Diversity of kindling of limbic seizures after lateral fluid percussion injury in the rat

Supplemental Table 1.

Progression of behavioral seizures during kindling

| Rat No | Stimulation number |
|--------|--------------------|
|        | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 (25) (26) (27) |
| LFPI   |                    |
| 1      | 1 4 5 4            |
| 2      | 0 4 4 4            |
| 3      | 0 3 4 4 4          |
| 4      | 0 2 3 5 4 5        |
| 5      | 0 3 3 5 4 4        |
| 6      | 1 4 1 2 4 4 4      |
| 7      | 0 1 1 2 4 4 4      |
| 8      | 1 3 3 3 3 5 5 4    |
| 9      | 1 3 2 1 3 4 4 5    |
| 10     | 1 0 1 1 2 3 4 4 4 |
| 11     | 0 2 1 1 0 3 3 2 3 4 4 5 |
| 12     | 0 1 1 2 1 2 3 3 3 5 4 4 |
| 13     | 0 0 1 2 2 2 2 3 3 3 3 4 4 4 |
| 14     | 0 2 2 4 2 2 3 2 3 3 3 3 5 4 5 |
| 15     | 1 1 1 1 1 1 3 3 3 2 3 2 3 4 4 4 |
| 16     | 0 0 0 0 2 2 3 2 3 3 2 3 2 3 5 5 5 |
| 17     | 1 2 2 1 2 2 3 3 3 2 2 3 3 3 4 2 3 2 4 5 4 |
| 18     | 1 1 3 3 2 2 3 4 2 2 2 2 3 1 3 1 5 2 3 3 3 4 4 4 |
| 19     | 0 0 1 2 2 2 3 3 3 3 3 3 3 2 2 1 2 3 3 3 3 4 5 5 |
| 20     | 0 0 0 0 2 2 2 4 2 2 3 2 2 3 3 3 2 2 3 3 3 3 3 4 4 (4) (4) |
| 21     | 0 1 1 1 2 2 3 3 3 5 3 2 1 1 1 2 2 3 2 2 3 1 2 5 (4) (4) |
| 22     | 1 0 0 2 1 1 2 3 3 3 3 2 4 1 1 2 3 3 3 2 3 3 3 3 2 2 4 (4) (4) (4) |
| 23     | 0 1 1 1 1 1 1 1 1 1 2 1 1 1 3 1 1 5 2 2 4 1 1 2 2 (4) (4) (4) |
| 24     | 0 0 2 1 2 2 4 1 1 3 2 0 2 3 3 3 2 1 1 4 2 2 3 3 (4) (4) (4) |

(Continued on the next page)
| Rat No | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | (25) | (26) | (27) |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| **Sham LFPI** |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 1      | 0 | 0 | 0 | 1 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 5 | 5 | 4 |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 2      | 0 | 1 | 1 | 0 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 3      | 0 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 4      | 0 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 5 | 3 | 3 | 4 | 4 | 5 |    |    |    |    |    |    |    |    |    |    |    |    |
| 5      | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 5 | 5 | 5 |    |    |    |    |    |    |    |    |    |    |    |    |
| 6      | 1 | 0 | 0 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 4 | 4 | 5 |    |    |    |    |    |    |    |    |    |    |    |
| 7      | 0 | 1 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 5 | 2 | 3 | 2 | 3 | 3 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |
| 8      | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |    |
| 9      | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 4 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |
| 10     | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 5 | 5 | 4 |    |    |    |    |    |    |    |    |    |    |

| **Naive** |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 1      | 1 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 2      | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 3      | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 5 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |    |    |
| 4      | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 5 | 5 | 4 |    |    |    |    |    |    |    |    |    |    |    |
| 5      | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 4 | 2 | 2 | 3 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |    |
| 6      | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 4 | 4 | 4 |    |    |    |    |    |    |    |    |    |    |    |
| 7      | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 2 | 5 | 5 | 4 |    |    |    |    |    |    |    |    |    |

**Methodology.**

The severity of seizures according to the Racine scale is shown for each consecutive simulation, for individual rats. Maximal number of stimulations was 24. The animal was considered kindled once it developed three consecutive stage 4 or 5 seizures. For those animals, which failed to kindle after 24 stimulations, in order to make the data amenable to statistical analysis, the number of stimulations was conjectured so as to project their minimal number, which would have been required to kindle. Therefore, while the
maximal number of actual stimulations was 24, the highest projected number was 27. In the table, stimulations 25-27 (shown in parentheses) were not actually delivered, but were projected. The three consecutive stage 4-5 seizures, after which the animal was considered kindled, are highlighted in red bold. Stage 4-5 seizures not culminating in kindling are in red normal font.

It should be noted that this methodology is biased towards the lower number of stimulations. Should the stimulations continued until the animals would have actually kindled (possibly indefinitely), the final numbers would have been likely higher that those assigned. Therefore, this approach is more suitable for the conservative statistical analysis.

**Examples:**

LFPI rat #17 developed consecutive stage 4-5 seizures after stimulations 19, 20 and 21. Therefore, for this rat, the number of stimulations to kindling is 21.

LFPI rat #20 failed to develop three consecutive stage 4-5 seizures; however, it had stage 4 seizure after stimulation 24. Assuming that if stimulations continued, and the animal would have developed stage 4-5 seizures consecutively, it would have taken two more stimulations (25 and 26) to kindle. Therefore, the number used for the statistical analysis was 26.

LFPI rat #24 had no consecutive stage 4-5 seizures. For this animal, we assume that if it developed such seizures after the next three stimulations (25-27), it would have kindled after stimulation 27. Therefore, the number used for statistical analysis was 27.