

learning disability (451/1,828 [24.7%]), and neurological (357/1,266 [28.2%]). At baseline, patients reported previous use of mean 5.4/2.1 historical/concomitant antiepileptic medications (N=1,716/N=931). Patients were treated with BRV for a median of 343.0 days (Q1-Q3: 147.0–410.9 days; N=1,894). Seizure-freedom was reported in 241/886 (27.2%), 242/1,020 (23.7%), and 191/804 (23.8%) patients at 3/6/12 months. TEAEs (since prior visit) were reported in 464/1,733 (26.8%), 230/1,537 (15.0%), and 128/1,346 (9.5%) patients at 3/6/12 months. Most frequently reported TEAEs ( $\geq 15\%$  patients with specified TEAEs) were fatigue (87/433 [20.1%])/dizziness (72/433 [16.6%])/irritability (72/433 [16.6%]) at 3 months, somnolence (36/176 [20.5%])/irritability (31/176 [17.6%]) at 6 months, and somnolence (28/108 [25.9%]) at 12 months. 609/1,904 (32.0%) patients discontinued BRV, mostly due to insufficient effectiveness and tolerability.

**Conclusions** In this interim pooled analysis in a large real-world setting, BRV appears both effective and well tolerated in this highly drug-resistant cohort. Limitations: mixed populations, variables, and time-points across centers present data harmonization challenges, adding analytic complexity.

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### 2317 THROMBOLYSIS FOR SMALL VESSEL ISCHAEMIC STROKE: CONSIDERATIONS IN A CASE STUDY

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**Introduction** Lacunar strokes are usually a result of an occluded single perforating cerebral artery. The delayed effects of cranial radiation therapy, in the absence of traditional risk factors, are a well-established aetiology. However, the use of standard hyperacute stroke treatment, intravenous recombinant tissue plasminogen activator factor, in this stroke subtype remains a topic of debate.<sup>1</sup> Further, the stuttering TIA-like nature, often seen in cerebral small vessel disease, raises concern regarding the risk of symptomatic intracranial haemorrhage.<sup>2</sup>

**Case** In this report, we detail the case of an 18-year-old right-handed survivor of a childhood brain tumour presenting within one hour of a right hemiparesis and non-fluent dysphasia. Through a real-life stroke assessment, we discuss the patient's clinical syndrome, possible differential diagnoses, the use of perfusion imaging to help identify a dysphasic disconnection syndrome and the evidence behind the use of intravenous recombinant tissue plasminogen activator as it relates to the case.

**Conclusions** The benefit of intravenous recombinant tissue plasminogen activator factor in acute stroke attributed to small vessel disease is unclear. Further, clinicians should be cautious of its use after a transient ischemia attack given the trend towards increased rates of symptomatic intracranial haemorrhage.

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### 2318 EVIDENCE FOR A SURVIVAL BENEFIT WITH LONG TERM CNM-AU8 TREATMENT: OPEN-LABEL FOLLOW-UP OF THE AUSTRALIAN RESCUE-ALS TRIAL

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**Objective** CNM-Au8, an oral suspension of clean-surfaced, catalytically-active gold nanocrystals, improves central nervous system energy metabolism, resulting in neuroprotection and neurorepair in multiple preclinical models. RESCUE-ALS was a phase 2, randomized, double-blind placebo-controlled clinical trial whose objective was to evaluate the efficacy and safety of CNM-Au8 as a disease-modifying treatment for amyotrophic lateral sclerosis (ALS).

**Methods** ALS participants were randomized 1:1 to receive CNM-Au8 30mg/day or placebo for 36 weeks followed by open-label extension (OLE) with CNM-Au8 (30mg/day). 45 participants were enrolled (n=23 active; n=22 placebo) in the double-blind portion. 36 of 40 eligible entered the OLE. Vital status and date of expiry was determined for all subjects, including those who withdrew or discontinued from the study. Lost-to-follow-up (n=2) were censored at last contact. Kaplan Meier survival analyses were conducted from randomization comparing observed survival to median predicted survival derived from the validated ENCALS model. All observations censored as of 1-Feb-2022.

**Results** Amongst originally randomized placebo patients who did not enter the OLE, there were 6 deaths vs. 5 predicted. Amongst OLE participants treated with CNM-Au8 30mg (n=36), long-term observed survival was greater than ENCALS predicted median survival (observed, n=6; predicted, n=16; log-rank HR: 0.32, 95% CI: 0.13 to 0.72; p=0.009).

**Conclusion** Long-term CNM-Au8 treatment suggests improved survival compared to median predicted survival.

### 2320 DEFINING EXCEPTIONAL COGNITION AND OTHER COMPONENTS OF SUPER-AGEING FOR RESEARCH STUDIES: A SYSTEMATIC REVIEW

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**Objectives** To systematically review the literature pertaining to the definition and key clinical features of older adults with exceptional cognition with or without exceptional physical and social characteristics.

**Methods** A systematic review according to PRISMA guidelines across PubMed (including MEDLINE), Embase, Web of Science, Scopus, PsycINFO and Google Scholar of studies involving older individuals with superior cognitive performance defined on the basis of objective measures including neuropsychological testing and functional status with comparisons made to either cognitively average age peers or younger people. Eligibility criteria included English language studies involving  $\geq$