**Supplementary Table 1.** Search Strategies for Delirium Monitoring in Neurocritical Care

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| --- | --- | --- |
| **CINAHLa Search** | **Terms** | **Results** |
| **#1** | MH "Cerebrovascular Disorders+" OR MH "Stroke+" OR MH "Intracranial Hemorrhage+" OR MH "Intracranial Embolism and Thrombosis+" OR MH "Intracranial Arterial Diseases+" OR MH "Cerebral Small Vessel Diseases+" OR MH "Cerebral Ischemia+" OR MH "Carotid Artery Diseases+" OR MH "Basal Ganglia Cerebrovascular Disease+" OR MH "Acute Febrile Encephalopathy" OR MH "Chronic Traumatic Encephalopathy" OR MH "Hepatic Encephalopathy" OR "hepatic encephalopathy" OR MH "Brain Diseases" OR "brain diseases" OR MH "Stroke+" OR "hemorrhagic stroke" OR MH "Intracranial Arteriosclerosis" OR "intracerebral hemorrhage" OR "cerebrovascular trauma" OR "traumatic brain injury" OR MH "Brain Injuries" OR "brain trauma" OR "head trauma" OR "subarachnoid haemorrhage" OR "subarachnoid hemorrhage" OR "subarachnoid haemorrhage | **108,241** |
| **#2** | (delirium OR MH "Psychomotor Agitation+" OR MH “Cognition Disorders” "cognitive impairment" OR TI cognition OR TI cognitive OR TI agitation OR TI agitated OR TI “mild cognitive”) | **43,306** |
| **#3** | (MH "Stroke Units") OR "stroke units" OR “stroke unit” OR  (MH "Critical Care+") OR "critical care" OR (MH "Critical Illness") OR "critical illness" OR "neurocritical" OR "neurointensive" OR  (MH "Intensive Care Units+") OR "intensive care" OR (MH "Trauma Centers") OR "trauma center" OR "surgery unit" OR "surgical unit" OR "surgical ICU" OR "surgical intensive care" OR "surgical step down" OR (MH "Surgical Patients") OR "surgical patients" OR "trauma patients" OR "trauma patient" OR "intensive care patients" OR (MH "Trauma Centers") OR "trauma centers" OR "trauma care" | **121,749** |
| **#4** | #1 AND #2 AND #3 | **128** |
| **WoS Searchb** | **Terms** | **Results** |
| **#1** | TS=(Chronic NEAR Encephalopathy) OR TS=(Acute NEAR Encephalopathy) OR TS=(Hepatic NEAR Encephalopathy) OR TS=(Wernicke NEAR Encephalopathy) OR TS=(Hypertensive NEAR Encephalopathy) OR TS=(Brain) OR TI=(encephalopathy) OR TS=(hemorrhagic NEAR stroke) OR TS=(haemorrhagic NEAR stroke) OR TS=(intracerebral NEAR hemorrhage) OR TS=(intracerebral NEAR haemorrhage) OR TS=(intracerebral NEAR hemorrhag\*) OR TS=(subarachnoid NEAR hemorrhag\*) OR TS=(intracranial NEAR hemorrhag\*) OR TS=(intracranial haemorrhag\*) OR TS=(ischaemia NEAR stroke) OR TS=(ischemic NEAR stroke) OR TS=(subarachnoid NEAR haemorrhag\*) OR TS=(cerebrovascular NEAR stroke\*) OR TS=(cerebral NEAR stroke\*) OR TS=(acute NEAR stroke\*) OR TS=(Stroke) OR TS=(Trauma) OR TS=(cerebrovascular NEAR trauma) OR TS=(trauma NEAR head) OR TS=(trauma NEAR brain) | **1,430,451** |
| **#2** | TS=(Emergence NEAR Delirium) OR TS=(Psychomotor NEAR Agitation) OR TS=(Delirium) OR TS=(agitation) OR TS=(agitated) OR TS=(cognition) OR TS=(mild NEAR cognitive NEAR impairment) OR TS=(cognitive NEAR impair\*) OR TI=(cognitive) | **223,962** |
| **#3** | TS=(neurocritical NEAR care) OR TS=(neurocritical NEAR unit\*) OR TI=(neurocritically) OR TS=(neurointensive) OR TS=(neurointensive NEAR unit\*) OR TS=(neurointensivis\*) OR TS=(neurointensivist\*) OR TS=(neuro NEAR icu) OR TS=(neuro NEAR icus) OR TS=(Critical NEAR Care) OR TS=(Critical NEAR Illness) OR TS=(Intensive NEAR Care) OR TS=(surgical NEAR intensive) OR TS=(trauma NEAR ICU) OR TS=(trauma NEAR intensive) OR TS=(neurotrauma\*) OR TS=(trauma NEAR unit\*) OR TS=(intensive NEAR care) OR TS=(critically NEAR Ill) | **174,657** |
| **#4** | #1 AND #2 AND #3 | **888** |
| **Pubmedc Search** | **Terms** | **Results** |
| **#1** | "Chronic Traumatic Encephalopathy"[Mesh] OR "Acute Febrile Encephalopathy"[Mesh] OR "Hepatic Encephalopathy"[Mesh] OR "Wernicke Encephalopathy"[Mesh] OR "Hypertensive Encephalopathy"[Mesh] OR "Brain Diseases"[Majr] OR encephalopathy[tiab] OR "hemorrhagic stroke" OR "haemorrhagic stroke" OR "intracerebral hemorrhage" OR "intracerebral haemorrhage" OR "intracerebral hemorrhage" OR "subarachnoid hemorrhaging" OR "intracranial hemorrhage" OR "intracranial haemorrhaging" OR "ischaemic stroke" OR "ischemic stroke" OR "subarachnoid haemorrhage"[tiab] OR "cerebrovascular stroke" OR "cerebrovascular strokes" OR "cerebral stroke" OR "acute stroke" OR "Stroke"[majr] OR "Trauma, Nervous System"[Mesh] OR trauma[ti] OR "cerebrovascular trauma"[tw] OR "intracerebral haemorrhage" OR "intracerebral hemorrhage" OR "intracerebral hemorrhages" OR "intracerebral hemorrhaging" OR "intracerebral haemorrhages" OR "intracerebral haemorrhagic complications" OR "brain hemorrhage" OR "brain hemorrhages" OR "brain hemorrhagic" OR "brain hemorrhaging" OR "brain haemorrhage" OR "Brain Hemorrhage, Traumatic"[Mesh] OR "Intracranial Hemorrhages"[Mesh] OR "Cerebrovascular Disorders"[Mesh] OR "head trauma"[tw] OR “traumatic head”[tw] OR “trauma head”[tw] | **1,182,253** |
| **#2** | "Emergence Delirium"[Mesh] OR "Psychomotor Agitation"[Mesh] OR "Delirium"[Mesh] OR delirium[tiab] OR agitation[tiab] OR agitated[tiab] OR "cognition disorders”[mesh] OR “mild cognitive impairment” OR “cognitive impairment” OR cognition[ti] OR cognitive[ti] | **178,834** |
| **#3** | "neurocritical care"[Text Word] OR "neurocritical care unit"[Text Word] OR "neurocritical care units"[Text Word] OR "neurocritically"[Text Word] OR "neurointensive"[Text Word] OR "neurointensive care unit"[Text Word] OR "neurointensive care units"[Text Word] OR "neurointensivismo"[Text Word] OR "neurointensivist"[Text Word] OR "neurointensivists"[Text Word] OR "neuro icu"[Text Word] OR "neuro icus"[Text Word] OR "Critical Care"[Mesh] OR "Critical Illness"[Mesh] OR "Intensive Care Units"[Mesh] OR "critical care"[tiab] OR "intensive care"[tiab] OR "trauma centers"[mesh] OR "trauma center"[tw] OR "surgery ICU"[tw] OR "surgical ICU"[tw] OR "trauma care"[All Fields] OR "trauma care/trauma center"[All Fields] OR "trauma care/trauma center association"[All Fields] OR "trauma care advisory council"[All Fields] OR "trauma care audit"[All Fields] OR "trauma care capabilities"[All Fields] OR "trauma care capacity"[All Fields] OR "trauma care center"[All Fields] OR "trauma care centers"[All Fields] OR "trauma care centre"[All Fields] OR "trauma care centre pgimer"[All Fields] OR "trauma care checklist"[All Fields] OR "trauma care clinicians"[All Fields] OR "trauma care community"[All Fields] OR "trauma care consult"[All Fields] OR "trauma care continuum"[All Fields] OR "trauma care costs"[All Fields] OR "trauma care course"[All Fields] OR "trauma care courses"[All Fields] OR "trauma care decision assist"[All Fields] OR "trauma care delivery"[All Fields] OR "trauma care division"[All Fields] OR "trauma care education"[All Fields] OR "trauma care environment"[All Fields] OR "trauma care evaluation"[All Fields] OR "trauma care facilities"[All Fields] OR "trauma care facility"[All Fields] OR "trauma care fellowships"[All Fields] OR "trauma care foundation"[All Fields] OR "trauma care foundation cambodia"[All Fields] OR "trauma care foundation iraq"[All Fields] OR "trauma care guidelines"[All Fields] OR "trauma care hospital"[All Fields] OR "trauma care hospitals"[All Fields] OR "trauma care improvement"[All Fields] OR "trauma care indicators"[All Fields] OR "trauma care information"[All Fields] OR "trauma care management"[All Fields] OR "trauma care model"[All Fields] OR "trauma care network"[All Fields] OR "trauma care nurses"[All Fields] OR "trauma care on scene"[All Fields] OR "trauma care organization"[All Fields] OR "trauma care outcomes"[All Fields] OR "trauma care parameters"[All Fields] OR "trauma care patients"[All Fields] OR "trauma care performance"[All Fields] OR "trauma care performance evaluation"[All Fields] OR "trauma care personnel"[All Fields] OR "trauma care physicians"[All Fields] OR "trauma care policy"[All Fields] OR "trauma care practice"[All Fields] OR "trauma care practitioners"[All Fields] OR "trauma care process"[All Fields] OR "trauma care processes"[All Fields] OR "trauma care professionals"[All Fields] OR "trauma care program"[All Fields] OR "trauma care programme"[All Fields] OR "trauma care project"[All Fields] OR "trauma care protocol"[All Fields] OR "trauma care providers"[All Fields] OR "trauma care provision"[All Fields] OR "trauma care quality"[All Fields] OR "trauma care quality improvement"[All Fields] OR "trauma care regionalisation"[All Fields] OR "trauma care regionalization"[All Fields] OR "trauma care reimbursement"[All Fields] OR "trauma care research"[All Fields] OR "trauma care resources"[All Fields] OR "trauma care service"[All Fields] OR "trauma care services"[All Fields] OR "trauma care setting"[All Fields] OR "trauma care settings"[All Fields] OR "trauma care skills"[All Fields] OR "trauma care standards"[All Fields] OR "trauma care system"[All Fields] OR "trauma care system plan"[All Fields] OR "trauma care systems"[All Fields] OR "trauma care systems development"[All Fields] OR "trauma care systems quality improvement guidelines"[All Fields] OR "trauma care team"[All Fields] OR "trauma care times"[All Fields] OR "trauma care training"[All Fields] OR "trauma care trauma center"[All Fields] OR "trauma care trauma center association"[All Fields] OR "trauma care unit"[All Fields] OR "trauma care units"[All Fields] OR "trauma care workshop"[All Fields] OR "trauma career"[All Fields] OR "trauma carotid artery"[All Fields] OR "trauma case"[All Fields] OR "trauma case load"[All Fields] OR "trauma case management"[All Fields] OR "trauma case manager"[All Fields] OR "trauma case managers"[All Fields] OR "trauma case mix"[All Fields] OR "trauma case report"[All Fields] OR "trauma case review tool"[All Fields] OR "trauma case reviews"[All Fields] OR "trauma case volume"[All Fields] OR "trauma case volumes"[All Fields] OR "trauma caseload"[All Fields] OR "trauma cases"[All Fields] OR "trauma casualties"[All Fields] OR "trauma categories"[All Fields] OR "trauma category"[All Fields] OR "trauma cats"[All Fields] OR "trauma causation"[All Fields] OR "trauma cause"[All Fields] OR "trauma caused"[All Fields] OR "trauma causes"[All Fields] OR "trauma causing"[All Fields] OR "trauma causing dislocation"[All Fields] OR "trauma causing injury"[All Fields] OR "trauma ceftriaxone"[All Fields] OR "trauma ceftriaxone group"[All Fields] OR "trauma celiotomy"[All Fields] OR "trauma census"[All Fields] OR "trauma center"[All Fields] | **210,047** |
| **#4** | **#1 AND #2 AND #3** | **441** |

Supplementary Table 1 Superscripts (by column):

aCINAHL, Cumulative Index to Nursing and Allied Health Literature Platform Search Strategy through August 17, 2017

bWoS, Web of Science Platform Search Strategy through July 20, 2017

cPubMed/MEDLINE Platform Search Strategy through May 21, 2017