



## INTRODUCTION

Cenobamate (CNB) is a third-generation anti-seizure medication (ASM) indicated as an adjunct ASM in adults with focal-onset drug-resistant epilepsy (DRE) and approved by EMA in 2021. Registration studies have shown good efficacy, with seizure reduction >50% in around 70% of those treated, and a good safety profile when titrated up gradually from a dosage of 12.5 mg/day.



## OBJECTIVES

- 1) To evaluate real-world efficacy and tolerability of CNB in persons with drug-resistant focal epilepsy.
- 2) To explore its impact on sleep using a questionnaire-based approach.



## METHODS

- Single-centre, retrospective, observational study
- Time period considered: 2022-2025
- Inclusion criteria: age ≥18 aa, drug-resistant focal epilepsy
- Outcomes assessed: retention rate e medium dosage of CNB, efficacy → seizure reduction (50-80%, 80.1-99%, 100%), adverse events (AEs), impact on sleep
- Time-points: 3 months (T1), 6 months (T2), 12 months (T3)



## POPULATION DEMOGRAPHICS AND CHARACTERISTICS



n. 100

### Gender

|               |          |
|---------------|----------|
| Male, n (%)   | 45 (45%) |
| Female, n (%) | 55 (55%) |

### Age at epilepsy onset, years

|              |              |
|--------------|--------------|
| Mean (SD)    | 12.6 (10.3)  |
| Median (IQR) | 9.5 (5 – 20) |

### Age at CNB introduction, years

|           |                |
|-----------|----------------|
| Mean (SD) | 40.8 (13.8)    |
| Median    | 40.5 (30.7-52) |

### Duration of epilepsy, years

|              |                |
|--------------|----------------|
| Mean (SD)    | 28.1 (14.8)    |
| Median (IQR) | 26 (17 – 38.6) |

### Known aetiology, n (%)

|   |    |
|---|----|
| Structural                              | 48 |
| Genetic                                 | 10 |
| Structural lesion with genetic mutation | 6  |
| Autoimmune                              | 5  |

### Developmental and Epileptic Encephalopathies, n (%)

### Prior surgery, n (%)

### VNS, n (%)

### Main seizure type, n (%)

|                                 |          |
|---------------------------------|----------|
| Focal preserved consciousness   | 18 (18%) |
| Focal impaired consciousness    | 59 (59%) |
| Focal-to-bilateral tonic-clonic | 23 (23%) |

### Baseline monthly seizure frequency, n

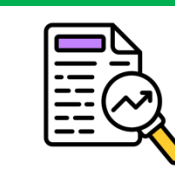
|              |                 |
|--------------|-----------------|
| Mean (SD)    | 35.7 (54)       |
| Median (IQR) | 13.3 (5.3 – 56) |

### Number of previous ASMs

|              |              |
|--------------|--------------|
| Mean (range) | 6.6 (2 – 20) |
| Median (IQR) | 6 (4 – 8)    |

### Number of concomitant ASMs

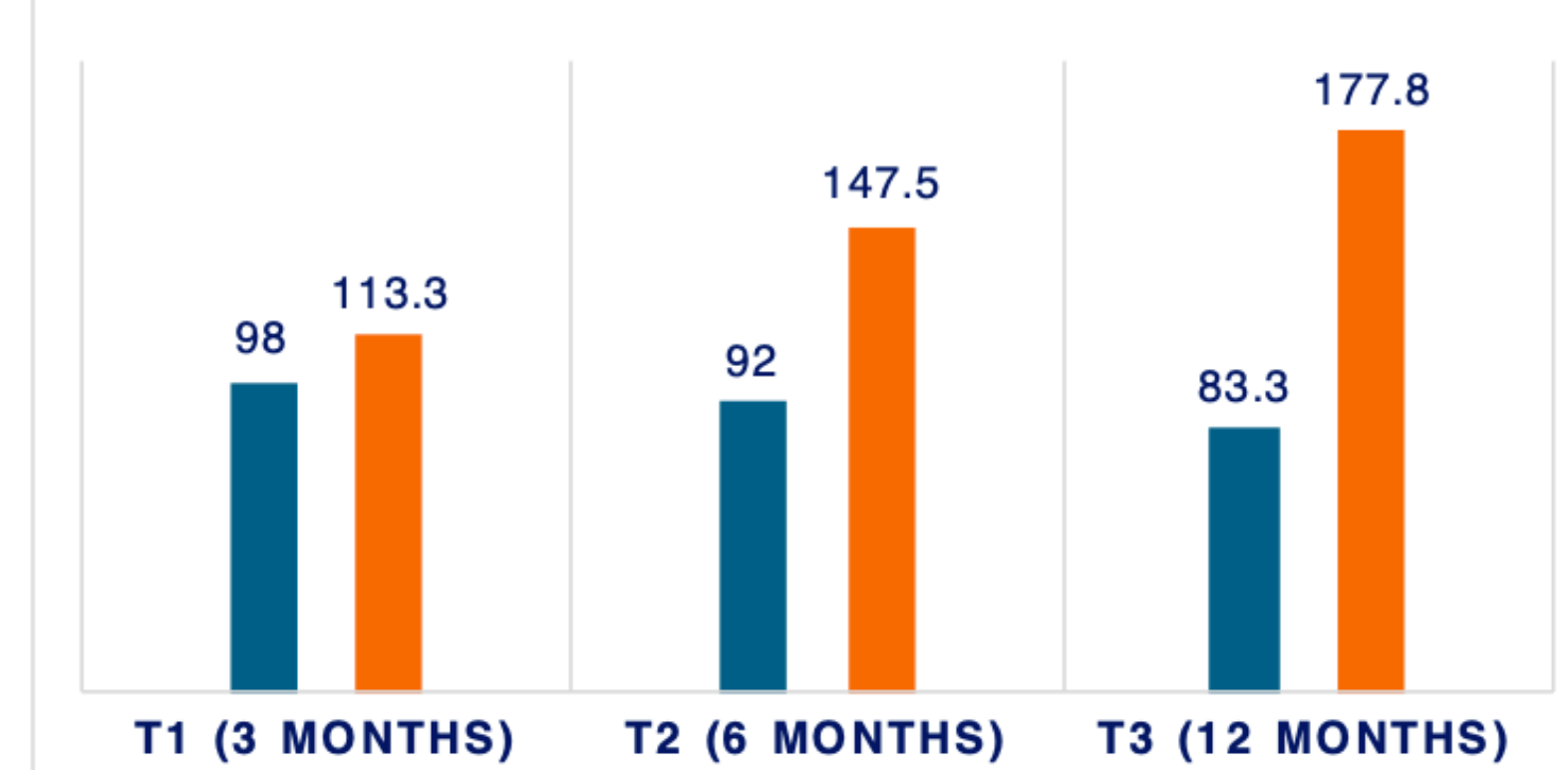
|              |             |
|--------------|-------------|
| Mean (range) | 3.1 (1 – 6) |
| Median (IQR) | 3 (2 – 4)   |



## RESULTS

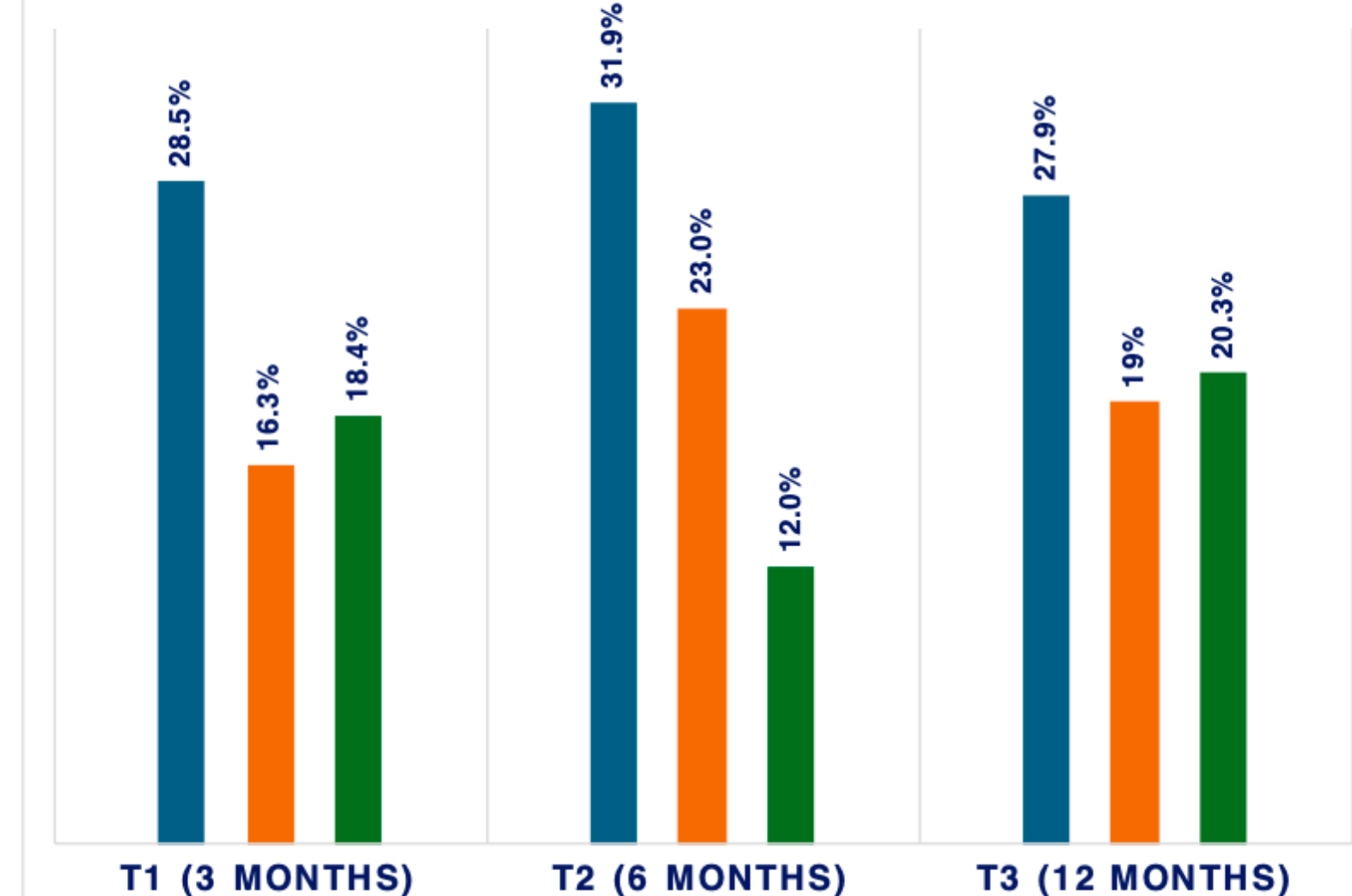
### RETENTION RATE

■ Retention rate (%) ■ Mean dosage (mg)



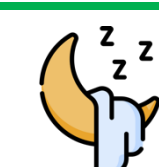
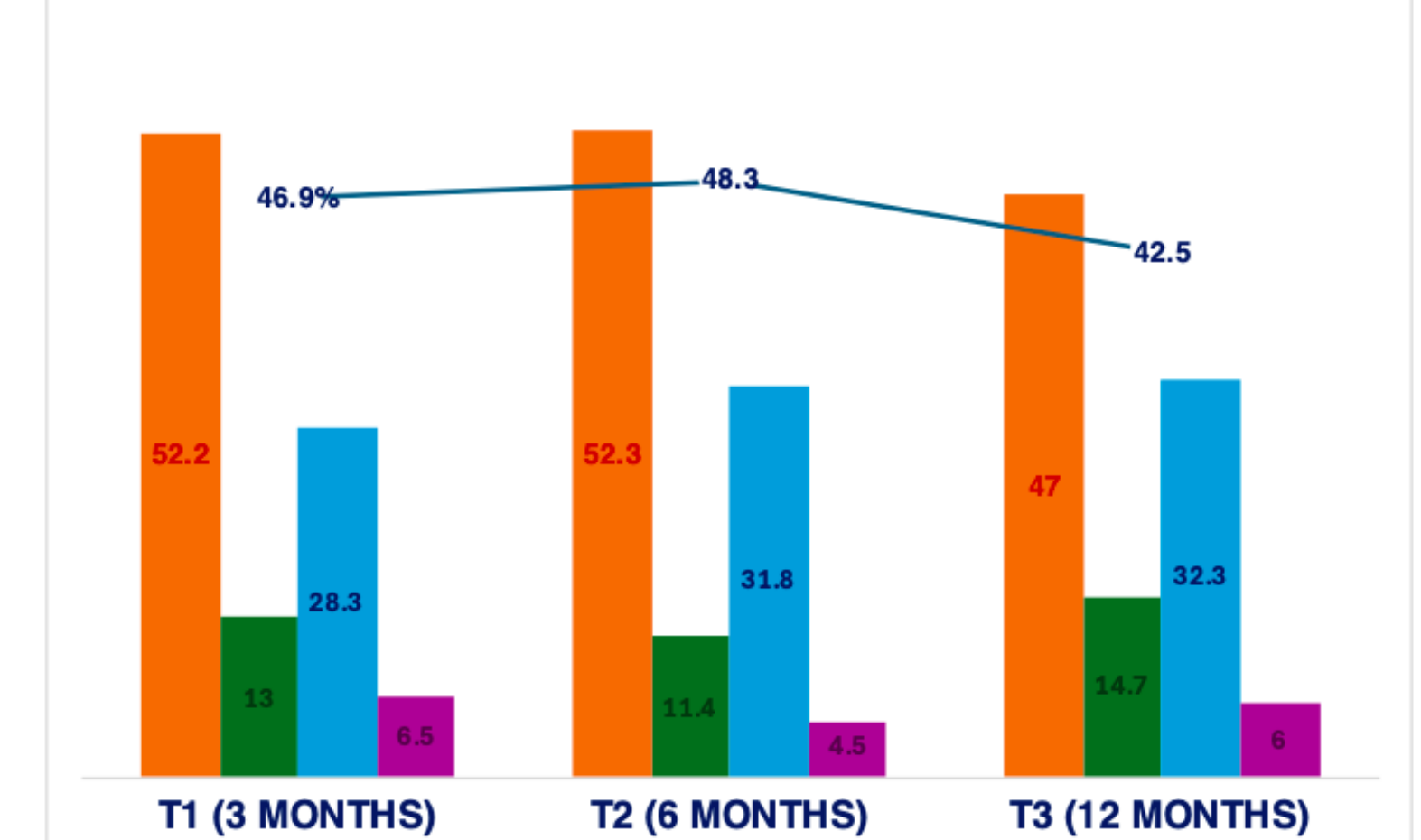
### SEIZURE REDUCTION

■ 50-80% ■ 80.1-99% ■ 100%



### ADVERSE EVENTS (AEs)

■ Drowsiness (%) ■ Diplopia (%)  
■ Postural Instability (%) ■ Drowsiness + Instability (%)  
--- Cumulative AEs (%)



## SLEEP QUALITY

26 patients completed a questionnaire assessing three domains between before and after CNB initiation: sleep onset latency (SOL), nocturnal arousals and global sleep quality (GSQ):

- 73% reported no change or an improvement in SOL
- 88.5% reported no change or an improvement in nocturnal arousals
- 61% reported a GSQ score ≥ 7/10

## CONCLUSIONS

CNB showed good efficacy in persons with DRE of heterogeneous aetiology, even at doses below 200 mg. While AEs were common, they did not significantly affect retention rate, which was high at all time-points considered. Additionally, sleep quality was generally unaffected or even improved.