

placebo and 370 in an inhaler placebo. Time to sustained recovery and time to resolution of individual symptoms are compared between groups using Kaplan-Meier curves and unadjusted log-rank tests. A step-down procedure is applied to control the false discovery rate. RESULTS/ANTICIPATED RESULTS: Control participants assigned to tablet placebos had shorter time to sustained recovery (adjusted hazard ratio (HR) 1.34 (95% CI 1.11, 1.62)). When examining each of the eleven individually reported symptoms on study Day 14, nasal symptoms (adjusted odds ratio (OR) 0.44 (0.27, 0.72),  $p < 0.01$ ), dyspnea (OR 0.44 (0.22, 0.87),  $p = 0.02$ ), and cough (OR 0.54 (0.35, 0.83),  $p < 0.01$ ) were identified as symptoms in which the tablet-placebo group performed notably better than those who received inhaler-placebos. In the follow-up, longitudinal analysis, we anticipate similar results. DISCUSSION/SIGNIFICANCE: Among ACTIV-6 control participants, those receiving a tablet placebo had a significantly shorter time to sustained recovery than those receiving an inhaler placebo. Platform trials using shared controls should consider efficiency in the context of the additional variability when sharing controls with a different route of administration.

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### Prognostication in super refractory status epilepticus: Preliminary results from an international survey study

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OBJECTIVES/GOALS: Super refractory status epilepticus (SRSE) is associated with high mortality, often due to withdrawal of life sustaining therapy (WLST) based on perceived poor neurological prognosis. Factors influencing decision making are underreported and poorly understood. We surveyed clinicians who treat SRSE to identify factors that influence WLST. METHODS/STUDY POPULATION: Health care providers (HCP), including physicians, pharmacists, and advanced practice providers, who treat SRSE answered a 51-question survey on respondent demographics, institutional characteristics and SRSE management that was distributed through professional societies. Respondents described approaches to prognostication and rated the importance of clinical factors in the management of two hypothetical clinical cases followed by their prediction of recovery potential for the same two cases. Neurointensivists and other HCP responses were compared using descriptive statistics to differentiate group characteristics; a  $p$ -value  $< 0.05$  was considered significant. Logistical regression models were employed to identify associations between clinician specific factors and prognostication. RESULTS/ANTICIPATED RESULTS: One-hundred and sixty-four respondents were included in the analysis. Compared to other HCPs (neurologists, epileptologists, neurosurgeons, other intensivists;  $n=122$ , 74%), neurointensivists ( $n=42$ , 26%) [Odds ratio (OR) 0.3, 95% confidence interval (CI) 0.14-0.68],  $p=.004$ ] were less likely to use prognostic severity scores and were less likely to prognosticate likelihood of good functional recovery (OR: 0.28 (95% CI: 0.13-0.62),  $p=.002$ ) compared to non-neurointensivist HCPs, controlling for potential confounders including professional degree, years of experience, country of practice, and annual volume of SRSE cases. There was, however, significant overlap in factors deemed necessary for determining futility in care escalation. DISCUSSION/SIGNIFICANCE: Neurointensivists value similar clinical factors to other HCPs when evaluating medical futility in SRSE but are less likely to predict definitive outcomes.

Pending final survey results, future studies aimed at understanding why neurointensivists may be less likely to decisively prognosticate (i.e. avoiding nihilism) in SRSE may be warranted.

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### Characterization of Xylazine-Related Overdose Deaths in Maryland (2020-2022)\*

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OBJECTIVES/GOALS: Xylazine is a strong sedative and fentanyl contaminant which has been increasingly detected in drug overdose deaths in Maryland. The goal of this project is to analyze the demographic characteristics and time trends of xylazine-related overdose deaths (XROD) in Maryland from 2020-2022. METHODS/STUDY POPULATION: This cross-sectional study utilizes the Maryland medical examiner's autopsy reports from 2020-2022. These reports include every death in the state that was investigated by the medical examiner, with demographic and toxicological data showing the presence of various substances at the time of death. An XROD was defined as someone who died from drug overdose and had a positive serum xylazine test at time of death. Demographic characteristics and time trends for XROD were analyzed. Multivariable logistic regression modeled associations between demographic variables and the presence of other substances with XROD. RESULTS/ANTICIPATED RESULTS: A total of 1,509 people died from XROD, of which the mean age was 44.4 years and 73.3% were male. The majority were White (57.6%), 39.2% were Black, and 3.2% identified as another race. Over 99.9% of individuals who died from XROD tested positive for fentanyl. XROD peaked in January 2021 and has been trending downwards since then. Adjusted multivariable logistic regression revealed that White individuals had greater odds of XROD relative to Black individuals (OR=1.22, 95% CI=1.07-1.37), and adults aged 30-45 years had higher odds of XROD relative to adults over age 60 (OR=1.26, 95%CI=1.04-1.54). Individuals who used fentanyl had higher odds of XROD relative to those who did not use fentanyl (OR=327.4, 95%CI=46.0-2331.3). DISCUSSION/SIGNIFICANCE: This study demonstrates that middle age, White race, and fentanyl use are associated with xylazine-related overdose deaths in Maryland. Efforts to reduce xylazine-related mortality in the state should address the unique social and geographic factors that influence substance use in this population.

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### Discrepancies in Medication Usage and Lifestyle Modification Referrals in Metabolic Syndrome is Dependent on how the Syndrome is Coded: A TriNetX Study

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OBJECTIVES/GOALS: ICD-10 coding inconsistencies hinder timely recognition and treatment of metabolic syndrome (MetS), posing a significant risk for cardiometabolic disease progression. This study employed a digital phenotype for MetS and compared odds for medication and lifestyle intervention compared to those coded for MetS. METHODS/STUDY POPULATION: MetS is a cluster of cardiometabolic risk factors that increase risk for numerous adverse clinical outcomes. Patients with MetS were identified through electronic