

21ST EDA ANNUAL CONFERENCE

Oral Abstracts

Delirium: From Mechanisms to Better Care

Oslo, Norway | 5–6 November 2026

One title has been editorially added in italics where no title was given in the submission.

Contents

ORAL PRESENTATIONS 1: PATHOPHYSIOLOGY

- 13 Yamini Ajmera:** *Determinants and outcomes of delirium in older inpatients*
- 24 Maria Scheutz:** The relationship between MRI-based preoperative blood-brain barrier permeability and postoperative delirium symptom severity is modulated by intraoperative blood-loss
- 39 Sofie Lautrup:** Longitudinal Associations Between Immune-Regulatory Kynurenine Pathway Metabolites and Delirium
- 41 Yoonhyoung Jo:** Postoperative Delirium Is Associated with Cortical Gray Matter Loss Following Brain Metastasis Surgery: A Longitudinal MRI Study
- 43 Christine A.F. von Arnim:** Preoperative Plasma Amyloid- β 1-40 Is Associated with Increased Risk of Postoperative Delirium after Cardiac Surgery: Results from the Prospective FINDERI Cohort
- 66 D.Y. Lodema:** Widespread Alterations in Aperiodic EEG Activity in Delirium
- 73 Mathias Nikolai Petersen Hella:** CSF α -synuclein seeding activity in delirium: exploring a potential link with Lewy body disease
- 86 Tania Ahmed:** The Brain's Sweet Spot

ORAL PRESENTATIONS 2: PHENOMENOLOGY, DIAGNOSIS, RISK FACTORS

- 25 Florence Gerakios:** Clinical delirium subtypes and associated one-year mortality, dementia and institutionalisation
- 32 R.A. Lawson:** Developing a Parkinson's Disease-Specific Delirium Diagnostic Tool: Internal Validation Using Penalised Regression
- 51 Sara Åkerman:** CAPD-defined delirium was highly prevalent in Swedish PICUs
- 60 Stefan Holman:** Diagnostic accuracy and feasibility of the 4AT, including non-verbal adaptations, for delirium detection in critically ill patients: a prospective multicenter study
- 62 MS Luney:** Delirium severity after hip fracture: development and validation of a UK clinical prediction model
- 85 Sophie Leroy:** Standardizing EEG Acquisition in Delirium Research: Clinical and Technical Recommendations for Harmonization and Federated Analysis
- 87 Aline V Nixon:** Poor Physical Function, a Key Risk Factor for Development of Post-operative Delirium in Older Adults. A Systematic Review and Meta-analysis
- 95 Zhangming Niu:** PharmkGPT, a biomedical knowledge graph to support evidence-grounded question answering and literature exploration across delirium and AD

ORAL PRESENTATIONS 3: TREATMENTS AND OUTCOMES

- 02 Jian-An Su:** Delirium as an Early Mortality Signal in Older Inpatients: A Three-Year Comparative Survival Study
- 04 Anders Aasheim:** EEG Spectrogram- and BIS-Guided Anaesthesia Improves Emergence and Early Postoperative Cognitive Function: A Randomized Controlled Trial
- 09 Eva Trompetter:** "My sister often tried to talk to the doctors about the delirium, but nothing came of it" - Care experiences and coping behaviour of relatives of older people with delirium
- 45 Christina Aggar:** PREDICT (Prevention and Early Delirium Identification Carer Toolkit)
- 63 Sining Zeng:** Perioperative Music Interventions for Prevention of Postoperative Delirium in Adult Patients: A Systematic Review and Meta-analysis
- 65 Rose S Penfold:** Delirium on admission and subsequent dementia subtype: a population-based cohort study of older adults
- 89 Sanchit Turaga:** Delirium occurrence across dementia subtypes in older hospital patients: ORCHARD-EPR cross-sectional study

ORAL 13

THURSDAY 5 NOVEMBER 2026

Determinants and outcomes of delirium in older inpatients

Yamini Ajmera, Karandeep Paul, Maroof Ahmad Khan, Bharti Kumari, Nand Kumar, Prasun Chatterjee, Aparajit Ballav Dey, Avinash Chakrawarty

India

Aim: To evaluate determinants and short-term and long-term outcomes of delirium in hospitalized older adults.

Methods: A prospective observational study was performed in consecutively admitted patients aged ≥ 60 years. Delirium assessment was performed within 24 hrs of admission and daily thereafter throughout the hospital stay using the Confusion Assessment Method (CAM). Potential risk factors were assessed at time of admission. Serum leptin levels were measured using enzyme-linked immunosorbent assay. Patients were followed up at 1-year post-discharge.

Results: Study included 200 participants with mean age 73.1 ± 8.83 years. Incidence and prevalence rates of delirium were 5% and 20% respectively. Serum leptin levels were significantly lower in Delirium group vs Non-Delirium group (2.58 ± 1.01 ng/mL vs. 10.72 ± 1.46 ng/mL, $p=0.03$). Multivariable regression analysis revealed emergency admission, functional dependency (Katz index of Independence in Activities of Daily Living (Katz-ADL) score <5), more psychopathological symptoms (higher Brief Psychiatric Rating Scale (BPRS) score) and low serum leptin levels to be independently associated factors ($p<0.05$). Patients in delirium group had significantly high in-hospital mortality (OR=5.02 (2.12–11.8), $p=0.001$) and post-discharge mortality (HR=2.02 (1.13–3.61), $p=0.017$) and functional dependency (Katz-ADL score <5) (OR=5.45 (1.49–19.31), $p=0.01$) at 1-year follow up.

Conclusion: Delirium is quite frequent with high in-hospital and post-discharge mortality risk and long-term functional dependency. Hence, earliest identification and treatment is warranted, with early implementation of rehabilitation services. Emergency admission, functional dependency, and more psychopathological symptoms are independently associated factors. Leptin might serve as a potential biomarker owing to its probable role in the pathophysiological processes.

[← Back to contents](#)

ORAL 24

THURSDAY 5 NOVEMBER 2026

The relationship between MRI-based preoperative blood-brain barrier permeability and postoperative delirium symptom severity is modulated by intraoperative blood-loss

Maria Scheutz, Laura Ambrosius, Gabriel Hoffmann, Anika Fix, Julia Schwarz, Franziska Zistler, Adriana Usheva, Juliana Zimmermann, Christine Preibisch, Stefanie Pilge, Gerhard Schneider, Svenja Letz, Rachel Nuttall

Germany

Background/Aims: Postoperative delirium risk is highest in patients presenting both preoperative and intraoperative risk factors, including surgical stress (e.g., blood-loss). Preoperative blood-brain-barrier permeability (preop-BBBp) may contribute to postoperative delirium symptom severity (PODss), when intraoperative risk has been taken into account, yet commonly-used biomarkers of BBBp may be too insensitive to detect subtle interindividual differences. We investigated whether preop-BBBp is predictive of PODss in older-aged surgical patients using a novel MRI-based measure of BBBp, namely Hadamard-encoded ASL-MRI with multi-echo readout of water exchange time from the extracellular to intracellular brain compartment (Tex).

Methods: Preoperative brain MRI, intraoperative blood-loss and postoperative (twice daily for 5 days) 3D-CAM assessment of PODss were performed in 76 surgical patients (≥ 65 years old), 35 of which were included in the final analysis. Mean gray-matter Tex (gmTex) and an interaction term between gmTex and intraoperative blood-loss served as predictors in a linear regression model built to predict PODss (the maximum 3D-CAM severity score across all assessments per patient).

Results: Intraoperative blood-loss was positively correlated with PODss ($\rho=0.49, p=0.003$) and surgery duration ($\rho=0.57, p<.001$). The main effect of gmTex was not significant ($\beta=-17.0, p=0.097, t=2.14$), yet a significant interaction was observed between gmTex and intraoperative blood-loss in predicting PODss ($\beta=0.01, p=0.01, t=2.72$).

Conclusions: Consistent with the neuroinflammatory model of POD, preoperative BBBp becomes significant in predicting PODss once intraoperative surgical stress has been taken into account, in line with our current understanding of POD risk as a combination of both preoperative and intraoperative factors, where disrupted BBBp is a potential mechanism of POD.

[← Back to contents](#)

Longitudinal Associations Between Immune-Regulatory Kynurenine Pathway Metabolites and Delirium

Sofie Lautrup, Kristoffer H. Hellton, Adrian McCann, Lasse M. Giil, Eli Rudi, Kristin Markus, Maria Krogseth, Evandro Fei Fang, Leiv Otto Watne

Norway

Background: Frailty and neurodegeneration are major risk factors for delirium, but the underlying biological mechanisms remain unclear. The kynurenine pathway (KP), an inflammation-driven pathway of tryptophan metabolism, produces neuroactive metabolites linked to delirium in previous cross-sectional studies, but the temporal relationship between KP activation, acute illness, and delirium is unknown.

Methods: We analyzed longitudinal data from the Capturing Acute and Social Care in Dependent Elders (CASCADE) cohort (210 participants), including repeated measurements of serum KP metabolites during stable conditions and acute hospitalizations (in total 457 serum samples). Participants were followed for two years. Associations between KP metabolites, age, frailty, dementia, delirium, and mortality were assessed using longitudinal and acute-state analyses.

Results: Frailty, age, and elevated KA concentrations were associated with increased mortality. Frailty and dementia were strong independent predictors of delirium. Interestingly, several KP metabolites decreased during a delirium event, whereas some of these increased post delirium. Acute hospitalization was associated with significant alterations in KP metabolism, and patients experiencing delirium demonstrated distinct KP changes compared with acutely hospitalized patients without delirium.

Conclusions: Frailty and dementia remain major clinical predictors of delirium, while KP alterations appear to reflect important biological processes associated with acute illness, delirium, and mortality. The observed differences in KP metabolites during delirium support a role for inflammation-driven tryptophan metabolism in delirium pathophysiology. These findings strengthen the rationale for further mechanistic and translational studies targeting the KP in delirium both systemically and in the brain.

[← Back to contents](#)

ORAL 41

THURSDAY 5 NOVEMBER 2026

Postoperative Delirium Is Associated with Cortical Gray Matter Loss Following Brain Metastasis Surgery: A Longitudinal MRI Study

Yoonhyoung Jo, Jihwan Yoo, Bio Joo, Jooyoung Oh

Republic of Korea

Background/Aims: Postoperative delirium (POD) is recognized as acute brain failure, yet its longitudinal impact on cortical brain structure following brain metastasis surgery remains poorly understood. This study examined whether POD is associated with differential cortical gray matter (GM) recovery trajectories over six months.

Methods: 47 patients undergoing brain metastasis resection received structural MRI preoperatively and at 3 and 6 months. FreeSurfer segmentation was applied. Primary analysis (n=47; delirium n=10, non-delirium n=37) used linear mixed-effects models (LMM) with TIV(total intracranial volume), age, radiotherapy, chemotherapy, and baseline K-MoCA as covariates. Sensitivity analyses excluded patients with follow-up metastatic progression, restricted analyses to the non-tumor hemisphere, and additionally adjusted for whole-brain radiotherapy. Exploratory Spearman correlations examined structural-cognitive associations.

Results: LMM revealed significant delirium-by-time interactions in primary ($p=0.049$) and sensitivity analyses ($p=0.005$). The non-delirium group showed a transient GM increase at 3 months, whereas the delirium group showed persistent GM decline. Model-estimated between-group differences were significant at 3 ($p=0.005$) and 6 months ($p=0.023$) in the sensitivity cohort. Among total K-MoCA score and its subdomains, only naming improvement (baseline to 3 months) correlated with cumulative cortical GM change from baseline to 6 months ($p=0.650$, $p=0.016$, $N=14$).

Conclusions: POD was associated with divergent cortical GM recovery after brain metastasis surgery, suggesting impaired postoperative brain resilience. Early recovery in naming performance may represent a candidate marker of structural recovery. These findings link acute cognitive dysfunction with subsequent structural recovery patterns. Longitudinal neuroimaging studies are needed to clarify how acute brain failure contributes to sustained structural vulnerability.

[← Back to contents](#)

ORAL 43

THURSDAY 5 NOVEMBER 2026

Preoperative Plasma Amyloid- β 1-40 Is Associated with Increased Risk of Postoperative Delirium after Cardiac Surgery: Results from the Prospective FINDERI Cohort

Christine A.F. von Arnim, Monika Sadlonova, Carlotta Derad, Maike Hohberg, Christopher M. Celano, Irina Günther, Tobias Titsch, Iryna Krasiuk, Katharina Packroß, Matilda-Marie Becker, Alina Isabel Rediske, Nicholas Paul Süttmann, Clara Maria Knopp, Stephanie Heinemann, Paul T. Itting, Ingo Kutschka, Barbara Morgado, Hermann Esselmann, Hassina Baraki, Thomas Asendorf, Niels Hansen, Jens Wiltfang, FINDERI investigators

Germany · United States · Switzerland · Portugal

Background/Aims: Postoperative delirium (POD) is a frequent complication after cardiac surgery, but identifying patients with neurobiological vulnerability before surgery remains challenging. We investigated whether preoperative plasma amyloid and tau biomarkers are associated with POD.

Methods: FINDERI is a prospective observational cohort study at a German cardiac surgery center. Patients ≥ 50 years undergoing elective cardiac surgery were included. Preoperative plasma amyloid- β 1-40 (A β 1-40), A β 1-42, phosphorylated tau 181 (pTau181), and pTau217 were measured using validated immunoassays. Baseline cognition was assessed using the Montreal Cognitive Assessment (MoCA). POD was assessed daily for five postoperative days using the Confusion Assessment Method. Multivariable logistic regression and receiver operating characteristic analysis were performed.

Results: Of 504 enrolled patients, 491 completed POD assessment (mean age: 68.4 ± 8.3 years; 21.6% women; baseline MoCA: 23.8 ± 3.62), and 106 (21.6%) developed POD. Among the plasma biomarkers, A β 1-40 demonstrated the highest discriminatory ability for POD (AUC=0.65; 95% CI, 0.59-0.71), outperforming pTau217, pTau181, and A β 1-42. After adjusting for age, sex, diabetes, and surgery duration, higher plasma A β 1-40 remained independently associated with POD (OR per SD=1.93; 95% CI, 1.14-3.26). A combined model including A β 1-40, clinical variables, and MoCA achieved an AUC of 0.77 (95% CI, 0.72-0.82), with A β 1-40 remaining significant after MoCA adjustment.

Conclusions: Preoperative plasma A β 1-40 was independently associated with POD and provided modest incremental predictive value beyond established clinical and cognitive risk factors. These findings support A β 1-40 as a blood-based marker of pre-existing neurobiological vulnerability in cardiac surgery patients and warrant further evaluation as part of multimodal delirium risk stratification.

[← Back to contents](#)

Widespread Alterations in Aperiodic EEG Activity in Delirium

D.Y. Lodema, L. Hofmeester, J. van der A, T.H. Ottens, E. van Dellen, A.J.C. Slooter

Netherlands

Background/Aims: Delirium is characterized by pronounced EEG slowing, but conventional band-power measures combine oscillatory activity with the broadband aperiodic background, limiting our understanding of this phenomenon. Separating these components may clarify the neurophysiological changes underlying delirium. We investigated whether delirium is associated with altered aperiodic EEG exponent and offset, measures reflecting spectral steepness and broadband power.

Methods: We analyzed 64-channel resting-state EEG from 50 hospitalized Intensive Care Unit (ICU) and non-ICU ward patients aged ≥ 50 years with delirium ($n=27$) or without delirium ($n=23$). Eyes-closed EEG power spectra (0.5–30 Hz) were analyzed using the Python aperiodic analysis toolbox Specparam. Whole-scalp spectral exponent and offset were compared using Welch's t-tests with Holm correction and ANCOVA adjusting for age, sex, and ICU admission. Cluster-based permutation testing assessed spatial effects across 61 electrodes.

Results: Delirium was associated with a higher aperiodic exponent (1.55 ± 0.25 vs 1.10 ± 0.27 ; Hedges' $g=1.71$; $p<0.001$) and offset (4.06 ± 0.35 vs 3.57 ± 0.29 ; $g=1.49$; $p<0.001$). Both differences remained significant after adjustment (exponent: partial $\eta^2=0.35$; offset: partial $\eta^2=0.29$; both $p<0.001$). For both measures, permutation testing identified a positive cluster spanning all 61 electrodes ($p<0.001$).

Conclusions: Delirium is associated with large, scalp-wide alterations in aperiodic EEG activity, indicating a global shift toward slower and higher-amplitude broadband activity. The higher spectral exponent is compatible with altered excitation-inhibition (E/I) dynamics, potentially involving increased inhibitory tone, but does not directly establish cortical E/I balance. These findings increase our understanding of delirium pathophysiology and could inform future diagnosis and treatment.

[← Back to contents](#)

ORAL 73

THURSDAY 5 NOVEMBER 2026

CSF α -synuclein seeding activity in delirium: exploring a potential link with Lewy body disease

Mathias Nikolai Petersen Hella, Kristin Markhus, Maria Camila Gonzalez Velez, Johannes Lange, Diego Alejandro Tovar Rios, Anne Katrine Bergland, Leiv Otto Watne, Dag Aarsland

Norway · United Kingdom

Background/aims: Delirium has been hypothesised, in some cases, to be a prodromal form of dementia with Lewy Bodies (DLB). The key pathological finding in DLB, α -synuclein pathology, can be detected with high sensitivity and specificity in cerebrospinal fluid by seed amplification assay (SAA). Research question: Is CSF α -synuclein seeding activity associated with delirium in acutely hospitalised older adults, and is this association present in patients without pre-existing dementia?

Methods: This multi-centre study includes patients acutely hospitalised with hip fracture at sites in the South-Eastern and Western regions of Norway. CSF α -synuclein seeding activity will be assessed using a SAA at Amsterdam University Medical Center and compared between patients with and without delirium during the index hospitalisation. A subgroup of the patients with delirium also have dementia, defined by a score on the IQCODE > 3,44.

Results: The median age of the patients with delirium (n=102) was significantly higher compared to the patients with no delirium (n=95) during the hospitalisation period (86.5 vs. 80 years, $p < .001$). Dementia was present for 71 (69.6%) of the patients with delirium, with a significantly higher IQCODE median in the delirium group compared to the no delirium group (3.9 vs. 3.0, $p < .001$). ASA-score median was significantly higher in the delirium group (3 vs. 2, $p < .001$).

Conclusion: Analysis of the CSF samples is currently ongoing, and results is expected in the beginning of September. Results and conclusion will be presented at the meeting.

[← Back to contents](#)

ORAL 86

THURSDAY 5 NOVEMBER 2026

The Brain's Sweet Spot

Tania Ahmed, Anita Nitchingham, Shouri Lahiri, Jacqueline C T Close, Gideon A Caplan

Australia · United States

Background/ Aims: Brain glucose hypometabolism occurs in delirium reflecting insulin resistance and dysglycaemia. Chronic hyperglycaemia, as in diabetes, impairs glucose sensing neurons thus 'normoglycaemia' becomes perceived as hypoglycaemia. This 'relative hypoglycaemia' triggers the counter-regulatory responses, and thus stress hyperglycaemia. Prior studies have investigated insulin resistance. This study evaluates the association between glycaemia and delirium.

Methods: We conducted a retrospective single centre cohort study of inpatients >75 years with glycosylated haemoglobin (HbA1c) measured within 3 months preceding admission. Delirium was assessed using a standardised chart review method.

Results: 554 inpatients with a mean age of 82.4 years were examined, of which 71.3% were diabetic. Delirium incidence was 27.3% (subsyndromal 7.6%) and prevalence 26.4% (subsyndromal 3.6%). Increased episodes of relative hypoglycaemia were significantly associated with increased delirium burden with adjusted odds ratio (aOR) of 1.02, (95% Confidence Interval 1.004-1.040); $p=0.04$ (adjusted for age, sex, frailty and HbA1c). Delirium risk trended to increase with relative hypoglycaemia, without reaching statistical significance with aOR of incidence 1.36 (0.88-2.10); $p=0.16$ and OR of burden 1.36, (0.97-1.92), $p=0.07$. Diabetic medication use is associated with relative hypoglycaemia with OR 2.42, (1.14-3.25), $p=0.02$. Interestingly, less variation in glucose results was associated with delirium incidence as the aOR for Coefficient of Variation (CV) was 0.99, (0.99-0.10), $p=0.0014$.

Conclusions: An association between relative hypoglycaemia episodes and delirium burden was identified. Individualised glycaemic targets that account for chronic glycaemic status warrant further investigation as a potential strategy to reduce delirium risk, given the significant relationship between diabetic medication use and relative hypoglycaemia.

[← Back to contents](#)

ORAL 25

THURSDAY 5 NOVEMBER 2026

Clinical delirium subtypes and associated one-year mortality, dementia and institutionalisation

Florence Gerakios, Alison J Yarnall, Emily Bowman, Daniel Davis, Blossom CM Stephan, Louise Robinson, Carol Brayne, Glenn Stebbins, John-Paul Taylor, Louise M Allan, Emma Cunningham, Kiran Reddy, Sarah J Richardson, Rachael A Lawson

United Kingdom · United States

Background: People with Parkinson's disease (PD) are more likely to develop delirium during hospitalisation than older adults without PD. Delirium in PD is associated with increased risks of death, dementia, and institutionalisation. Compared to delirium in those without PD, the risks of death and institutionalisation are greater. This suggests that delirium in PD may be phenotypically distinct, contributing to poor outcomes. We aimed to explore the phenomenology of delirium in PD and older adults, develop data-driven symptom profiles, and examine their relationship with adverse outcomes.

Methods: Delirium admissions with and without PD were drawn from three prospective studies and diagnosed per DSM-5 criteria. Subtypes were identified using Latent Class Analysis. One-year mortality, dementia, and institutionalisation were analysed using Cox or logistic regression.

Results: The analysis comprised 150 delirium participants. Three classes were identified: a PD-predominant neuropsychiatric class (n=40, 95.2% PD), an alert class mainly comprising older adults (n=53, 26.2% PD), and a mixed drowsy class (n=57, 62.3% PD). One-year cumulative survival was lower in the drowsy (40%) and neuropsychiatric (57.5%) classes than in the alert class (86.8%; $p<.001$ for all). Compared with the alert class, the drowsy and neuropsychiatric classes had higher mortality (HR=6.1 and 3.2, respectively, $p<0.01$) and institutionalisation risk (OR=18.5 and 10.1, respectively, $p<0.05$), but not dementia.

Conclusion: These results suggest that PD delirium is phenotypically distinct from delirium in older adults. The drowsy class is at the highest risk of mortality and loss of independence. These subtypes could support personalised delirium management and improve the accuracy of prognostic conversations with families.

[← Back to contents](#)

ORAL 32

THURSDAY 5 NOVEMBER 2026

Developing a Parkinson's Disease-Specific Delirium Diagnostic Tool: Internal Validation Using Penalised Regression

R.A. Lawson, F. Gerakios, S.J. Richardson, A.J. Yarnall, J.P. Taylor, L.M. Allan, DJ Burn, G. Stebbins

United Kingdom · United States

Background: Delirium is common in Parkinson's disease (PD) and increases the risk of dementia, institutionalisation and mortality. However, diagnosis is challenging due to overlapping clinical features. We aimed to develop PD-specific delirium diagnostic models for research and clinical practice.

Methods: Delirium was assessed daily in inpatients with PD using standardised Diagnostic and Statistical Manual of Mental Disorders 5th Edition criteria, comprising bedside tests, clinical observations and collateral history, in addition to bedside tests and questions about symptoms. Candidate predictors across delirium core features showing significant between-group differences were entered into penalised logistic regression models (LASSO and ElasticNet). Models were developed using training and test datasets with cross-validation. Performance was assessed using accuracy, area under the receiver operating characteristic curve (AUC), sensitivity and specificity. Internal validation was undertaken using internal-external cross-validation and .632 bootstrap resampling.

Results: 115 participants (200 admissions) were included; 66.1% experienced delirium. Penalised regression identified two diagnostic models. A 21-variable research model achieved the highest diagnostic performance (ElasticNet Min λ : AUC=0.97, accuracy=92%, sensitivity=90.9%, specificity=93.2%). A simplified clinical model comprising nine core delirium features (arousal, attention, orientation, neuropsychiatric symptoms, behavioural change, fluctuations, and disorganised thinking), retained excellent discrimination (LASSO λ 1SE: AUC=0.97, accuracy=84%, sensitivity=87.0%, specificity=92.4%).

Conclusions: We developed two complementary PD-specific delirium diagnostic models: a highly accurate research model and a simplified clinical model, which reduced assessment burden while maintaining excellent diagnostic performance. These models have the potential to improve recognition of delirium in PD; however, external validation in an independent cohort is required prior to use.

[← Back to contents](#)

CAPD-defined delirium was highly prevalent in Swedish PICUs

Sara Åkerman, Ylva Thernström Blomqvist, Maria Rathonyi Bylund, Maria Bågenholm, Ali-Reza Modiri, Alexander Hülsen, Alice Cronenberger, Moa Fahlander, Linus Roslin, Chani Traube, Johan Westerbergh, Robert Frithiof

Sweden · United States

Background: Delirium is a transient disturbance in awareness, attention, and cognition associated with adverse outcomes in children receiving paediatric intensive care. It presents as hypoactive, hyperactive, or mixed. This study investigated delirium incidence, trajectories, subtypes, and associated risk factors in Swedish PICUs.

Methods: In this prospective multicentre observational study, children with an anticipated PICU stay exceeding one night were enrolled at three Swedish tertiary PICUs. Patients receiving end-of-life care were excluded. Delirium was assessed three times daily using the Cornell Assessment of Pediatric Delirium (CAPD); a score ≥ 9 indicated delirium. Clinical data were collected prospectively and supplemented by record review.

Results: Between December 2023 and June 2025, 651 admissions involving 572 children were included, representing 4,572 PICU days. Screening was completed on 3,645 days (79.7%). Median age was 18 months (IQR 2.0–76.5), and 364 patients (55.9%) were male. Delirium occurred in 402 admissions (62.0%). Mixed delirium was the most common subtype, with frequent transitions between subtypes. CAPD scores decreased significantly before PICU discharge, and delirium trajectories varied by age and admission reason. Young age, benzodiazepine exposure, invasive mechanical ventilation, and extracorporeal membrane oxygenation were associated with delirium.

Conclusion: CAPD-defined delirium was highly prevalent in Swedish PICUs. Its trajectory varied by age and admission reason and was associated with commonly used PICU treatments. Delirium phenotype changed dynamically, with frequent transitions between hypoactive, hyperactive, and mixed subtypes.

[← Back to contents](#)

ORAL 60

THURSDAY 5 NOVEMBER 2026

Diagnostic accuracy and feasibility of the 4AT, including non-verbal adaptations, for delirium detection in critically ill patients: a prospective multicenter study

Stefan Holman, Kim van de Klok, Marian Winters, Ad Kamper, Jessica Veldhuizen, Mark van den Boogaard, Bram Tilburgs

Netherlands

Background/Aims: Delirium screening instruments differ across hospital settings, hampering consistent monitoring across transitions. The 4AT offers a single instrument usable across settings, but evidence in critically ill and non-verbal patients remains limited. This study evaluated the 4AT's diagnostic accuracy, severity correspondence and feasibility of its non-verbal adaptations, in critically ill patients.

Methods: This prospective multicenter diagnostic accuracy study in two Dutch hospitals enrolled intensive care and medium care unit patients (≥ 18 years) with Richmond Agitation-Sedation Scale ≥ -3 by convenience sampling. Patients with conditions precluding reliable delirium assessment or classification were excluded. The 4AT was compared against a Delirium Rating Scale-Revised-98-informed expert consensus reference standard. The 4AT's attention item was supplemented with non-verbal adaptations: a pointing aid and multiple-choice cards. Feasibility was assessed via completion and non-testable score rates.

Results: Delirium was present in 50 of 100 assessments across 88 patients. Overall accuracy was high (sensitivity 90%, 95% CI 79–96%; specificity 84%, 95% CI 71–92%; AUC 0.92, 95% CI 0.87–0.98). In non-verbal patients, sensitivity was 96% (95% CI 80–99%) and specificity 70% (95% CI 40–89%). Severity correspondence was strong (Spearman's $\rho=0.82$, 95% CI 0.74–0.87). Completion rate was 99%. Non-testable scores occurred in 41% and 61% of pointing aid and multiple-choice cards assessments, respectively.

Conclusions: The 4AT showed good overall diagnostic accuracy and correlated strongly with delirium severity in critically ill patients. Its performance in verbal patients supports delirium screening use in this group, while non-verbal feasibility and performance warrant further study.

[← Back to contents](#)

ORAL 62

THURSDAY 5 NOVEMBER 2026

Delirium severity after hip fracture: development and validation of a UK clinical prediction model

MS Luney, KTS Pattinson, M Franssen, IK Moppett, GS Collins, ML Costa

United Kingdom

Background: Studies to reduce delirium after hip fracture have been impeded by difficulty stratifying which participants in this frail multimorbid population may benefit from intervention, and even fewer studies target reducing delirium severity. There is no model to predict delirium severity after hip fracture, and all binary delirium models for hip fracture are based on non-European populations. Therefore, we developed a parsimonious model to predict delirium severity for UK hip fracture care.

Methods: The model was developed using prospectively collected data from the World Hip Trauma Evaluation (WHITE) platform trial. Eligible participants were people aged over 60 years with a hip fracture requiring surgery. Primary outcome was peak delirium severity within five days of hip fracture surgery as measured on the Memorial Delirium Assessment Scale (MDAS, range 0-30, scores ≥ 13 constitutes delirium). Ordinary least squares linear regression was used for model fit and validation performed with bootstrapping. Multiple imputation with predictive mean matching handled missingness.

Results: The cohort comprised 623 people, 60-100 years, 70% female, 70% ASA grade ≥ 3 , recruited January 2022 – July 2026. Delirium incidence was 22.5% (n=140), median (IQR [range]) delirium severity 3 (1-11 [0-30]) MDAS points. Final predictors were cognitive impairment, residential status, ASA, and preoperative haemoglobin. Proportion of variation explained by the model was good (optimism-corrected adjusted-R² = 65.8%).

Conclusions: Delirium severity in the UK hip fracture population can be predicted using a parsimonious model. Future work will be external validation in other European populations and then implementation in routine care.

[← Back to contents](#)

Standardizing EEG Acquisition in Delirium Research: Clinical and Technical Recommendations for Harmonization and Federated Analysis

Sophie Leroy, Julia van der A, Yorben Lodema, Jordan Wehrman, Arjen JC Slooter, Edwin van Dellen, Robert Sanders, Robert Fleischmann

Germany · Netherlands · Belgium · Australia

Background/Aims: Electroencephalography (EEG) provides a non-invasive and temporally precise measure of brain dysfunction in delirium and represents a promising tool for diagnosis, monitoring, and mechanistic research. However, heterogeneity in clinical characterization, EEG acquisition, preprocessing, analysis, and reporting limits reproducibility and multi-site collaboration. We aimed to develop practical recommendations for harmonizing EEG-based delirium research and enabling privacy-preserving multi-centre analyses, in alignment with the aims of the International Delirium Pathophysiology & Electrophysiology Network for Data sharing (iDEPEND).

Methods: We performed a narrative, practice-oriented synthesis of current evidence, methodological recommendations, recent delirium harmonization initiatives, and experience from multi-site EEG studies. Key sources of variability were evaluated across clinical phenotyping, recording paradigms, technical acquisition, preprocessing, data structuring, and collaborative analysis.

Results: We propose standardized clinical characterization including validated delirium assessment, arousal, cognitive status, relevant comorbidities, medications, and predisposing and precipitating factors. For EEG acquisition, recommendations address resting-state paradigms, electrode coverage, sampling frequency, impedance, referencing, metadata, and signal-quality documentation. Reproducible, version-controlled preprocessing and feature-extraction pipelines are recommended. We further outline a federated analysis framework in which raw EEG data remain locally stored while standardized pipelines are executed at participating sites and only derived, non-identifiable outputs are shared.

Conclusions: Harmonized clinical and technical standards can improve comparability, reproducibility, and scalability of delirium EEG research. Federated workflows provide a practical framework for multi-site collaboration while respecting local governance and data-protection requirements.

[← Back to contents](#)

Poor Physical Function, a Key Risk Factor for Development of Post-operative Delirium in Older Adults. A Systematic Review and Meta-analysis

Aline V Nixon, Joseph Taylor, Hannah M Moorey, Yessica Martinez-Serrato, Amanda Sardeli, Ali Mazaheri, Helen M. McGettrick, Thomas A. Jackson

United Kingdom · Austria

Postoperative Delirium (POD)¹ is associated with increased dementia risk and mortality². Pre-operative characterisation of POD patients is critical for surgical risk assessment, and targeted prehabilitation. Sarcopenia (loss of muscle mass and function) is common in older age. Acknowledgement of the bi-directional relationship between muscle and brain (the 'muscle-brain axis')³, presents loss of muscle driven 'physical function' as a realistic candidate risk factor for POD. Aims were to establish whether pre-operative physical function is associated with incidence of POD in older surgical patients. The review followed PRISMA⁴ guidelines and was prospectively registered on PROSPERO (CRD420251054986). 877 abstracts (final search February 2025) were screened by two independent reviewers, a third reviewer resolved conflicts. Extracted data were qualitatively and quantitatively synthesised. Effect sizes from meta-analyses of studies with comparable methodology and sufficient data were reported as standardised mean difference (SMD). Reduced pre-operative physical function was associated with POD in 103/117 included studies. Meta-analyses showed lower gait speed (SMD 0.29 (95% CI 0.55-0.02), $p=0.04$); weaker handgrip strength (SMD 7.20 (95% CI 5.64-8.75), $p<0.001$); and lower activities of daily living (ADL) scores on Barthel Index (SMD 0.65 (95% CI 0.34-0.96), $p<0.001$) and Katz ADL (SMD 0.84 (95% CI 0.19-1.49), $p<0.001$) measured pre-operatively were all significant risk factors for POD. Muscle driven poor physical function is a risk factor for POD in older adults and should be considered in pre-operative surgical risk assessment.

References: 1 Evered, L et al. "Recommendations for the Nomenclature of Cognitive Change Associated with Anaesthesia and Surgery-2018." *Anesthesiology* vol. 129,5 (2018): 872-879. doi:10.1097/ALN.0000000000002334 2 Yonas Tesfaye, Courtney R Davis, Melissa J Hull, Danielle Greaves, James du Preez, Sally Johns, Alice Bourke, Hannah A D Keage, Long-term clinical outcomes of delirium after hospital discharge: a systematic review and meta-analysis, *Age and Ageing*, Volume 54, Issue 7, July 2025, afaf188, <https://doi.org/10.1093/ageing/afaf188> 3 Arosio et al., Sarcopenia and Cognitive Decline in Older Adults: Targeting the Muscle-Brain Axis. *Nutrients*. 2023 Apr 12;15(8):1853. doi: 10.3390/nu15081853 4 Page, Matthew J et al. "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews." *BMJ (Clinical research ed.)* vol. 372 n71. 29 Mar. 2021, doi:10.1136/bmj.n71

← [Back to contents](#)

ORAL 95

THURSDAY 5 NOVEMBER 2026

PharmkGPT, a biomedical knowledge graph to support evidence-grounded question answering and literature exploration across delirium and AD

Zhangming Niu, Li Fu, Xianglu Xiao, Wenfan Wu, Shenglong Deng, Alice Ai, Xiaofeng Wang, Xinyue Zhang, LeKai Deng, Nan Yang, Yingying Fang, Linggang Kong, Leiv Otto Watne, David C. Rubinsztein, Evandro Fei Fang, Guang Yang

China · United Kingdom · Norway

Background/Aims: Delirium and Alzheimer's disease (AD) share overlapping clinical features and biological pathways, but relevant evidence is distributed across a rapidly expanding literature. We developed PharmkGPT, a biomedical knowledge graph (KG)-enhanced retrieval-augmented generation (RAG) framework, to support evidence-grounded question answering and literature exploration across delirium and AD.

Methods: PharmkGPT constructed disease-focused KGs from 284,698 PubMed abstracts (42,155 delirium; 242,543 AD), comprising 61,356 entities and 1,424,760 relationships. The system combines biomedical entity normalization, graph-guided retrieval, filtering and reranking before large-language-model answer generation. Performance was evaluated using 1,045 expert-reviewed questions spanning genetic, cellular, pathway, metabolic and clinical domains, together with external PubMedQA and blinded free-form evaluations.

Results: PharmkGPT achieved 95.62% mean accuracy on the internal benchmark, compared with 88.38% for the strongest evaluated RAG baseline, HippoRAG2, an absolute improvement of 7.23 percentage points. Exact-source Recall@10 was 97.13%. On PubMedQA, PharmkGPT-retrieved evidence increased same-generator accuracy from 14.4% in closed-book answering to 54.0%. In blinded free-form evaluation, Full KG improved mean correctness scores from 1.570 to 1.715/2. The framework also organized direct and indirect literature evidence around proteomics-derived candidate genes relevant to delirium and AD.

Conclusions: PharmkGPT improves evidence-grounded biomedical question answering and supports structured exploration of delirium-related literature. It may provide a useful research tool for synthesizing cross-disease mechanisms and prioritizing literature-supported hypotheses, while requiring further validation before any clinical decision-making use.

[← Back to contents](#)

ORAL 2

THURSDAY 5 NOVEMBER 2026

Delirium as an Early Mortality Signal in Older Inpatients: A Three-Year Comparative Survival Study

Jian-An Su

Taiwan

Background: Delirium, dementia, and depression are common psychiatric conditions among older medical inpatients and are associated with increased mortality. This study aimed to compare 1-, 2-, and 3-year mortality among older inpatients with these diagnoses referred to a psychiatry consultation-liaison service, and to identify factors associated with mortality.

Methods: We analyzed consecutive inpatients aged ≥ 65 years who were referred for psychiatric consultation at a general hospital over a five-year period. Among 614 older referrals, 172 were diagnosed with delirium, 92 with dementia, and 165 with depression. Mortality at 1, 2, and 3 years after consultation was compared across diagnostic groups using log-rank tests. Cox proportional hazards regression was used to identify factors associated with mortality.

Results: One-year mortality was significantly higher in patients with delirium than in those with depression. However, no significant between-group differences were observed in 2-year or 3-year mortality. Higher mortality among male patients was observed only in the depression group. In multivariable analyses, male sex, older age, and longer hospital stay were associated with increased mortality.

Conclusions: Among older inpatients referred for psychiatric consultation, delirium was associated with an early mortality signal, particularly within the first year after referral. These findings highlight the importance of timely delirium recognition, careful clinical follow-up, and early intervention for older patients at increased risk of mortality.

[← Back to contents](#)

ORAL 4

THURSDAY 5 NOVEMBER 2026

EEG Spectrogram- and BIS-Guided Anaesthesia Improves Emergence and Early Postoperative Cognitive Function: A Randomized Controlled Trial

Anders Aasheim, Leiv Arne Rosseland, Lars Andreas Karbø, Cathrine Brunborg, Luis Romundstad
Norway

Background/Aims: This study evaluated whether EEG with spectrograms and Bispectral Index guided anaesthesia could reduce anaesthetic drug consumption, shorten wake-up time, and improve early postoperative cognitive function.

Methods: 100 adult patients scheduled for anterior cervical discectomy and fusion, were randomised to either EEG spectrogram/BIS-guided anaesthesia (intervention group) or standard clinical monitoring (control group). Anaesthetic dosing in the intervention group was guided by raw EEG, EEG spectrograms, and Bispectral Index (BIS), while the control group received standard care. The primary outcome was time to wake-up after anaesthesia. Secondary outcomes included postoperative cognitive function assessed 3 and 24 hours after awakening using the Cambridge Neuropsychological Test Automated Battery (CANTAB).

Results: Wake-up time was shorter in the intervention group (median 330s vs. 468s; Mann-Whitney U test, $p=0.002$). Total propofol consumption (mg/kg/h) was lower in the intervention group than in the control group (median 4.94 vs 6.28; range 1.37–7.98 vs 4.31–8.79; Mann-Whitney U, $p<0.001$). Postoperative cognitive testing revealed significant differences between the groups, with the intervention group demonstrating better performance on CANTAB assessments.

Conclusions: EEG spectrogram and BIS-guided depth-of-anaesthesia monitoring reduced anaesthetic drug consumption, facilitated faster emergence from anaesthesia, and improved early postoperative cognitive performance. These findings support the use of advanced EEG-based monitoring to individualise anaesthetic management and potentially reduce cognitive side effects following surgery.

Trial registration: ClinicalTrials.gov: NCT04529304

Ethics: Approved by REK HSØ (approval number 32173).

[← Back to contents](#)

ORAL 9

THURSDAY 5 NOVEMBER 2026

"My sister often tried to talk to the doctors about the delirium, but nothing came of it" - Care experiences and coping behaviour of relatives of older people with delirium

Eva Trompetter, Angela Nikelski, Marleen Schönbeck, Annette Nauerth, Stefan Kreisel

Germany

Background / Aims: Experiencing delirium is very stressful for relatives of older people. To date, little is known about the experiences of relatives in caring for the affected family members and how they cope with the situation. The project aimed to shed light on these two aspects from the perspective of relatives and derive recommendations for care.

Methods: A qualitative research design was chosen for the study. Relatives of older people with delirium were interviewed using an interview guideline. The data material was analysed using content-structuring content analysis with inductive categorisation.

Results: Twelve relatives took part. They are exposed to a high level of emotional stress and feel overwhelmed when dealing with people suffering from delirium. Their experiences in the health care system are varied. They rarely feel that the care provided to those affected fulfils their needs. Relatives report a lack of information and education on the part of professionals. They often seek support in their private environment. Obtaining information and exchanging information with acquaintances as well as emotional support within their own family are key coping strategies. Assessing the quality of information on delirium is a challenge for relatives.

Conclusions: Delirium poses major challenges for relatives of older people. There is a need for action regarding needs-based care for those affected and adequate integration, information and education for relatives. Comprehensible and quality-assured information material with specific recommendations for action is needed.

[← Back to contents](#)

ORAL 45

THURSDAY 5 NOVEMBER 2026

PREDICT (Prevention and Early Delirium Identification Carer Toolkit)

Christina Aggar, Carla Sunner, Alison Craswell, Kasia Bail, Golam Sorwar, Mark Hughes, Brenton Shanahan, James R. Baker, Jennene Greenhill

Australia

Background/Aims: Carers play a vital role in recognizing behavioral and cognitive changes that may signal delirium in older adults. PREDICT (Prevention and Early Delirium Identification Carer Toolkit) is a co-designed model that includes a digital resource to support carer inclusion in the prevention and early identification of delirium. This study explored carers and healthcare professionals' (HCP) experience of PREDICT and its role in strengthening care partnerships.

Methods: A multiphase, multimethod study was conducted. Phase 1: an eDelphi study validated the co-designed PREDICT website and App. Phase 2: a pilot feasibility study explored delirium incidence, carer delirium knowledge, and HCPs' perceptions of carer involvement in delirium prevention and management. Phase 3: a multi-institutional SW-CRCT across Australian hospital settings. Findings from Phases 1 and 2 are presented.

Results: Ongoing end-user engagement is essential to enhance the usability, credibility, adoption and impact of PREDICT. Carer delirium knowledge increased significantly following use of PREDICT ($p < .001$; 95% CI 2.07-4.73). Carers reported feeling well placed to recognize early signs of delirium but frequently described exclusion from care processes and limited access to information and support. HCPs recognized the value of carers in detecting early changes but reported varying confidence in partnering with carers for delirium prevention and management. Although not statistically significant, delirium incidence decreased, supporting progression to a larger trial.

Conclusions: PREDICT shows promise in strengthening carer-HCP partnerships through accessible, evidence-based delirium resources. Supporting carers to actively partner in delirium prevention and identification may improve care experiences and outcomes for older adults during hospitalization.

[← Back to contents](#)

Perioperative Music Interventions for Prevention of Postoperative Delirium in Adult Patients: A Systematic Review and Meta-analysis

Sining Zeng, Kelu Yang, Elke Detroyer, Steffen Rex, Koen Milisen

Belgium

Background/Aims: Postoperative delirium (POD) is a common and serious complication following surgery in adults, associated with increased morbidity, prolonged hospitalization, and higher healthcare costs. However, whether music can reduce the incidence of POD remains uncertain. We therefore evaluated the effects of perioperative music intervention on POD and secondary postoperative outcomes.

Methods: Nine databases and trial registries were searched from inception to 27 July 2026, supplemented by citation searching. Studies comparing perioperative music interventions with routine or sham care in adult surgical patients and assessing POD using validated tools were eligible. Two reviewers independently performed study selection, data extraction, and risk-of-bias assessment. Primary meta-analyses included RCTs, with non-randomised studies included in sensitivity analyses. Certainty of evidence was assessed using GRADE.

Results: Six studies (five RCTs and one quasi-experimental study; 1124 participants) were included from 6337 records. Five RCTs (1050 participants) contributed to the primary POD meta-analysis. Perioperative music intervention was associated with lower POD risk (RR 0.53, 95% CI 0.32-0.89; $P=0.027$; $I^2=0\%$), with similar findings after including a quasi-experimental study. However, no differences were found in hospital length of stay (MD 1.18 days, 95% CI -2.32 to 4.69), postoperative pain (MD -0.57, 95% CI -1.86 to 0.72), mortality (RR 1.33, 95% CI 0.06-30.14), or postoperative complications (RR 0.90, 95% CI 0.11-7.36). Certainty was low for POD incidence and hospital length of stay, and very low for other outcomes.

Conclusions: Perioperative music interventions may reduce POD incidence, but low-certainty evidence warrants cautious interpretation. Larger, high-quality trials are needed to optimise protocols.

[← Back to contents](#)

ORAL 65

THURSDAY 5 NOVEMBER 2026

Delirium on admission and subsequent dementia subtype: a population-based cohort study of older adults

Rose S Penfold, Tim Wilkinson, Alasdair MJ MacLulich

United Kingdom

Background/Aims: Delirium is strongly associated with subsequent dementia, but whether associations differ by recorded dementia subtype remains uncertain. We examined associations between delirium on hospital admission and subsequent all-cause and subtype-specific dementia diagnoses.

Methods: We conducted a population-based cohort study using linked routine healthcare data from NHS Lothian. Adults aged ≥ 65 years without pre-existing dementia admitted as an emergency between 1 April 2017 and 1 April 2020 were included, with follow-up to October 2023. Delirium on admission was assessed using the 4AT. Incident dementia was identified from GP Read v2 and hospital ICD-10 codes and classified by first recorded subtype as Alzheimer's, vascular, or unspecified/other dementia. Cause-specific Cox models estimated associations with incident dementia, overall and by subtype, adjusted for age, sex, deprivation, and frailty.

Results: Among 23,558 participants, 4,135 (17.6%) had delirium. During follow-up, 2,572 (10.9%) were diagnosed with dementia: 741/4,135 (17.9%) of those with delirium and 1,831/19,423 (9.4%) without. Among incident diagnoses, vascular (30.6% vs 26.2%) and unspecified/other dementia (39.5% vs 34.2%) were more frequent following delirium, while Alzheimer's was less frequent (29.9% vs 39.6%). Delirium was associated with all-cause dementia (adjusted Hazard Ratio 2.94, 95% Confidence Interval 2.69–3.21), vascular dementia (3.30, 2.75–3.95), unspecified/other dementia (3.17, 2.70–3.71), and Alzheimer's disease (2.24, 1.88–2.66).

Conclusions: Delirium was associated with subsequent diagnosis of all recorded dementia subtypes, with the largest associations for vascular and unspecified/other dementia. These findings support further investigation of vascular and other non-Alzheimer's disease pathways following delirium, while recognising uncertainty inherent in routinely recorded dementia subtypes.

[← Back to contents](#)

ORAL 89

THURSDAY 5 NOVEMBER 2026

Delirium occurrence across dementia subtypes in older hospital patients: ORCHARD-EPR cross-sectional study

Sanchit Turaga, Dimitrios Gratsias, Sarah T Pendlebury

United Kingdom

Background/Aims: In the absence of previous studies, we compared delirium occurrence across dementia subtypes in a large unselected sample of older hospital in-patients.

Methods: We included individual electronic hospital record data from consecutive patients aged >70 years with first admission to Oxford University Hospitals (2017-19) in ORCHARD-EPR. All-cause dementia/dementia subtype were ascertained from ICD-10 codes, and delirium from mandatory on-admission cognitive screening informed by a holistic assessment and CAM supplemented by ICD-10 coding. Associations between dementia and delirium were analysed using logistic regression adjusted for age and sex, then additionally for modified (dementia/delirium excluded) Charlson Comorbidity Index (mCCI) and Hospital Frailty Risk Score (mHFRS).

Results: Delirium occurred in 1,878/3,779 (49.7%) admissions with dementia vs 3,335/18,234 (18.3%) without dementia (adjOR=3.79, 95%CI 3.51– 4.08). Among 3,753 admissions with the five most common dementia subtypes, delirium was identified in 58.2% with Alzheimer's disease, 55.2% with vascular dementia, 50.5% with mixed dementia, 47.2% with unspecified dementia and 38.9% with Lewy body dementia/Parkinson's disease dementia (LBD/PDD, $p<0.001$). Compared with unspecified dementia, age/sex-adjusted odds of delirium were higher in Alzheimer's disease (adjOR=1.58, 1.34–1.86) and vascular dementia (adjOR=1.42, 1.16–1.74), lower in LBD/PDD (adjOR=0.79, 0.65–0.95), and similar in mixed dementia (adjOR=1.22, 0.80–1.85). Differences in delirium occurrence across dementia subtypes remained significant after additional adjustment for mCCI and mHFRS ($p<0.001$).

Conclusions: Delirium was common in hospital admissions with dementia but varied by dementia subtype. These differences persisted after adjustment for age, sex, comorbidity and frailty, suggesting possible differences in underlying brain vulnerability.

[← Back to contents](#)