

**Novel, Broad-Spectrum Anticonvulsants Containing a Sulfamide Group: Pharmacological Properties of (S)-N-[(6-Chloro-2,3-dihydrobenzo[1,4]dioxin-2-yl)methyl]sulfamide (JNJ-26489112)**

David F. McComsey,<sup>†</sup> Virginia L. Smith-Swintosky,<sup>†</sup> Michael H. Parker,\* Douglas E. Brenneman, Ewa Malatynska, H. Steve White,<sup>§</sup> Brian D. Klein,<sup>§</sup> Karen S. Wilcox,<sup>§</sup> Michael E. Milewski, Mark Herb, Michael F. A. Finley, Yi Liu, Mary Lou Lubin, Ning Qin, Allen B. Reitz, and Bruce E. Maryanoff\*

*Research & Development, Janssen Pharmaceutical Companies of Johnson & Johnson,  
Spring House, Pennsylvania 19477-0776*

*Department of Pharmacology & Toxicology, College of Pharmacy  
University of Utah Health Sciences Center,  
Salt Lake City, Utah 84112-5820*

**Supporting Information**

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Table of Microanalytical and Accurate Mass Data

| cmpd                   | formula  | calculated  |      |       |       | found |      |       |       |
|------------------------|--|---|------|-------|-------|-------|------|-------|-------|
|                        |  | C   | H    | N     | S     | C     | H    | N     | S     |
| <b>4</b>               | C <sub>9</sub> H <sub>11</sub> ClN <sub>2</sub> O <sub>4</sub> S               | 38.78   | 3.98 | 10.05 | 11.51 | 38.80 | 3.67 | 9.99  | --    |
| <i>ent-4</i>           | C <sub>9</sub> H <sub>11</sub> ClN <sub>2</sub> O <sub>4</sub> S               | 38.78   | 3.98 | 10.05 | 11.51 | 38.77 | 3.64 | 9.87  | 11.62 |
| <b>5</b>               | C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S                 | 44.25   | 4.95 | 11.47 | 13.13 | 44.32 | 4.95 | 11.74 | 13.16 |
| ( <i>S</i> )- <b>5</b> | C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S                 | 44.25   | 4.95 | 11.47 | 13.13 | 44.35 | 4.84 | 11.31 | 13.05 |
| ( <i>R</i> )- <b>5</b> | C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S                 | 47.99   | 4.92 | 18.65 | 14.23 | 44.21 | 4.67 | 11.34 | 13.12 |
| <b>6</b>               | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>4</sub> S                | 46.50   | 5.46 | 10.85 | 12.41 | 46.48 | 5.65 | 10.90 | 12.07 |
| <b>7</b>               | C <sub>11</sub> H <sub>16</sub> N <sub>2</sub> O <sub>4</sub> S                | 48.52   | 5.92 | 10.29 | 11.78 | 48.63 | 5.62 | 10.20 | 11.90 |
| <b>8</b>               | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>3</sub> S                | 49.57   | 5.82 | 11.56 | 13.23 | 49.57 | 5.80 | 11.75 | 13.33 |
| <b>9</b>               | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>4</sub> S                | 46.50   | 5.46 | 10.85 | 12.41 | 46.48 | 5.60 | 10.81 | 12.41 |
| <b>10a</b>             | C <sub>9</sub> H <sub>11</sub> ClN <sub>2</sub> O <sub>4</sub> S               | 38.78   | 3.98 | 10.05 | 11.51 | 38.66 | 3.93 | 9.88  | 11.49 |
| <b>10b</b>             | C <sub>9</sub> H <sub>11</sub> ClN <sub>2</sub> O <sub>4</sub> S               | 38.78   | 3.98 | 10.05 | 11.51 | 38.79 | 3.59 | 9.97  | 11.41 |
| <b>10c</b>             | C <sub>9</sub> H <sub>11</sub> ClN <sub>2</sub> O <sub>4</sub> S               | 38.78   | 3.98 | 10.05 | 11.51 | 38.86 | 3.78 | 9.92  | 11.49 |
| <b>10d</b>             | C <sub>9</sub> H <sub>11</sub> FN <sub>2</sub> O <sub>4</sub> S                | 41.22   | 4.23 | 10.68 | 12.23 | 41.23 | 4.15 | 10.57 | 12.63 |
| <b>10e</b>             | C <sub>9</sub> H <sub>11</sub> FN <sub>2</sub> O <sub>4</sub> S                | 41.22   | 4.23 | 10.68 | 12.23 | 41.38 | 4.20 | 10.61 |       |
| <b>10f</b>             | C <sub>9</sub> H <sub>11</sub> BrN <sub>2</sub> O <sub>4</sub> S               | Accurate mass: calcd, M <sup>+</sup> = 321.962290; found, M <sup>+</sup> = 321.962958 |      |       |       |       |      |       |       |
| <b>10g</b>             | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>5</sub> S                | Accurate mass: calcd, M <sup>+</sup> = 274.062344; found, M <sup>+</sup> = 274.062254 |      |       |       |       |      |       |       |
| <b>10h</b>             | C <sub>9</sub> H <sub>10</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>4</sub> S | 34.52   | 3.22 | 8.95  | 10.24 | 34.64 | 2.68 | 8.87  | 10.35 |
| <b>10i</b>             | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>4</sub> S                | 46.50   | 5.46 | 10.85 | 12.41 | 46.65 | 5.60 | 10.84 | 12.61 |
| <b>11a</b>             | C <sub>8</sub> H <sub>10</sub> N <sub>2</sub> O <sub>4</sub> S                 | 41.73   | 4.38 | 12.17 | 13.93 | 42.00 | 4.12 | 11.97 | 13.54 |
| <b>11b</b>             | C <sub>8</sub> H <sub>9</sub> ClN <sub>2</sub> O <sub>4</sub> S                | 36.30   | 3.43 | 10.58 | 12.11 | 36.96 | 3.60 | 10.77 | 12.55 |
| <b>12</b>              | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>4</sub> S                | 46.50   | 5.46 | 10.85 | 12.41 | 46.39 | 5.45 | 10.74 | 12.29 |