

# Clinical use of PER in real-life setting: a retrospective study in patients with «super-refractory» epilepsies

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**Purpose.** The objective of this observational retrospective study is to evaluate the effectiveness and tolerability of PER, in a real-life setting, as adjunctive therapy in patients with super-refractory epilepsies

**Methods.** We retrospectively analyzed data of 175 consecutively enrolled patients (Table 1) with drug-resistant epilepsy treated with PER as add-on therapy. Clinical data were collected through charts review. Effectiveness ( $\geq 50\%$  reduction in seizure frequency) and safety were evaluated.

Demographic data of population		
Total number of pts	175	F= 92 M=83
Mean age	37,3 years	Range 14-70
Disease duration	24,6 years	Range 2-61
Concomitant AEDs	2,4	Range 1-4
n° of AED previously used	9	Range 4-13

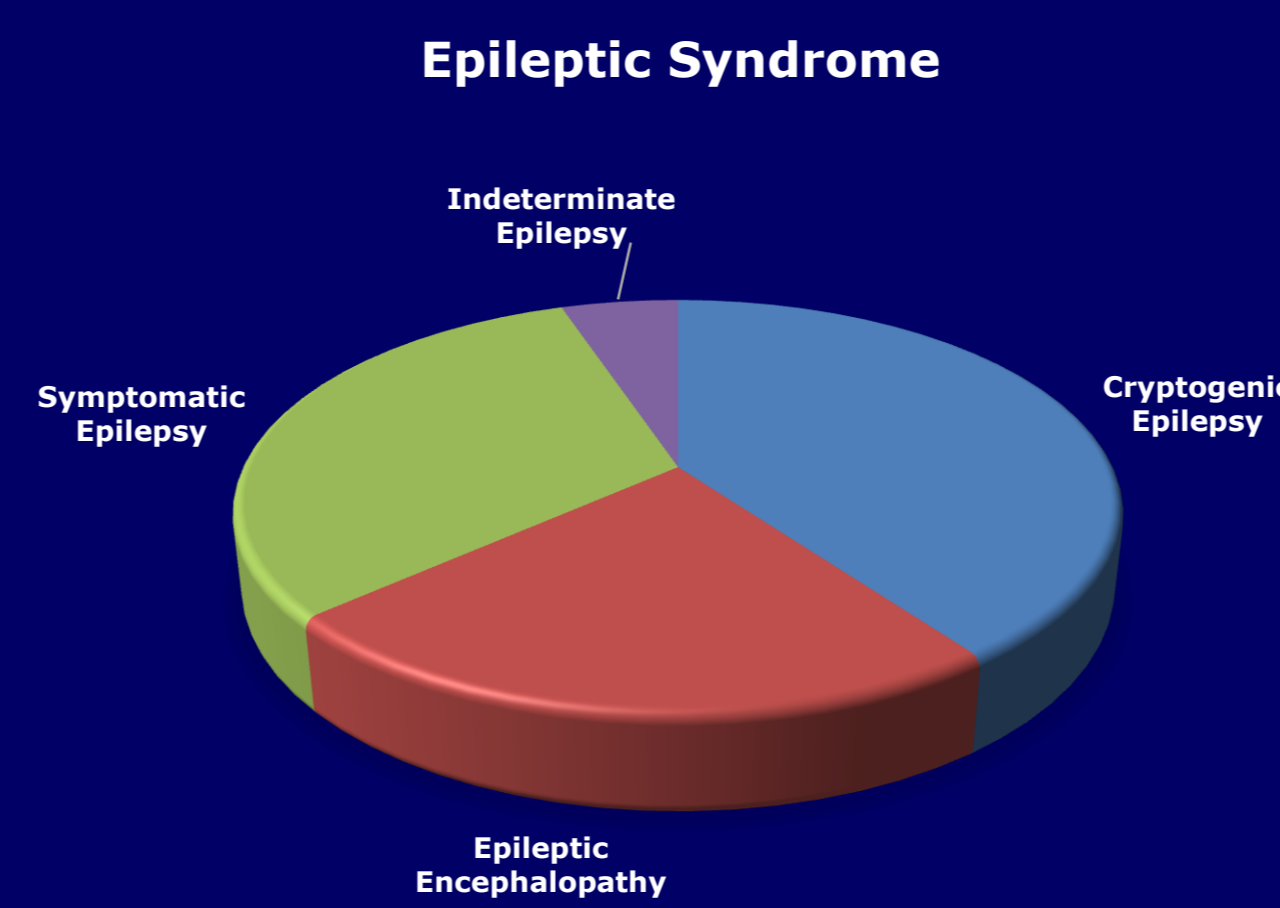


Fig. 1

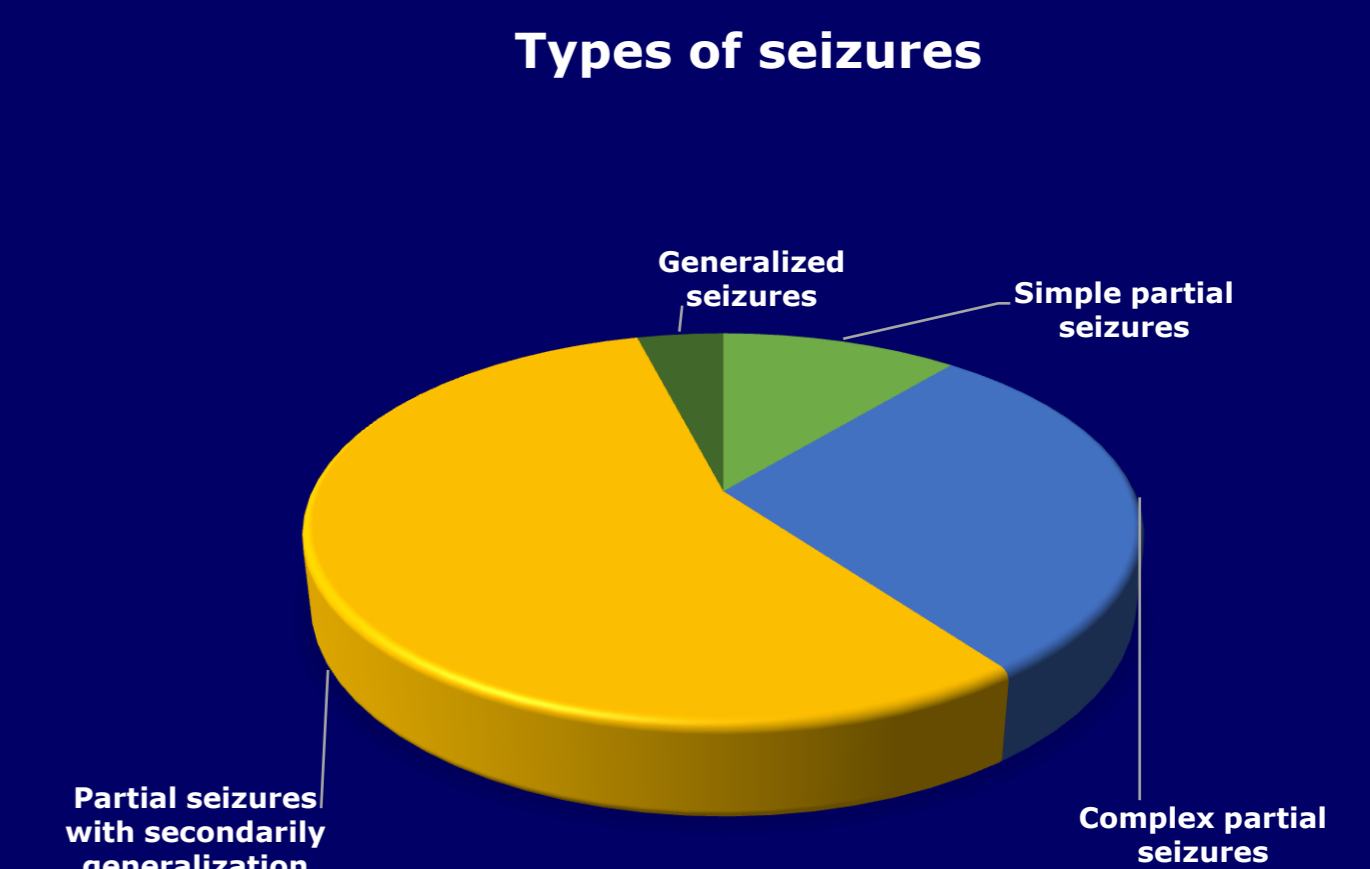


Fig. 2

**Results.** Epilepsy syndromes included: cryptogenic partial in 40% of patients, symptomatic partial in 31,3%, indeterminate whether focal or generalized in 5,1% and epileptic encephalopathy in 23,4% (Fig.1). Relative percentage of patients distributed according to types of seizures are reported in Fig.2. Mean number of concomitant AEDs was 2,4 (range 1-4); mean number of AED previously used was 9. PER mean target dose, gradually titrated (2 mg weekly), was 7 mg (range 2-12) once daily. Most used concomitant AEDs were CBZ, LEV and PB (Fig.3). At the end of 6-months follow up a  $\geq 50\%$  reduction in seizure frequency was observed in 28% of general population (seizure-free in 2) (Fig.4). PER was more effective in patients with secondarily generalized seizures (Fig.5) and in those with symptomatic epilepsy (Fig. 6). AEs were observed in 22,3% of cases (the most common being dizziness and psychiatric events) (Fig.7); worsening of seizures was experienced by 8,6% cases. Drop-outs were 14,9% cases (ineffectiveness in 5,7%, AEs in 12,6%).

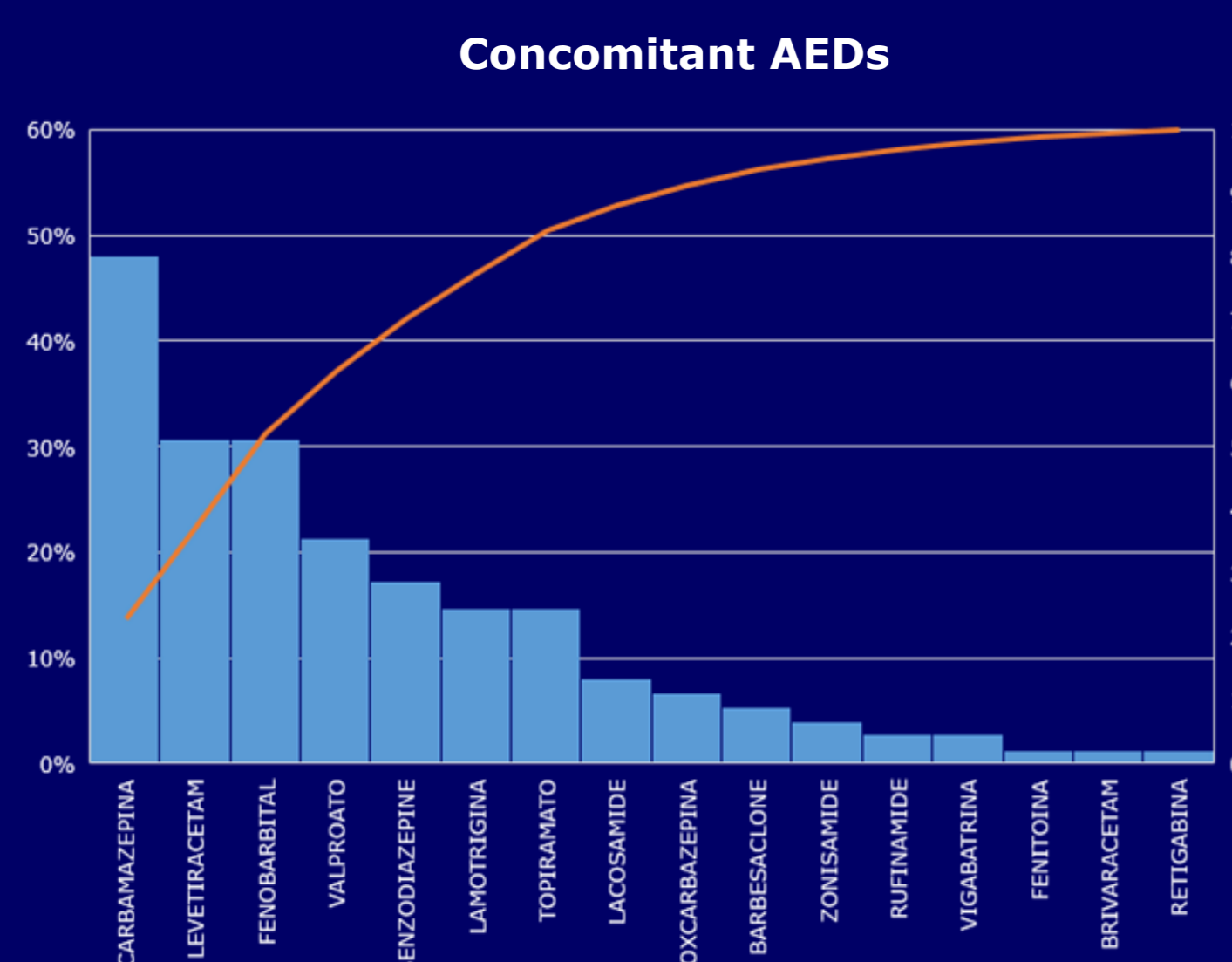


Fig. 3

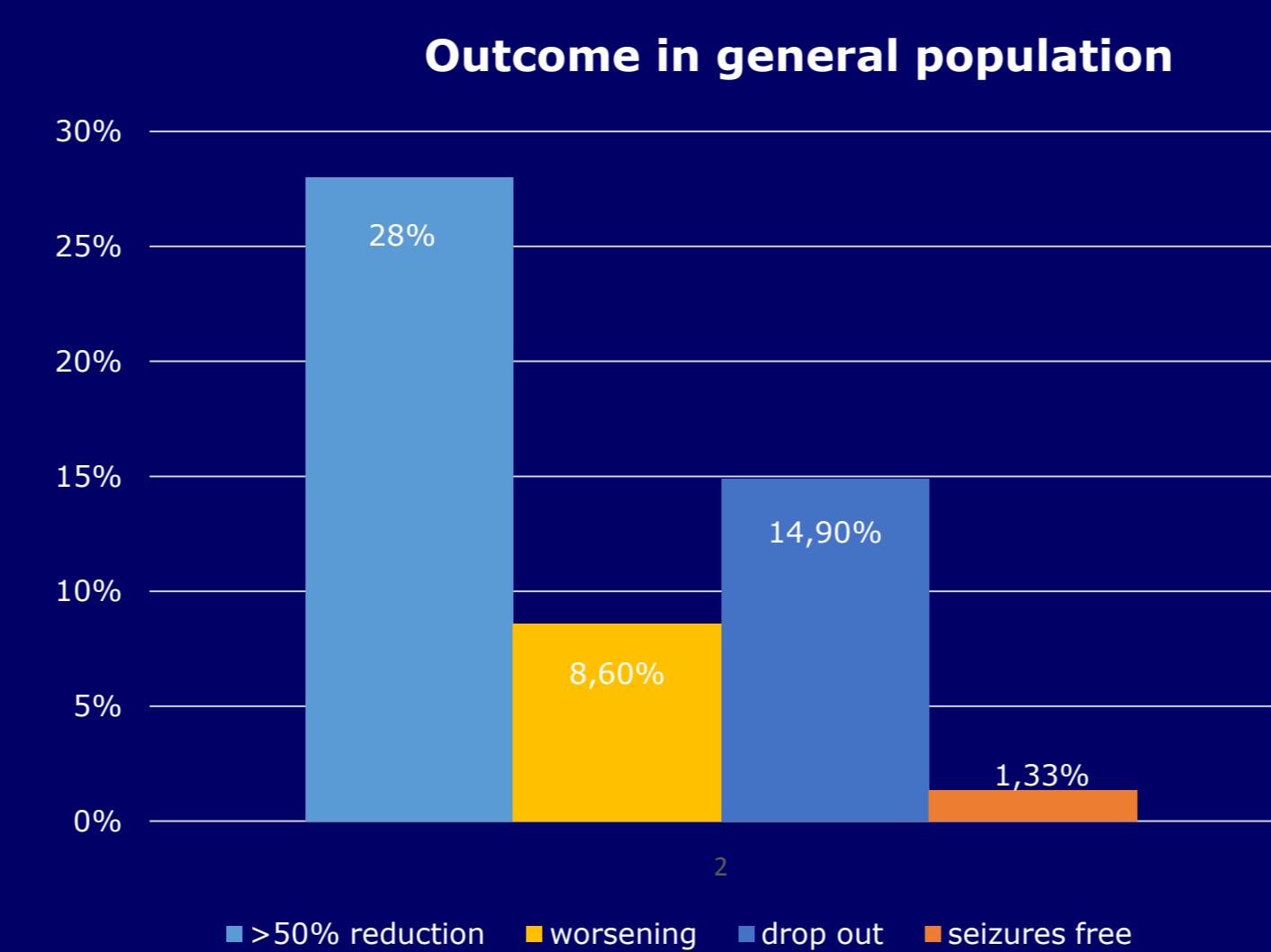


Fig. 4

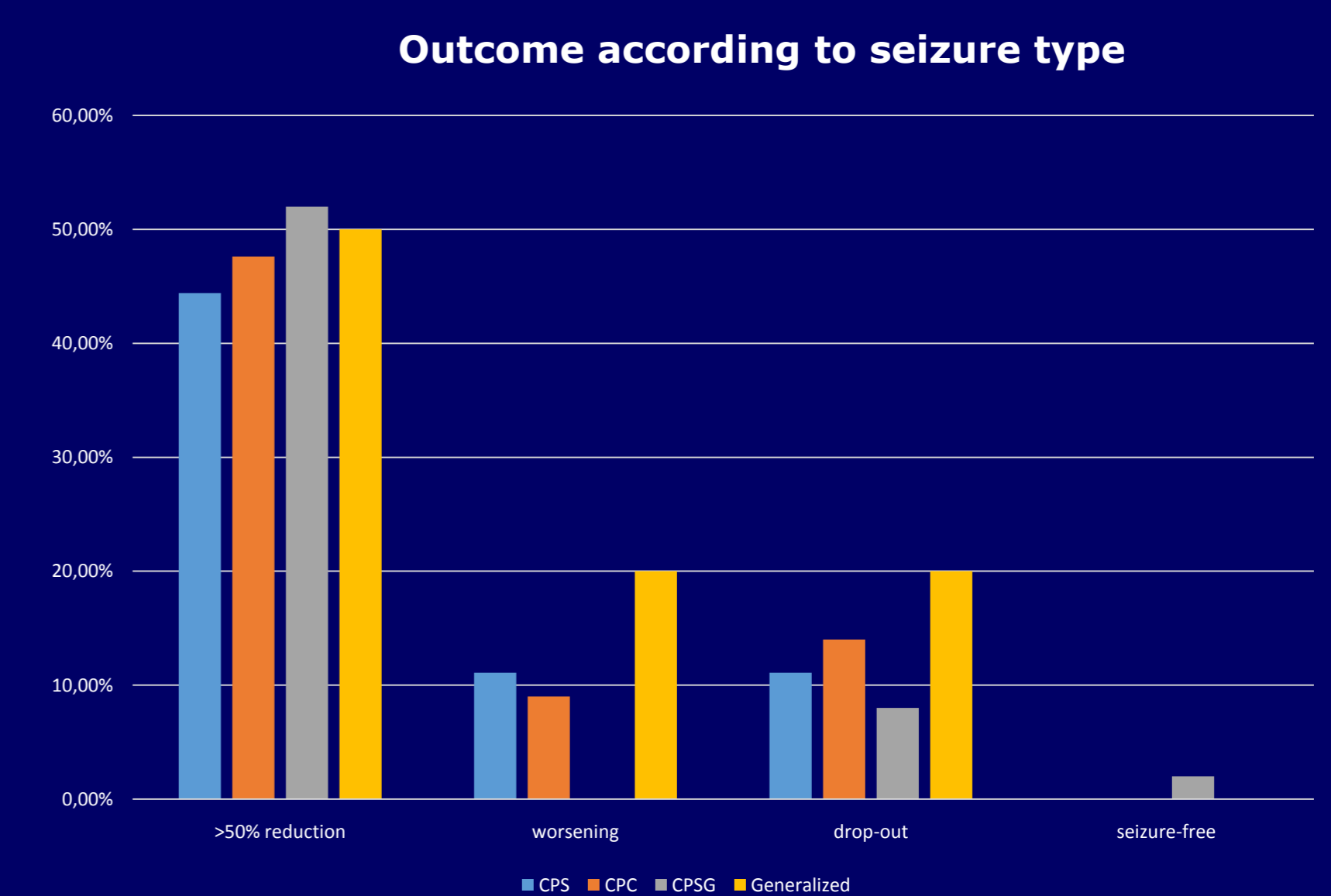


Fig. 5

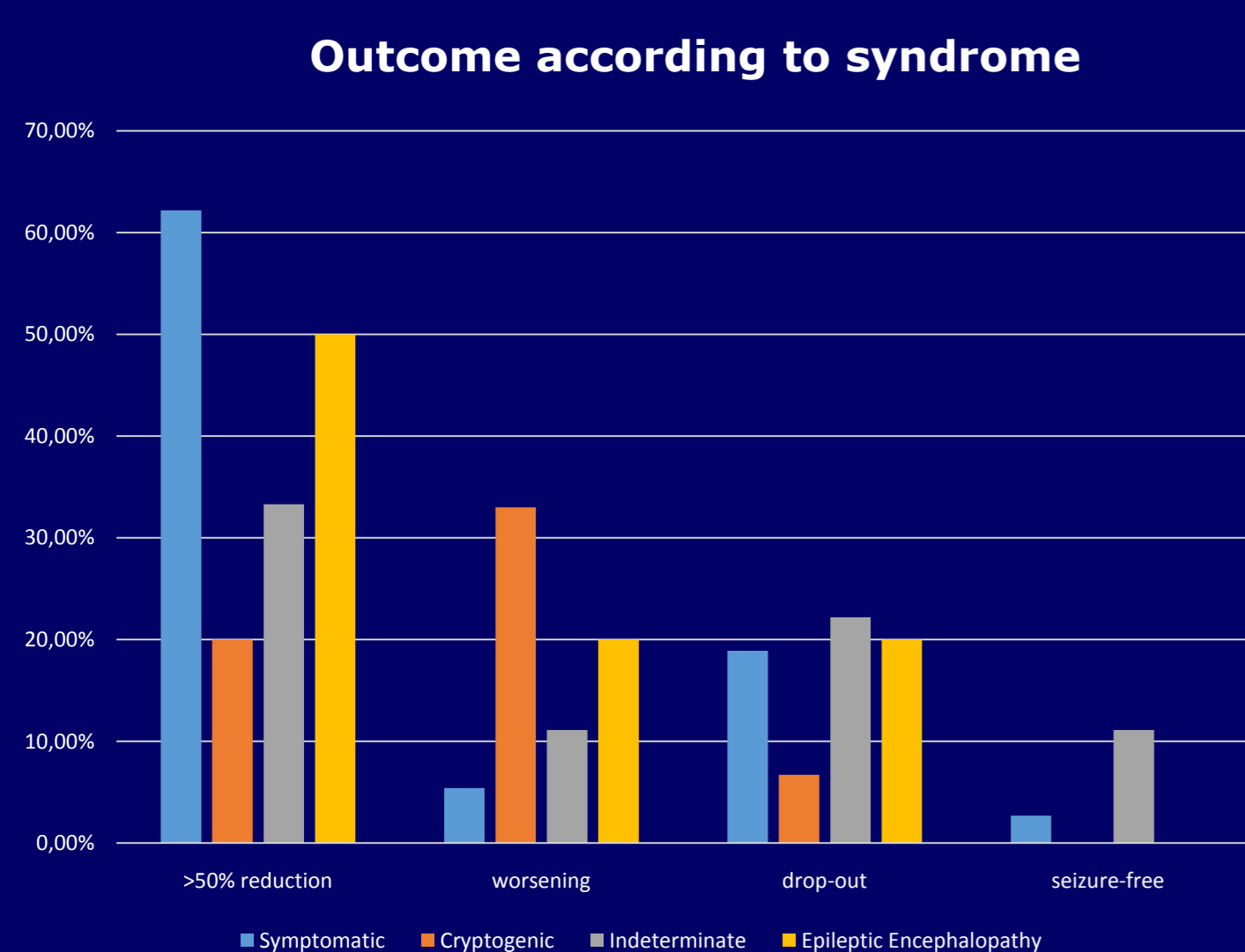


Fig. 6

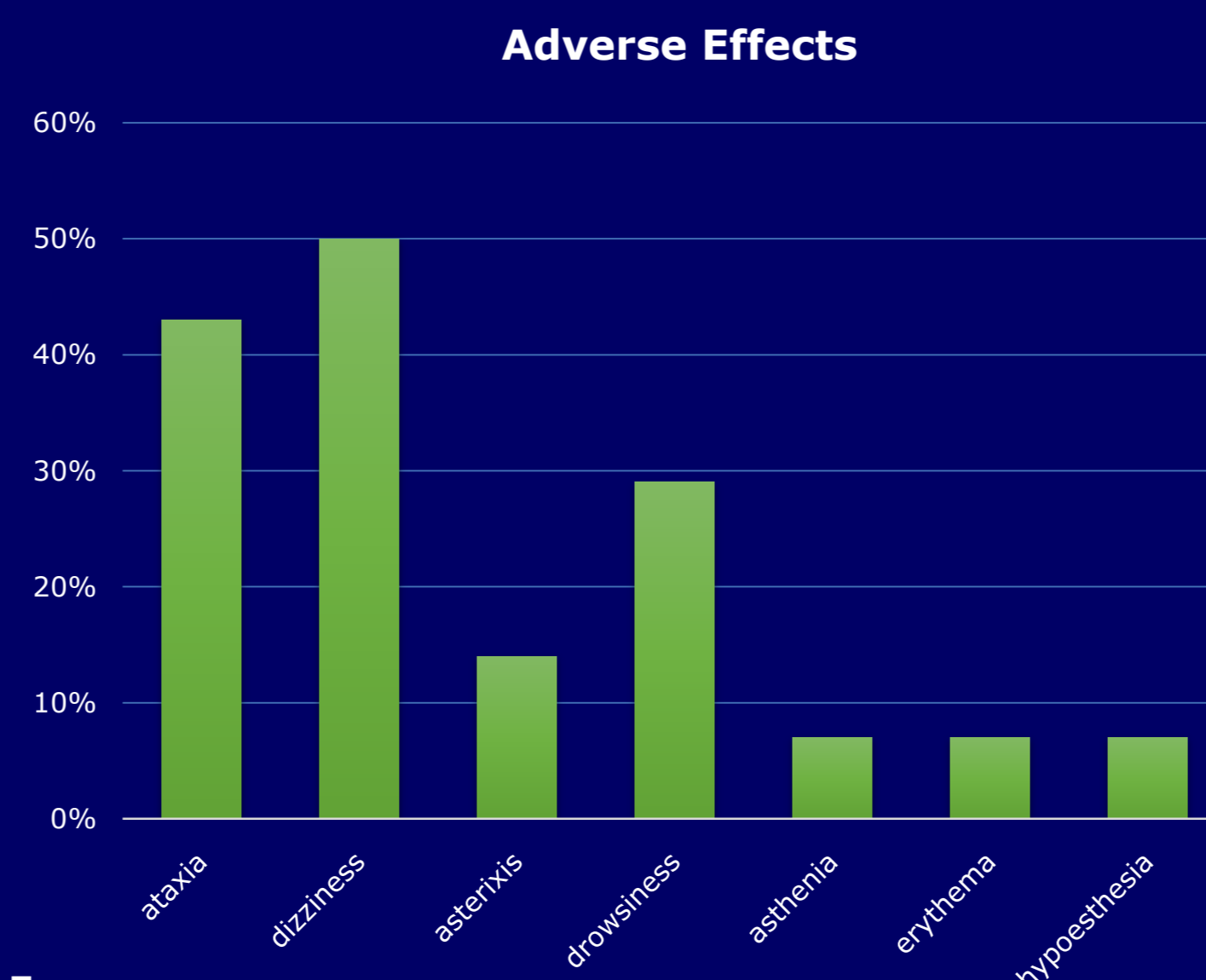


Fig. 7

**Conclusion.** This clinical experience with PER in super-refractory epilepsies is promising and helps to delineate both the main syndromic context in which PER can be effective and side effects profile in patients with complex polytherapies. Specifically, our data have documented a better response to the PER in patients with symptomatic epilepsy and secondarily generalized seizures

Literature:  
 [1] Shah E et al. «Clinical experience with adjunctive perampanel in adult patients with uncontrolled epilepsy: A UK and Ireland multicentre study». Seizure 2016 Jan, 34: 1-5.  
 [2] Steinhoff BJ et al. «A multicenter survey of clinical experiences with perampanel in real life in Germany and Austria». Epilepsy Res, 2014 Jul; 108 (5).  
 [3] French JA et al. «Perampanel for tonic-clonic seizures in idiopathic generalized epilepsy. A randomized trial». Neurology 2015 Sep 15, 85 (11)