration	Completely shattered kidney	
	Vascular	Avulsion of renal hilum which devascularizes the kidney	

Head Injury Scale	
<i>Grade</i>	Injury Description
I	No changes on computerized tomography (CT)
II	Positive changes on CT
III	Nonsurvivable head injury