

Positive Variable Associations with CT Findings

Variable	Supporting Studies	Null or Contrasting Result Studies
Medications		
Vitamin K antagonists	Turcato et al. (2019)* ¹ , Riccardi et al. (2017)* ¹ , Santing et al. (2022)* ¹ , Savioli et al. (2020) ¹	Antoni et al. (2022) ^{1,2}
Antithrombotic medications (as a whole)		Sakkas et al. (2023a) ¹ , Sakkas et al. (2023b) ¹ , Ibanez Perez De La Blanca (2023)* ¹ , Martinez Rivas et al. (2023)* ¹ , Karibe et al. (2023) ² , Hadwe et al. (2022)* ²
Antiplatelet therapy	Ibanez Perez De La Blanca et al. (2018) ¹ , Aramvanitch et al. (2023)* ¹ , Antoni et al. (2022) ^{1,2} , Fiorelli et al. (2020)* ¹	Savioli et al. (2021)* ¹ , Santing et al. (2022)* ¹ , Bergenfeldt et al. (2023)* ² , Colombo et al. (2021)* ² , Spektor et al. (2003) ¹ , Tauber et al. (2009) ¹
Direct oral anticoagulants		Broderick et al. (2023)* ² , Catal et al. (2023)* ² , Bergenfeldt et al. (2023)* ² , Puzio et al. (2021)* ²
Antidepressants		Ibanez Perez De La Blanca et al. (2018) ¹ , Isokuortti et al. (2022) ¹
Statins		Ibanez Perez De La Blanca (2023)* ¹
Signs or symptoms		
Amnesia	Turcato et al. (2019)* ¹ , Aramvanitch et al. (2023)* ¹ , Sakkas et al. (2023a) ¹ , Sakkas et al. (2023b) ¹ , Park et al. (2023)* ¹ , Sakkas et al. (2023cd)* ¹ , Shafie et al. (2023)* ¹ , Mori et al. (2020) ¹	
Loss of consciousness	Turcato et al. (2019)* ¹ , Ibanez Perez De La Blanca et al. (2018) ¹ , Aramvanitch et al. (2023)* ¹ , Sakkas et al. (2023a) ¹ , Sakkas et al. (2023b) ¹ , Park et al. (2023)* ¹ , Sakkas et al. (2023cd)* ¹ , Mori et al. (2020) ¹	
Glasgow Coma Scale <15	Turcato et al. (2019)* ¹ , Ibanez Perez De La Blanca et al. (2018) ¹ , Sakkas et al. (2023a) ¹ , Sakkas et al. (2023b) ¹ , Ibanez Perez De La Blanca (2023)* ¹ , Shafie et al. (2023)* ¹	
Lesion or trauma above clavicles	Turcato et al. (2019)* ¹ , Park et al. (2023)* ¹	
Nausea	Ibanez Perez De La Blanca et al. (2018) ¹ , Sakkas et al. (2023a) ¹ , Sakkas et al. (2023b) ¹ , Sakkas et al. (2023cd)* ¹	
Pain or headache	Aramvanitch et al. (2023)* ¹ , Sakkas et al. (2023a) ¹ , Sakkas et al. (2023b) ¹ , Park et al. (2023)* ¹ , Sakkas et al. (2023cd)* ¹	
Dizziness	Sakkas et al. (2023a) ¹ , Sakkas et al. (2023b) ¹ , Sakkas et al. (2023cd)* ¹	

Vomiting	Aramvanitch et al. (2023)* ¹ , Park et al. (2023)* ¹ , Shafie et al. (2023)* ¹ , Mori et al. (2020) ¹	
Seizures	Sakkas et al. (2023cd)* ¹	
Skull fracture	Aramvanitch et al. (2023)* ¹ , Sakkas et al. (2023cd)* ¹	
Raccoon eyes	Shafie et al. (2023)* ¹	
Somnolence	Sakkas et al. (2023a) ¹ , Sakkas et al. (2023cd)* ¹	
Nature of injury		
High energy/dynamic impact or traffic accident	Turcato et al. (2019)* ¹ , Ibanez Perez De La Blanca et al. (2018) ¹ , Aramvanitch et al. (2023)* ¹ , Park et al. (2023)* ¹ , Shafie et al. (2023)* ¹ , Mori et al. (2020) ¹	
Temporo-parietal and occipital impact location	Sedlak et al. (2023)* ¹	
Demographics		
Age	Savioli et al. (2021)* ¹ , Coffeng et al. (2023)* ¹ , Shafie et al. (2023)* ¹	Sakkas et al. (2023b) ¹
Sex	Ibanez Perez De La Blanca (2023)* ¹ (males)	Sakkas et al. (2023b) ¹
History of neurosurgery	Park et al. (2023)* ¹	
Alcohol consumption	Ibanez Perez De La Blanca (2023)* ¹	
Presence of tumor	Ibanez Perez De La Blanca (2023)* ¹	
Neurological disease		Ibanez Perez De La Blanca (2023)* ¹
Diabetes		Ibanez Perez De La Blanca (2023)* ¹
Biomarkers		
Glial fibrillary acidic protein (GFAP)	Gardner et al. (2022) ¹ , Iverson et al. (2022) ¹	
S100 calcium binding protein B (S100B)		Oris et al. (2021)* ¹ , Gardner et al. (2022) ¹
Ubiquitin carboxy-terminal hydrolase L1 (UCH-L1)		Gardner et al. (2022) ¹ , Iverson et al. (2022) ¹
Neuron-specific enolase (NSE)		Gardner et al. (2022) ¹
Neurofilament light (NF-L)		Iverson et al. (2022) ¹
Total tau (t-tau)		Iverson et al. (2022) ¹

*High quality study (studies without asterisk likely have higher risk of bias) or at least moderate quality systematic review

¹Immediate measurement in emergency department

²Later measurement to potentially detect delayed bleeding