**BACKGROUND**

- The prevalence of epilepsy in children ranges approximately from 3.3-5.5 per 1,000 in developed countries to 3.6-4.4 per 1,000 in developing countries, with a reported global incidence of 41.187 per 100,000 person-years.1
- Focal seizures originate within networks limited to one hemisphere of the brain and are the most common type of epileptic seizures, constituting up to 60% of all seizures2,3 and majority of childhood epilepsy.4
- Treatment decisions for paediatric epilepsy are highly dependent on patient-specific factors including seizure frequency; epilepsy syndrome and type of neurological disorders. Various guidelines highlight the need to individualize anti-epileptic drug (AED) therapy, as per paediatric needs.5

**OBJECTIVE**

- To review the clinical efficacy and safety of AEDs in paediatric patients with focal seizures in order to understand the existing unmet need in the management of these patients and the possible implications of AED choice in clinical practice.6

**METHODS**

- A systematic literature review (SLR) was conducted based on a pre-specified protocol as per the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines.7
- Searches were conducted for relevant articles indexed in Embase, MEDLINE, MEDLINE in Process and the Cochrane Library databases using the Ovid interface through August 2015, using a combination of Medical Subject Headings (MeSH) and free-text terms following the Patient, Intervention & Comparator, Outcomes. Study design (PICOS) statement approach (Table 1)

**RESULTS**

- Of the 5,650 records retrieved from Ovid, sixteen RCTs were included in the final analysis (Figure 1): PRISMA diagram for study selection

**CONCLUSIONS**

- High quality evidence on the efficacy and safety of AEDs for focal seizures in pediatric patients is limited, especially in monotherapy.
- The subjective differences observed in the efficacy and safety profiles of AEDs highlight the need for more available therapy options. This will ensure that treatment choices are tailored to the patient, allowing the combination of efficacy and safety profiles for AEDs to best fit the needs of individual patients.