

Supplementary Table 1: Summary of clinical practice guideline recommendations

TBI guidelines			
Brain trauma foundation^[10]	2017 neurocritical care society^[11,12]	ACS-TQIP^[13]	2020 WTA guideline^[14]
Considered if the brain injury is stable and the benefit outweighs the risk of ↑ ICH	LMWH or UFH within 24 h of TBI and 24 h postcraniotomy	Modified Berne-Norwood criteria start 24 h (if low risk), 72 h (if moderate risk) with stable head CT scan High-risk patients, namely, those needing neurosurgical intervention or progression at 72 h, should be considered for a retrievable inferior vena cava filter	24 h after injury for patients with stable CT and nearly all should receive within 72 h of the time of injury. No consensus regarding the safety in the presence of ICP monitors or postcraniotomy
SCI guidelines			
2017 neurocritical care society^[11,12]	AANS and CNS^[19]	2020 WTA guideline^[14]	
Start LMWH or UFH within 72 h of admission with SCI		As soon as possible after a spine surgery or any spinal injury. Regimens can be initiated preoperatively or immediately after operative fixation (within 48 h of operative fixation of traumatic spine fractures)	
NOR solid organ injury (liver, spleen, and kidney) guidelines			
2002 EAST^[5,24,25,49]			2020 WTA guideline^[14]
No literature consensus about safe initiation time. Eberle <i>et al.</i> : Early (<3 days) did not ↑ failure rates or blood transfusion			Within 12-24 h appeared to be safe across moderate AAST injury grades. Caution with Grades IV and V injuries

AANS: American association of neurological surgeons, CNS: Congress of neurological surgeons, AAST: American association for the surgery of trauma, EAST: Eastern association for the surgery of trauma, NOR: Nonoperative, TBI: Traumatic brain injury, SCI: Spinal cord injury, ACS-TQIP: American college of surgeons, trauma quality improvement program, WTA: Western trauma association, UFH: Unfractionated heparin, LMWH: Low-molecular-weight heparin, CT: Computed tomography, ICH: Intracranial hemorrhage, ICP: Intracranial pressure