**Supplementary Table S1** Maximum tolerated mean daily dose for each therapy

|  | CBD Isolate (n = 19) | CBD Broad Spectrum (n = 17) | CBD & Δ⁹-THC (n = 17) |
|---|---|---|---|
| Cannabidiol dose (mg/kg/d) | 14.1 ± 5.3 | 5.7 ± 4.1 | 8.7 ± 4.3 |
| Tetrahydrocannabinol dose (mg/kg/d) | N/A | N/A | 0.4 ± 0.3 |

Abbreviations: CBD, cannabidiol; Δ⁹-THC, delta-9-tetrahydrocannabinol.
*Note*: Data displayed as mean ± standard deviation.

**Supplementary Table S2** Number of prescriptions per individual CBMP

| Prescription data | Number of prescriptions | CBD dose | Δ9-THC dose |
|---|---|---|---|
| Adven 100 mg CBD/5 mg full spectrum Δ9-THC/mL oil | 5 | 100 mg/mL | 5 mg/mL |
| Adven 150 mg/mL CBD isolate oil | 3 | 150 mg/mL | 0 mg/mL |
| Adven 20 mg/mL Δ9-THC full spectrum oil | 2 | 20 mg/mL | 0 mg/mL |
| Adven 50 mg/mL CBD broad spectrum oil | 21 | 50 mg/mL | 0 mg/mL |
| Bedica <1% CBD/2% Δ9-THC oil | 4 | <10 mg/mL | 20 mg/mL |
| Bedrolite 10% CBD/< 1% Δ9-THC | 6 | 100 mg/mL | <10 mg/mL |
| Epidyolex/CBD isolate 100 mg/mL oil | 1 | 100 mg/mL | 0 mg/mL |
| NOIDECS C20, Celixir 20 186.4 mg CBD/9 mg Δ9-THC /mL oil | 5 | 186.4 mg/mL | 9 mg/mL |

**Supplementary Table S3** Comparison of mean difference in Impact of Pediatric Epilepsy Score at each follow-up between those previously naïve to treatment and those who had previously commenced treatment

| Follow-up Month | Previously naïve to treatment | Commenced treatment prior to enrollment | *p*-Value |
|---|---|---|---|
| Month 1 | −1.9 ± 3.5 | −0.9 ± 4.7 | 0.605 |
| Month 3 | −0.9 ± 6.5 | −1.2 ± 9.8 | 0.962 |
| Month 6 | −6.7 ± 5.0 | −1.3 ± 6.8 | 0.233 |

**Supplementary Table S4** Comparison of mean difference in Impact of Pediatric Epilepsy Score at each follow-up according to maximally tolerated therapy

| Follow-up month | Mean difference CBD isolate | Mean difference CBD whole spectrum | Mean difference CBD and | *p*-Value |
|---|---|---|---|---|
| Month 1 | −3.9 ± 3.8 | −4.5 ± 8.0 | 0.1 ± 4.5 | 0.280 |
| Month 3 | 4.2 ± 2.4 | −2.8 ± 5.6 | −1.7 ± 10.8 | 0.648 |
| Month 6 | −7.4 ± 7.5 | −5.1 ± 5.5 | −1.7 ± 6.9 | 0.598 |

**Supplementary Table S5** Adverse events reported by participants prescribed CBD and Δ9-THC CBMPs (n = 17)

| Adverse events | Mild | Moderate | Severe | Debilitating/Life threatening | Total |
|---|---|---|---|---|---|
| Fatigue | 5 | 2 | 0 | 0 | 7 (41.1%) |
| Seizure frequency increased | 0 | 1 | 0 | 0 | 1 (5.9%) |
| Sepsis | 0 | 0 | 0 | 1 | 1 (5.9%) |
| Somnolence | 0 | 1 | 0 | 0 | 1 (5.9%) |
| Weight loss | 0 | 0 | 1 | 0 | 1 (5.9%) |
| Total | 5 (29.4%) | 4 (23.5%) | 2 (11.8%) | 1 (5.9%) | 11 (64.7%) |