

**Supplementary Table 1:** Sensitivity and false detection rates for individual dogs in the study

| Dog | Period 1 – Predefined Algorithm |                   |             |                          | Period 2 – Individualized Algorithm |                   |             |                          |
|-----|---------------------------------|-------------------|-------------|--------------------------|-------------------------------------|-------------------|-------------|--------------------------|
|     | Seizures                        | Seizures Detected | Sensitivity | False Detection Rate/Day | Seizures                            | Seizures Detected | Sensitivity | False Detection Rate/Day |
| 1   | 6                               | 3                 | 0.5         | 0.24                     | 4                                   | 0                 | 0           | 0                        |
| 2   | 40                              | 0                 | 0           | 0                        | 3                                   | 1                 | 0.33        | 0.14                     |
| 3   | 2                               | 1                 | 0.5         | 0.36                     | 8                                   | 5                 | 0.63        | 0.02                     |
| 4   | 1                               | 0                 | 0           | 0.02                     | 4                                   | 0                 | 0           | 0                        |
| 5   | 6                               | 0                 | 0           | 0                        | 6                                   | 0                 | 0           | 0.023                    |
| 6   | 6                               | 1                 | 0.17        | 0.011                    | 1                                   | 1                 | 1           | 0                        |
| 7   | 11                              | 2                 | 0.18        | 0.24                     | 5                                   | 1                 | 0.2         | 0.038                    |
| 8   | 17                              | 8                 | 0.47        | 0.11                     | 13                                  | 2                 | 0.15        | 0.012                    |
| 9   | 35                              | 4                 | 0.11        | 0.077                    | 16                                  | 10                | 0.63        | 0.43                     |
| 10  | 6                               | 0                 | 0           | 0.15                     | 15                                  | 1                 | 0.067       | 0.019                    |
| 11  | 19                              | 6                 | 0.32        | 0.36                     | 7                                   | 1                 | 0.14        | 0.078                    |
| 12  | 4                               | 0                 | 0           | 0.052                    | 3                                   | 0                 | 0           | 0.12                     |
| 13  | 14                              | 0                 | 0           | 0.0089                   | 12                                  | 0                 | 0           | 0.021                    |
| 14  | 9                               | 7                 | 0.78        | 0                        | 2                                   | 2                 | 1           | 0                        |
| 15  | 8                               | 0                 | 0           | 0                        | 11                                  | 1                 | 0.091       | 0.053                    |
| 16  | 2                               | 1                 | 0.5         | 0                        | 5                                   | 4                 | 0.8         | 0.029                    |
| 17  | 19                              | 2                 | 0.11        | 0.18                     | 17                                  | 1                 | 0.059       | 0.022                    |
| 18  | 3                               | 2                 | 0.67        | 0                        | 3                                   | 0                 | 0           | 0.028                    |
| 19  | 7                               | 3                 | 0.43        | 0.024                    | 1                                   | 0                 | 0           | 0                        |