

**NetTable 1. Localisation of Xenon-induced Decreases (Anesthesia vs. Baseline) in Regional Cerebral Blood Flow.**

**Absolute SPM-analysis (T=3, k=500)**

|                |                          |      | Proportion of Cluster | Proportion of the Region   | Cluster | Maximum Voxel |
|----------------|--------------------------|------|-----------------------|----------------------------|---------|---------------|
|                |                          |      |                       |                            |         | MNI           |
| Lobe           | Region                   | Side | Volume (%)            | Covered by the Cluster (%) | Voxels  | Coordinates   |
|                |                          |      |                       |                            |         | 42 -80 -30    |
| CLUSTER 1      |                          |      |                       |                            | 23692   |               |
| Occipital Lobe | Inferior Occipital Gyrus | R    | 0,53                  | 17,38                      | 126     |               |
|                | Lingual Gyrus            | R    | 0,43                  | 4,64                       | 102     |               |
|                | Angular Gyrus            | L    | 1,14                  | 67,93                      | 270     |               |
|                | Supramarginal Gyrus      | L    | 2,13                  | 57,08                      | 505     |               |
| Temporal Lobe  | Middle Temporal Gyrus    | L    | 6,6                   | 31,18                      | 1564    |               |
|                | Superior Temporal Gyrus  | L    | 1,84                  | 8,31                       | 436     |               |
|                | Fusiform Gyrus           | L    | 2,28                  | 30,93                      | 540     |               |
|                | Fusiform Gyrus           | R    | 2,3                   | 31,04                      | 545     |               |
|                | Inferior Temporal Gyrus  | L    | 2,23                  | 38,71                      | 528     |               |
| Parietal Lobe  | Inferior Parietal Lobule | L    | 6,38                  | 51                         | 1512    |               |

|             |                          |   |      |       |      |
|-------------|--------------------------|---|------|-------|------|
| Limbic Lobe | Superior Parietal Lobule | L | 1,54 | 43,56 | 365  |
|             | Precuneus                | L | 2,57 | 16,51 | 609  |
|             | Precuneus                | C | 0,43 | 60,23 | 102  |
|             | Precuneus                | R | 3,07 | 18,86 | 727  |
|             | Parahippocampal Gyrus    | R | 0,25 | 2,91  | 59   |
|             | Posterior Cingulate      | L | 0,42 | 10,78 | 100  |
|             | Posterior Cingulate      | R | 1,28 | 30,01 | 303  |
|             | Cingulate Gyrus          | L | 1,06 | 7,88  | 251  |
|             | Cingulate Gyrus          | C | 0,39 | 53,18 | 92   |
|             | Cingulate Gyrus          | R | 1,73 | 11,64 | 410  |
| Cerebellum  | Tuber                    | R | 0,69 | 12,59 | 163  |
|             | Uvula                    | L | 0,54 | 20,77 | 128  |
|             | Uvula                    | R | 1,01 | 37,68 | 239  |
|             | Pyramis                  | L | 0,28 | 7,05  | 66   |
|             | Pyramis                  | R | 0,56 | 14,22 | 133  |
|             | Declive                  | L | 8,13 | 85,94 | 1926 |
|             | Declive                  | R | 8,58 | 90,75 | 2033 |

|                   |                         |   |      |       |      |
|-------------------|-------------------------|---|------|-------|------|
|                   | Culmen                  | L | 5,99 | 55,75 | 1419 |
|                   | Culmen                  | C | 0,4  | 84,82 | 95   |
|                   | Culmen                  | R | 6,02 | 54,82 | 1426 |
|                   | Cerebellar Lingual      | L | 0,23 | 73,97 | 54   |
|                   | Cerebellar Lingual      | R | 0,28 | 85,71 | 66   |
| Corpus callosum   | Corpus Callosum         | L | 0,35 | 7,1   | 83   |
|                   | Corpus Callosum         | C | 0,28 | 29,26 | 66   |
|                   | Corpus Callosum         | R | 0,95 | 17,4  | 225  |
| Thalamus          | Thalamus                | L | 1,6  | 37,36 | 379  |
|                   | Thalamus                | R | 3,95 | 91,94 | 936  |
|                   | Medial Dorsal Nucleus   | L | 0,5  | 97,54 | 118  |
|                   | Pulvinar                | L | 0,46 | 40,6  | 109  |
|                   | Medial Dorsal Nucleus   | R | 0,51 | 100   | 121  |
|                   | Pulvinar                | R | 1,08 | 95,52 | 256  |
|                   | Ventral Lateral Nucleus | R | 0,47 | 100   | 111  |
|                   | Medial Globus Pallidus  | R | 0,21 | 59,76 | 50   |
| Lentiform nucleus | Lentiform Nucleus       | R | 0,29 | 5,97  | 69   |

|                               |               |   |              |       |              |
|-------------------------------|---------------|---|--------------|-------|--------------|
| Extra-Nuclear                 | Extra-Nuclear | L | 1,18         | 5,28  | 280          |
|                               | Extra-Nuclear | R | 2,74         | 11,99 | 649          |
| Brain stem                    | Pons          | R | 0,7          | 16,26 | 166          |
|                               | Midbrain      | L | 0,83         | 19,56 | 197          |
|                               | Midbrain      | R | 0,75         | 16,4  | 178          |
| <b>Total % of the Cluster</b> |               |   | <b>88,16</b> |       | <b>20887</b> |

| Lobe      | Region | Side | Proportion of Cluster | Proportion of the Region   | Cluster | Maximum Voxel |
|-----------|--------|------|-----------------------|----------------------------|---------|---------------|
|           |        |      | Volume (%)            | Covered by the Cluster (%) | Voxels  | MNI           |
|           |        |      |                       |                            |         | Coordinates   |
| <hr/>     |        |      |                       |                            |         |               |
|           |        |      |                       |                            |         | -44 50 10     |
| CLUSTER 2 |        |      |                       |                            | 15283   |               |

|              |                        |   |       |       |      |
|--------------|------------------------|---|-------|-------|------|
| Frontal lobe | Inferior Frontal Gyrus | L | 6,87  | 22,75 | 1050 |
|              | Inferior Frontal Gyrus | R | 6,33  | 20,73 | 967  |
|              | Middle Frontal Gyrus   | L | 19,51 | 40,96 | 2982 |
|              | Middle Frontal Gyrus   | R | 13,32 | 28,03 | 2036 |
|              | Superior Frontal Gyrus | L | 14,43 | 38,03 | 2205 |
|              | Superior Frontal Gyrus | R | 7,47  | 19,43 | 1142 |

|                               |                      |   |              |       |              |
|-------------------------------|----------------------|---|--------------|-------|--------------|
|                               | Medial Frontal Gyrus | L | 4,67         | 17,94 | 714          |
|                               | Medial Frontal Gyrus | R | 4,51         | 16,58 | 689          |
|                               | Orbital Gyrus        | L | 0,48         | 21,45 | 73           |
|                               | Orbital Gyrus        | R | 0,54         | 22,4  | 83           |
|                               | Rectal Gyrus         | R | 0,35         | 14,96 | 53           |
| <b>Total % of the Cluster</b> |                      |   | <b>78,48</b> |       | <b>11994</b> |

| Lobe      | Region | Side | Proportion of Cluster | Proportion of the Region   | Cluster | Maximum Voxel |
|-----------|--------|------|-----------------------|----------------------------|---------|---------------|
|           |        |      | Volume (%)            | Covered by the Cluster (%) | Voxels  | MNI           |
|           |        |      |                       |                            |         | Coordinates   |
| <hr/>     |        |      |                       |                            |         |               |
|           |        |      |                       |                            |         | 62 -58 44     |
| CLUSTER 3 |        |      |                       |                            | 3968    |               |

|                |                          |   |      |       |     |
|----------------|--------------------------|---|------|-------|-----|
| Temporal lobe  | Inferior Temporal Gyrus  | R | 3,35 | 9,72  | 133 |
|                | Middle Temporal Gyrus    | R | 8,22 | 6,52  | 326 |
|                | Superior Temporal Gyrus  | R | 4,41 | 3,33  | 175 |
| Parietal lobe  | Inferior Parietal Lobule | R | 15,6 | 20,97 | 619 |
|                | Superior Parietal Lobule | R | 1,59 | 7,56  | 63  |
| Occipital lobe | Angular Gyrus            | R | 2,72 | 26,67 | 108 |

|                               |   |              |       |             |
|-------------------------------|---|--------------|-------|-------------|
| Supramarginal Gyrus           | R | 10,18        | 45,29 | 404         |
| <b>Total % of the Cluster</b> |   | <b>46,07</b> |       | <b>1828</b> |

R = Right Hemisphere, L = Left Hemisphere, T = Height Threshold, k = Extend Threshold. Proportions that were not identifiable or sized <50 were excluded.