



# **Corrigendum: Potential Clinical Benefits of CBD-Rich Cannabis Extracts Over Purified CBD in Treatment-Resistant Epilepsy: Observational Data Meta-analysis**

Fabricio A. Pamplona<sup>1\*</sup>, Lorenzo Rolim da Silva<sup>2</sup> and Ana Carolina Coan<sup>3</sup>

<sup>1</sup> Entourage Phytolab, São Paulo, Brazil, <sup>2</sup> Bedrocan Brasil, São Paulo, Brazil, <sup>3</sup> UNICAMP, Campinas, Brazil

Keywords: cannabinoids, cannabidiol (CBD), epilepsy, meta-analysis, refractory epilepsy, phytotherapy

#### A Corrigendum on

## Potential Clinical Benefits of CBD-Rich *Cannabis* Extracts Over Purified CBD in Treatment-Resistant Epilepsy: Observational Data Meta-analysis

*by Pamplona, F. A., da Silva, L. R., and Coan, A. C. (2018). Front. Neurol. 9:759. doi: 10.3389/fneur. 2018.00759* 

In the original article, there was a mistake in **Table 2** as published. The total number of one reference was wrongly included in the calculation of the endpoint efficacy over 70%. Where it reads 83/430, it should be 83/311, therefore 27% (instead of 19%). The corrected **Table 2** appears below.

In the original article, there was a mistake in **Table 4** as published. Data from one reference was missing in the calculation of the endpoints mild AE and severe AE. Where it reads 285/663, it should be 308/663, therefore 46% (instead of 43%). Where it reads 64/487, it should be 64/483. The corrected **Table 4** appears below.

In the original article, due to the errors in **Tables 2**, **4** mentioned above, corrections have been made to the **Abstract** as well as the **Results**, paragraphs one, two, three and five:

- "81/223, 36%" changed to "81/175, 46%" in Abstract and Results, paragraph one.
- "p = 0.56" changed to "p = 0.52" in Abstract and Results, paragraph two.
- "97/255, 38%" changed to "122/330, 37%" in Abstract and Results, paragraph two.
- "6.1 mg/kg/day" changed to "6.0 mg/kg/day" in Abstract and Results, paragraph two.
- "27.1 mg/kg/day" changed to "25.3 mg/kg/day" in Abstract and Results, paragraph two.

- "(109/285 vs. 291/346, p < 0.0001) and severe (23/285 vs. 77/346, p < 0.0001)" changed to "(158/216, 76% vs. 148/447, 33%, p < 0.001) and severe (41/155, 26% vs. 23/328, 7%, p < 0.0001)" in Abstract and Results, paragraph five.

- "17.7 mg/kg/day" changed to "15.0 mg/kg/day" in Results, paragraph two.
- "18%" changed to "27%" in Results, paragraph three.
- "83/430" changed to "83/311" in Results, paragraph three.
- "(Table 4)" changed to reference "(11)" in Results, paragraph five.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

Copyright © 2019 Pamplona, da Silva and Coan. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

## OPEN ACCESS

### Edited and reviewed by:

Richard Lowell Bell, Indiana University, United States

### \*Correspondence:

Fabricio A. Pamplona fabriciopamplona@gmail.com

#### Specialty section:

This article was submitted to Neuropharmacology, a section of the journal Frontiers in Neurology

Received: 02 November 2018 Accepted: 20 November 2018 Published: 10 January 2019

#### Citation:

Pamplona FA, da Silva LR and Coan AC (2019) Corrigendum: Potential Clinical Benefits of CBD-Rich Cannabis Extracts Over Purified CBD in Treatment-Resistant Epilepsy: Observational Data Meta-analysis. Front. Neurol. 9:1050. doi: 10.3389/fneur.2018.01050 TABLE 2 | Efficacy of treatments in the reduction of convulsive seizures (heterogeneous population).

| References            | Patients | Reported improvement | >50%    | >70%   | Mean daily dose (mg/kg/day)<br>(2–50 mg/kg) |  |
|-----------------------|----------|----------------------|---------|--------|---|--|
| Total reports         | 670      | 399/622              | 216/553 | 83/311 |   |  |
| Mean                  | 100%     | 64%                  | 39%     | 27%    | 15.0 mg/kg                                  |  |
| CBD pure (6)          | 137      | 37%                  | 37%     | 22%    | 22.9 mg/kg                                  |  |
| CBD pure (7)          | 7        | 86%                  | 71%     | 57%    | 22 mg/kg                                    |  |
| CBD pure (8)          | 13       | 85%                  | 70%     | 46%    | 24.6 mg/kg                                  |  |
| CBD pure (9)          | 18       | 72%                  | 50%     | 22%    | 37.7 mg/kg                                  |  |
| CBD pure (10)         | 48       | NR                   | 42%     | NR     | 28.2 mg/kg                                  |  |
| CBD-rich extract (11) | 19       | 84%                  | 74%     | 42%    | 7.0 mg/kg                                   |  |
| CBD-rich extract (12) | 117      | 85%                  | NR      | NR     | 4.3 mg/kg                                   |  |
| CBD-rich extract (28) | 75       | 57%                  | 33%     | NR     | NR  |  |
| CBD-rich extract (13) | 74       | 89%                  | 34%     | 18%    | <10 mg/kg                                   |  |
| CBD-rich extract (14) | 43       | 83%                  | 67%     | 42%    | 3.2 mg/kg                                   |  |
| CBD-rich extract (15) | 119      | 49%                  | 24%     | NR     | NR  |  |

Endpoints: any improvement reported, improvement > 50% ("clinical responder") and >70%, and average dose reported. NR, not reported; ?, inconclusive.

TABLE 4 | Negative secondary effects of treatment with CBD-rich Cannabis extracts and purified CBD described as secondary endpoints in the clinical studies.

| References            | п    | Mild AE        | Serious AE | Total AE<br>326/663<br>49% |
|-----------------------|------|----------------|------------|----------------------------|
| Total reports         | 663  | 308/663<br>46% | 64/483     |                            |
| Mean                  | 100% |                | 13%        |                            |
| CBD pure (6)          | 137  | 79%            | 30%        | 128/137                    |
| CBD pure (9)          | 18   | 67%            | 0%         | 12/18                      |
| CBD pure (8)          | 13   | 77%            | NR         | 10/13                      |
| CBD pure (10)         | 48   | 58%            | NR         | 28/48                      |
| CBD-rich extract (11) | 19   | 37%            | 0%         | 7/19                       |
| CBD-rich extract (12) | 117  | 30%            | 0%         | 35/117                     |
| CBD-rich extract (28) | 75   | 44%            | 13%        | 33/75                      |
| CBD-rich extract (13) | 74   | 46%            | 18%        | 34/74                      |
| CBD-rich extract (14) | 43   | 37%            | 0%         | 16/43                      |
| CBD-rich extract (15) | 119  | 19%            | NR         | 23/119                     |

\*Reporting adverse events in a study population does not necessarily mean that it is related to treatment. NR, not reported.