systemic and microglia inflammation as described in ME/CFS. The clinical manifestation in the present case was worsening in the symptoms of the ME/CFS. The patient was already on Spironolactone targeting the increase on number of macrophages ACE2 receptors as immune modulation.

An anti-inflammatory synergy between Colchicine and Spironolactone is currently the focus of research in atherosclerosis. Colchicine has a direct effect on phagocytes leading to inflammasome inhibition and impaired production of IL-1 beta.

**Conclusion:** The Colchicine had a beneficial effect in recovering this patient from an exacerbation of his ME/CFS induced by SARS-CoV-2 vaccination.

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## BEST POSTER PRIZE IN ADULT MEDICINE – TRAINEE

### MONASH STATUS EPILEPTICUS STUDY(MOSES): GLASGOW COMA SCORE, AGE AND INPATIENT ONSET, NOT TIME TO TREATMENT, PREDICT IN-HOSPITAL MORTALITY AND MORBIDITY

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**Background:** Status epilepticus (SE) is a medical emergency with high mortality and morbidity. There is ongoing controversy over the predictors of mortality and morbidity[1,2]. As a result, many of the mortality prediction tools that have been introduced in status epilepticus have failed to gain widespread acceptance[1,2,3]. Furthermore, there is little literature on the predictors of morbidity in status epilepticus. We aimed to determine the predictors of in-hospital mortality and morbidity in an Australian setting.

**Aim:** To identify predictors of mortality and morbidity in status epilepticus in an Australian setting.

**Methods:** We retrospectively reviewed medical records between January 2020 and December 2020 to identify patients diagnosed with status epilepticus. Data regarding in-hospital mortality, modified Rankin Score (mRS), medical history, management and outcomes were collected from the electronic medical records.

**Results:** We identified 157 patients meeting the inclusion criteria. In-hospital mortality was 20.4% (32/157) and 40.8%(64/157) had an increase in their mRS. Only 67(42.7%) of patients received first-line therapy with benzodiazepines, and of these only 35 were given within 20 minutes of first contact with medical staff.

After adjusting for confounders, age, presenting Glasgow Coma Score (GCS) and inpatient onset of SE were associated with in-hospital mortality. For every 1 year increase in age, the odds of in-hospital mortality were increased by 1.05 (95%CI 1.01–1.08). For every 1 point decrease in GCS, the odds of in-hospital mortality increased by 1.13 (95%CI 1.01–1.25). Inpatient onset had greater odds of in-hospital mortality (Odds ratio (OR) of 4.42, 95%CI 1.71-11.49). Similarly, age, presenting GCS, inpatient onset of SE were independent predictors of increase in the modified Rankin Score. Time to first, second and third-line therapy were not found to be predictors of in-hospital mortality.

**Conclusion:** This is one of the largest cohorts of status epilepticus in an Australian setting. Status epilepticus was associated with a high rate of mortality and increased morbidity. Less than one-quarter of patients had timely provision of first-line SE treatment. Time to treatment was not associated with short-term mortality in status epilepticus; instead, age, initial GCS and an inpatient onset of SE5 were the strongest predictors of short-term mortality. These variables also predicted increase in morbidity following SE.

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## BEST POSTER PRIZE IN ADULT MEDICINE – FELLOW

### COVID-19 VACCINE RESPONSE IN PATIENTS ON CANCER THERAPY - EVIDENCE FROM AUSTRALIAN DATA

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**Background:** Cancer patients have increased risk of serious illness or death from COVID-19. Vaccination protects against severe disease, but cancer patients were excluded from COVID-19 vaccine registration trials. Different cancer therapies may have varying impact on immune response. We assessed seroconversion post COVID-19 vaccination among cancer patients in a setting of high vaccine uptake with minimal community transmission.

**Methods:** Solid tumour patients and healthy controls from Canberra who received COVID-19 vaccination between 3/2021 – 1/2022 were included. Patients received active cancer therapy within two weeks of COVID-19 vaccination. Blood was collected at baseline, pre 2nd vaccine dose, then one, three and six months post 2nd dose. SARS-CoV-2 anti-spike receptor binding domain and anti-nucleocapsid immunoglobulin G(IgG) levels were measured by enzyme-linked immunosorbent assay and calibrated with the National Institutes of Health serology standard. Primary endpoint was seroconversion three months post 2nd vaccine dose, or within two weeks prior to 3rd vaccine dose in patients.

**Results:** There were 96 solid tumour patients (76 evaluable for the primary endpoint) and 19 healthy controls. Median age 62 years with 70 (61%) being female. COVID-19 vaccines included AZD1222 (65%) and BNT162b2 (35%). Majority (69%) of patients had metastatic cancer. Baseline lymphopenia (<1.2x10^9/L) was seen in 41% of patients. Median Charlson comorbidity index score was 7 (2 - 12). Among primary endpoint evaluable patients, 47 (62%) patients received chemotherapy, alone or in combination with other cancer therapy; 8 (11%) received immunotherapy alone; 21 (28%) had targeted therapy.

Seroconversion at three months post vaccination occurred in 86% of cancer patients and 100% of controls (p=0.11). Mean anti-spike antibody titre was 88 binding antibody units (BAU)/ml in cancer patients and 179 BAU/ml in controls, p=0.10. No subjects had positive anti-nucleocapsid IgG confirming absence of past COVID-19 infection. Seroconversion occurred in patients who received chemotherapy alone or in combination (83%), immunotherapy (75%) and targeted therapy (95%; p=0.2). Mean anti-spike IgG levels were 77, 63 and 137 BAU/mL with chemotherapy, immunotherapy and targeted therapy respectively. Age, metastatic disease and lymphocyte count were not associated with anti-spike antibody level. Among cancer patients, 40% and 95% were seropositive after 1 and 2 vaccine doses respectively. A decline in anti-spike antibody titre was seen from three months post the 2nd vaccine dose. Cancer patients had an increase in anti-spike post 3rd vaccine dose, while levels declined in controls (pre booster), at 6 months post the 2nd vaccine dose.

**Conclusions:** Cancer patients achieved comparable seroconversion rates three months post vaccination compared with healthy controls. Although the anti-spike antibody titre was numerically lower among cancer patients than controls, the difference was not statistically significant. Recent cancer therapy did not appear to significantly affect vaccine response, however, the anti-spike antibody level was numerically lower

among recipients of chemotherapy compared with targeted therapy. Patients on immunotherapy had the lowest antibody level, although the small sample size limits definitive conclusion in this subgroup. Reassuringly, a rise in anti-spike antibody occurred after the 3rd primary dose in cancer patients, surpassing the level among controls prior to receipt of booster vaccination.

## THE ROLE OF A STRUCTURED NONADMISSION-BASED TRANSIENT ISCHEMIC ATTACK PROTOCOL IN REDUCING LENGTH OF STAY

***Dr Julia Lim*[1]**, *Dr Ian Goh*[1], *Dr Kiran Iyer*[2], *Ms Heather Smith*[1], *Associate Professor Benjamin Clissold*[1]

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**Objectives:** Admission to stroke units following transient ischemic attack (TIA) increases hospital length of stay (LOS) resulting in reduced bed availability. Studies have demonstrated clinical safety for TIA to be managed in an Emergency Department Observational Unit (EDOU).[1-3] At our institution, all TIA presentations were previously admitted to the Stroke Unit (SU). We aimed to compare 90-day stroke risk of admitted TIA patients in SU versus EDOU.

**Methods:** Retrospective analysis was performed on all admitted TIA patients from January 2019 to December 2020. Patients were stratified into high-risk TIA if they had new atrial fibrillation (AF), pre-existing AF not anticoagulated or symptomatic carotid stenosis >50%. LOS was calculated from time of presentation to time of discharge. 90-day stroke risk was also determined.

**Results:** 377 patients were identified; 126 had admissions into the SU and 251 into the EDOU. High-risk TIA was seen at 18.3% (23/126) in the SU versus 12.3% (31/251) in the EDOU. Average LOS in the SU was 177.9 hours vs 19.6 hours in the EDOU. LOS in the SU was largely accounted for by inpatient endarterectomy (median 93 hours) and inpatient magnetic resonance imaging (median 29.6 hours) whilst LOS in the EDOU was contributed to by carotid ultrasonography (median 13.3 hours). 90-day stroke risk was at 2% (5/251) for the EDOU which is comparable to structured nonadmission-based TIA protocols as shown in previous international studies.

**Conclusion:** 90-day stroke risk in TIA patients managed in the EDOU was not only low but had a significantly shorter LOS. As such, our TIA guideline has been revised to utilise EDOU for TIA management.

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## BEST POSTER PRIZE IN ADULT MEDICINE – TRAINEE

## EVALUATION OF TRANSIENT ISCHEMIC ATTACK RISK STRATIFICATION - OMITTING ABCD2 SCORE

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**Objectives:** In a national survey, 64% of Australian hospitals conveyed a policy to admit all transient ischemic attack (TIA) with ABCD2 >4. This raise concerns as ABCD2 does not represent the vascular mechanism of TIA. It fails to consider carotid artery atherosclerosis or atrial fibrillation (AF), both contributing greatly to recurrent stroke risk. A 'low-risk' TIA as defined by ABCD2 <4, could in fact represent a high-risk TIA. We aim to evaluate if ABCD2 score is a suitable tool for TIA risk stratification.

**Methods:** Retrospective analysis was performed on all patients presenting to Barwon Health's Emergency Department with TIA from January 2019 to December 2020. ABCD2 score was calculated at baseline. Expected stroke risk and actual risk were compared at 90 days.

**Results:** 377 patients were identified; 217 patients had ABCD2 score of ≤4 whilst 160 patients had ABCD2 >4. New AF was seen at similar rates in both groups at 4%, 10/217 patients with ABCD2 ≤4 versus 7/160 patients with ABCD2 >4. Known AF who were not anticoagulated was seen at 3.2% (7/217) with ABCD2 ≤4 versus 2.5% (4/160) with ABCD2 >4. New symptomatic high grade carotid stenosis was seen at 5.5% (12/217) with ABCD2 ≤4 versus 8.7% (14/160) with ABCD2 >4. 90-day stroke risk was higher at 6.9% (11/160) for ABCD2 >4 than that of 2.8% (6/217) for ABCD ≤4 however was still lower than the expected risk of 9.8%.

**Conclusion:** Although the ABCD2 score takes into consideration vascular risk factors, risk stratification relying solely on it can underestimate stroke risk by neglecting vascular mechanisms such as AF and high-grade carotid stenosis. As such, our institution's TIA guideline was revised to omit ABCD2 scoring.

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## ETHICAL CONSIDERATIONS IN PATIENT OPTIMIZATION DURING TRANSITION TO DIALYSIS COMMENCEMENT

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**Background:** A core tenet of Australian health policy is reduction in health inequity between Aboriginal and Torres Strait Islander (hereafter referred to as Indigenous) and non-Indigenous Australians (1). The stark contrast in health outcomes is entrenched in colonization, persisting marginalisation and disparate social determinants of health (1-3). These concepts are illustrated clearly in the Northern Territory (NT); 50% of the total population (228 822) live in remote or very remote areas. 27% are Indigenous, almost 10% of the total Indigenous population of Australia (1, 4). 70% of the NT Indigenous population live remotely, in poor areas (1). From a renal perspective, the NT has the highest prevalence of chronic kidney disease (CKD), with an estimated 85% of those with end stage kidney disease being Indigenous (5). Dialysis commencement has traditionally meant displacement from home and community life (5). As such, management is being focused on holistic care closer to home (4).

Our case is of a sixty-two-year-old Torres Strait Islander patient from a remote community in the NT whose successful transition from CKD to dialysis commencement was threatened by chronic back pain caused by facet joint arthropathy. She was an active and independently functioning schoolteacher who wanted to continue living and working in her community post dialysis commencement. The back pain was impacting her function, with the concern that this would be made worse by the intra-abdominal pressure caused by peritoneal dialysis, a modality which can be practiced in remote communities after a period of education in a main centre.

**Aim:** Seamless transition to peritoneal dialysis. Achieving health equity by patient advocacy to access best evidence-based care. To explore the ethical underpinnings of this undertaking.

**Methods:** Multidisciplinary team patient assessment and identification of all management strategies to ensure optimum patient-centred care. Treatment availability within the health service was reviewed. Completion of literature review in conjunction with sub-specialist consultation. This identified radiofrequency ablation as best treatment modality, with equal peri-procedure risks to other treatments, but far superior analgesic effects. The treatment was only offered privately. After further team discussion, it was felt this procedure should be made available to this patient at no individual cost to her for the best health outcome. The ethical principles of this decision were reviewed with an external ethicist. A business report was submitted for