

Electronic Supplementary Material

**Impact of Mechanical Ventilation and Anesthesia on
PET Tracer Kinetics for Combined PET/fMRI Studies in Rats**

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Supplementary Tables

Table S1: Peak [¹¹C]raclopride activity, time to peak, and tracer delivery rate of [¹¹C]raclopride for the CPU and the cerebellum under different respiratory conditions.

	Group 1	Group 2	Group 3
Peak activity [kBq/cc] Caudate Putamen	481.4 ± 41.9	409.8 ± 43.7	417.6 ± 62.2
Peak activity [kBq/cc] Cerebellum	402.5 ± 51.3	276.4 ± 32.9	289.8 ± 63
Time to Peak [s] Caudate Putamen	292.5 ± 122.9	427.5 ± 103.6	487.5 ± 87.5
Time to Peak [s] Cerebellum [s]	122.5 ± 18.9	255 ± 38.7	262.5 ± 28.7
Tracer Delivery Rate Caudate Putamen	1.9 ± 0.8	1 ± 0.3	0.9 ± 0.2
Tracer Delivery Rate Cerebellum	3.4 ± 0.8	1.1 ± 0.3	1.1 ± 0.2

Table S2: Peak [¹¹C]raclopride activity, time to peak, and tracer delivery rate of [¹¹C]raclopride for the CPU and the cerebellum under different anesthesia protocols

	Group 3	Group 4	Group 5
Peak activity[kBq/cc] Caudate Putamen	417.6 ± 62.2	372.3 ± 82.3	268.2 ± 25.5
Peak activity [kBq/cc] Cerebellum	289.8 ± 63	302.9 ± 35.7	223.9 ± 27.8
Time to Peak [s] Caudate Putamen	487.5 ± 87.5	457.5 ± 282.7	291.3 ± 201.5
Time to Peak [s] Cerebellum [s]	262.5 ± 28.7	172.5 ± 15	255 ± 38.7
Tracer Delivery Rate Caudate Putamen	0.9 ± 0.2	1.1 ± 0.6	0.6 ± 0.2
Tracer Delivery Rate Cerebellum	1.1 ± 0.2	1.8 ± 0.4	0.9 ± 0.2