Figure 1: Kaplan–Meier curve shows that the early stoppage of midazolam secondary to the failure of control of refractory status epilepticus or infusion termination due to severe hypotension ($P = 0.005$)

days, $P = 0.006$), duration of Intensive Care Unit stay (11 [6–13.5] vs. 15 [14.25–23] days, $P = 0.006$) and duration of hospital stay (11 [7–13.5] vs. 22 [15.75–43.25] days, $P = 0.006$). The difference of time taken for seizure control between the groups was trending toward significance (4 [3–4.5] vs. 5 [4–12] h, $P = 0.091$). Survival curve analysis showed a significant difference between the groups for stoppage of infusions due to either hypotension or inadequate seizure control, with midazolam recording earlier infusion discontinuation (Breslow's test, $P = 0.005$) [Figure 1]. Termination of infusions due to successful seizure control did not show any significant difference ($P = 0.609$). **Conclusion:** Despite the limitation of small sample size, outcomes seem to be better with propofol infusion rather than midazolam. Future studies with larger sample sizes are likely to validate this finding.

ISNACC-S-19

Bispectral index artefact compendium: Mechanisms explored

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Introduction: Bispectral index (BIS), the widely accepted monitoring modality for depth of hypnosis under anaesthesia, has had multiple versions improving upon the original algorithm. Artefact recognition and removal are important aspects of any neuromonitoring modality. This article aims to review the various artefacts recognised during BIS monitoring along with additional unpublished observations and mechanisms for the same. **Methodology:** PubMed was searched using

keywords 'Bispectral index AND (Artifact OR Artefact)' and relevant articles were compiled. Cross referencing from these articles, a list of artefacts concerning BIS were prepared. Wherever mechanisms of artefact processing were not elucidated satisfactorily, a patent review under assignee 'Aspect Medical Systems' was done to obtain additional information. Additional unpublished artefacts were also listed and researched similarly. **Results:** The list of artefacts recognised was either physiological (electrocardiographic, frontalis electromyography [EMG], seizure) or external (electrical - facial nerve stimulator; cautery - bipolar/monopolar, electrical line interference, CUSA, coil detacher artefact, electromagnetic shaver; mechanical - forced air warmer). **Discussion:** Almost all artefacts presented as increase in BIS EMG with or without signal quality index deterioration with or without BIS fluctuation. High-amplitude signal contaminations were usually recognised as artefacts by the BIS monitor while low-amplitude ones were not. Signal contamination occurred even when frequency range of artefact signal was out of bandwidth allowed by BIS filters (may be attributed to Gibbs phenomenon). The exact mechanism behind each artefact is explained and when possible, a method to ameliorate the undesirable signal is suggested.

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Magnetic resonance imaging predictors of intraoperative bleeding in intracranial neurosurgical tumour surgery

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Introduction: Intraoperative blood loss during intracranial tumour surgery is a common and serious complication and predicting the same is challenging task for the anaesthesiologist. Although radiological scans can be used to qualitatively predict intraoperative blood loss, no current literature explores it systematically. This study is designed with the purpose of elucidating the magnetic resonance imaging (MRI) characteristics predictive of intraoperative bleeding. **Methodology:** Retrospective Observational Single centre study. E-hospital for haemoglobin (Hb) (pre-operative and post-operative) values and InstaRIS PACS MRIs of intracranial tumour surgery patients was collected. Putative predictors of blood loss from MRIs were: (1) Size of tumour, (2) proximity to venous sinuses, (3) proximity to major intracranial arteries and first-degree branches, (4) pattern of contrast enhancement, (5) contrast enhancement ratio, (6) suspected histopathology of tumour, (7) percentage of areas of hypointensity (necrosis) within tumour, (8) average pixel intensity of susceptibility weighted