**Supplemental Digital Content 1: Criteria for scoring depth of anesthesia (from reference** [**16**](#_ENREF_16)**).**

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| **Scale/score** | **Definition** |
| *Posture and mobility* |
| 0 | Normal posture, locomotion, rearing and grooming |
| 1 | Ataxia and moderate atonia. Weight support, but no rearing |
| 2 | Weight support, but severe ataxia (e.g. may fall off table edge) |
| 3 | Muscle tone but no weight support; small purposive movements |
| 4 | Atonia, with no attempts at movement |
| *Righting reflex* |
| 0 | Rat struggles when placed on side, rapid forceful righting |
| 1 | Moderate resistance to placement on side, rapid righting |
| 2 | No resistance to placement on side, effortful but successful righting |
| 3 | Attempts to right, but unsuccessful |
| 4 | Righting not attempted, no movements |
| *Response to foot pinch a* |
| 0 | Brisk foot withdrawal and escape, sometimes with vocalization |
| 1 | Withdrawal and escape reaction but noticeably less brisk |
| 2 | Withdrawal and escape but only to firm pinch |
| 3 | Weak but directed foot withdrawal to firm pinch |
| 4 | No movement of foot even when clip applied for 2–3 s |
| *Response to tail pinch a* |
| 0 | Brisk tail flick and escape behavior, sometimes with vocalization |
| 1 | Tail flick and escape but noticeably less brisk |
| 2 | Tail flick and escape but only to firm pinch |
| 3 | Weak but noticeable tail flick to firm pinch |
| 4 | No response of tail even when clip applied for 2–3 s |

a The most intense stimulus used was a spring-loaded instrument that applied a force of ~500 g (80 g/mm2). This was moderately painful when applied to human skin. Use of two sensory and two motor measures is not redundant as one of each pair (tail-flick, hindlimb muscle tone) is largely a spinally mediated reflex, while the second (foot withdrawal, righting) is organized supraspinally. Empirically, during onset and recovery from anesthesia response to tail and foot pinch often diverged. However, scores on the two sensory measures during the deepest phase of anesthesia proved to be highly correlated, as did scores on the two motor measures.