

Table 1. Irwin test methodology and and scores.

| Physical factors and gross appearance | |
|---|---|
| Coat color | A= Albino, Ag=Agouti, Bl=Black |
| Body weight | Animal weight (g) before the test |
| Presence of whiskers | 0 = None; 1 = A few; 2 = Most, but not a full set; 3 = A full set |
| Appearance of fur | 0 = Ungroomed and disheveled; 1 = Somewhat disheveled; 2 = Well-groomed (normal) |
| Piloerection | 0 = None; 1 = Most hairs standing on end |
| Patches of missing fur on face | 0 = None; 1 = Some; 2 = Extensive |
| Patches of missing fur on body | 0 = None; 1 = Some; 2 = Extensive |
| Wounds | 0 = None; 1 = Signs of previous wounding; 2 = Slight wounds present; 3 = Moderate wounds present; 4 = Extensive wounds present |
| Observation of behavior in a novel environment | |
| Transfer behavior | 0 = Coma; 1 = Prolonged freeze (>10 sec.), then slight movement; 2 = Extended freeze, then moderate movement; 3 = Brief freeze (a few seconds), then active movement; 4 = Momentary freeze, then swift movement; 5 = No freeze, immediate movement; 6 = Extremely excited ("manic") |
| Body position | 0 = Completely flat (on stomach); 1 = Lying on side; 2 = Lying on back; 3 = Sitting or standing; 4 = Rearing on hind legs; 5 = Repeated vertical leaping |
| Spontaneous activity | 0 = None, resting; 1 = Casual scratch, groom, slow movement; 2 = Vigorous scratch, groom, moderate movement; 3 = Vigorous, rapid/dart movement; 4 = Extremely vigorous, rapid/dart movement |
| Respiration rate | 0 = Gasping, irregular; 1 = Slow, shallow; 2 = Normal; 3 = Hyperventilation |
| Tremor | 0 = None; 1 = Mild; 2 = Marked |
| Palpebral closure | 0 = Eyes wide open; 1 = Eyes 1/2 closed; 2 = Eyes closed |
| Piloerection | 0 = None; 1 = Coat stood on end |
| Gait | 0 = Normal; 1 = Fluid but abnormal; 2 = Limited movement only; 3 = Incapacity |
| Pelvic elevation | 0 = Markedly flattened; 1 = Barely touches; 2 = Normal (3mm elevation); 3 = Elevated (more than 3 mm elevation) |
| Tail elevation | 0 = Dragging; 1 = Horizontally extended; 2 = Elevated (Straub tail) |
| Urination | 0 = None; 1 = Little; 2 = Moderate amount; 3 = Extensive |
| Defecation | Count the number of fecal boli emitted during the 3-min. period |
| Reflexes and reactions to simple stimuli | |
| Touch escape | 0 = No response; 1 = Mild (escape response to firm stroke); 2 = Moderate (rapid response to light stroke); 3 = Vigorous (escape response to approach) |
| Positional passivity | 0 = Struggles when restrained by tail; 1 = Struggles when restrained by neck (finger grip, not scruffed); 2 = Struggles |

| | |
|--|--|
| | when held supine (on back); 3 = Struggles when restrained by hind legs; 4 = Does not struggle |
| Trunk curl | 0 = Absent; 1 = Present |
| Reaching reflex | 0 = None; 1 = Upon nose contact; 2 = Upon vibrassee contact; 3 = Before vibrassee contact (18mm); 4 = Early vigorous extension (25mm) |
| Body tone | 0 = Flaccid, no return of cavity to normal; 1 = Slight resistance; 2 = Extreme resistance, board like |
| Measures recorded during supine restraint | |
| Plantar surface skin color | 0 = Blanched; 1 = Pink; 2 = Bright, deep red flush |
| Heart Rate | 0 = Slow, bradycardia; 1 = Normal; 2 = Fast, tachycardia |
| Limb Tone | 0 = No resistance; 1 = Slight resistance; 2 = Moderate resistance; 3 = Marked resistance; 4 = Extreme resistance |
| Abdominal Tone | 0 = Flaccid, no return of cavity to normal; 1 = Slight resistance; 2 = Extreme resistance, board like |
| Righting Reflex | 0 = No impairment; 1-10 = Number of seconds required to right |
| Air Righting Reflex | 0 = No impairment; 1-10 = Number of seconds required to right |
| Salivation | 0 = None; 1 = Slight margin of sub-maxillary area; 2 = Wet zone entire sub-maxillary area |
| Provoked Biting | 0 = Absent; 1 = Present |
| Motor coordination | |
| Grip strength | 0 = None; 1 = Slight grip, semi-effective; 2 = Moderate grip, effective; 3 = Active grip, effective; 4 = Unusually effective |
| Inverted screen (s) | 0-60 = Number of seconds before falling |
| Wire maneuver | 0=Active grip with hindlegs; 1= Difficulty to grasp with hindlegs; 2= Unable to grasp with hindlegs; 3=Unable to lift hindlegs, falls within second; 4= Falls immediately |
| Wire Hand | 0=Active grip with hindlegs; 1= Difficulty to grasp with hindlegs; 2= Unable to grasp with hindlegs; 3=Unable to lift hindlegs, falls within second; 4= Falls immediately |
| Pole climb | 0= Climbs down within 30 sec; 1= Turns and climbd up the pole; 2= Turns but then freezes; 3= Does not move within 30 seconds or climbs but not off the pole; 4= Falls off. |

Table 2. Irwin test 1 hour after Guaiacol treatment.

| | | CONTROL | GUAIACOL 50mg/kg | GUAIACOL 100 mg/kg | GUAIACOL 200 mg/kg |
|---|--------------------------------|----------------|-----------------------------|-------------------------------|-------------------------------|
| Physical factors and gross appearance | Coat color | A | A | A | A |
| | Body weight (g) | 28,8 ± 0,66 | 33,83 ± 0,81 | 31,03 ± 0,45 | 32,1 ± 3,12 |
| | Presence of whiskers | 3 ± 0 | 3 ± 0 | 3 ± 0 | 3 ± 0 |
| | Appearance of fur | 2 ± 0 | 2 ± 0 | 2 ± 0 | 2 ± 0 |
| | Patches of missing fur on face | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Patches of missing fur on body | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Wounds | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| Observation of behavior in a novel environment | Transfer behavior | 5 ± 0 | 5 ± 0 | 5 ± 0 | 5 ± 0 |
| | Body position | 3 ± 0 | 3 ± 0 | 3 ± 0 | 3 ± 0 |
| | Spontaneous activity | 2 ± 0 | 1,67 ± 0,58 | 1 ± 0 | 1,67 ± 0,58 |
| | Respiration rate | 2 ± 0 | 2 ± 0 | 2 ± 0 | 2 ± 0 |
| | Tremor | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Palpebral closure | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0,67 ± 0,58 |
| | Piloerection | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Gait | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Pelvic elevation | 2 ± 0 | 2 ± 0 | 2 ± 0 | 2 ± 0 |
| | Tail elevation | 1 ± 0 | 1 ± 0 | 1 ± 0 | 0,67 ± 0,58 |
| | Urination | 0,67 ± 0,58 | 0,67 ± 0,58 | 0,67 ± 0,58 | 0,67 ± 0,58 |
| | Defecation | 5 ± 1,73 | 4 ± 1 | 1 ± 1 | 2,33 ± 0,58 |
| Reflexes and reactions to simple stimuli | Touch escape | 2 ± 0 | 2 ± 0 | 2,67 ± 0,58 | 2,33 ± 0,58 |
| | Positional passivity | 0,67 ± 0,58 | 0,33 ± 0,58 | 0,33 ± 0,58 | 0,33 ± 0,58 |
| | Trunk curl | 1 ± 0 | 0,67 ± 0,58 | 1 ± 0 | 1 ± 0 |
| | Reaching reflex | 3 ± 0 | 3 ± 0 | 3 ± 0 | 3 ± 0 |
| | Body tone | 1 ± 0 | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| Measures recorded during supine restraint | Skin color | 1 ± 0 | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| | Heart rate | 1 ± 0 | 1 ± 0 | 1 ± 0 | 0,67 ± 0,58 |
| | Limb tone | 1 ± 0 | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| | Abdominal tone | 1 ± 0 | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| | Righting reflex | 0,33 ± 0,58 | 0 ± 0 | 1,33 ± 0,58 | 0 ± 0 |
| | Air righting reflex | 0,33 ± 0,58 | 0,33 ± 0,58 | 1,33 ± 0,58 | 0,33 ± 0,58 |
| | Salivation | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Provoked biting | 1 ± 0 | 0,67 ± 0,58 | 1 ± 0 | 1 ± 0 |
| Grip strength and motor coordination | Grip strength | 3 ± 0 | 3 ± 0 | 3 ± 0 | 3 ± 0 |
| | Wire maneuver | 0 ± 0 | 1 ± 1 | 0,67 ± 0,58 | 1 ± 0 |
| | Wire hang | 0 ± 0 | 0,67 ± 1,15 | 0,67 ± 0,58 | 1 ± 0 |
| | Inverted screen | 60 ± 0 | 46,67 ± 23,09 | 60 ± 0 | 60 ± 0 |
| | Pole climb | 0 ± 0 | 0 ± 0 | 0 ± 0 | 0 ± 0 |

Table 3. Irwin test 4 hours after Guaiacol treatment.

| | | GUAIACOL 50mg/kg | GUAIACOL 100 mg/kg | GUAIACOL 200 mg/kg |
|---|--------------------------------|-----------------------------|-------------------------------|-------------------------------|
| Physical factors and gross appearance | Coat color | A | A | A |
| | Body weight (g) | 33,07 ± 0,68 | 30,63 ± 0,15 | 31,8 ± 3,21 |
| | Presence of whiskers | 3 ± 0 | 3 ± 0 | 3 ± 0 |
| | Appearance of fur | 2 ± 0 | 2 ± 0 | 2 ± 0 |
| | Patches of missing fur on face | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Patches of missing fur on body | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Wounds | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| Observation of behavior in a novel environment | Transfer behavior | 5 ± 0 | 4,67 ± 0,58 | 4,67 ± 0,58 |
| | Body position | 3 ± 0 | 3 ± 0 | 3 ± 0 |
| | Spontaneous activity | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| | Respiration rate | 2 ± 0 | 2 ± 0 | 2 ± 0 |
| | Tremor | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Palpebral closure | 0 ± 0 | 0,33 ± 0,58 | 0 ± 0 |
| | Piloerection | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Gait | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Pelvic elevation | 2 ± 0 | 2 ± 0 | 0,67 ± 1,15 |
| | Tail elevation | 1 ± 0 | 0,67 ± 0,58 | 1 ± 0 |
| | Urination | 0,33 ± 0,58 | 0,33 ± 0,58 | 0 ± 0 |
| | Defecation | 3 ± 2 | 2,33 ± 3,21 | 1,33 ± 1,53 |
| Reflexes and reactions to simple stimuli | Touch escape | 2 ± 0 | 2,33 ± 0,58 | 2,67 ± 0,58 |
| | Positional passivity | 0,33 ± 0,58 | 0 ± 0 | 0,33 ± 0,58 |
| | Trunk curl | 1 ± 0 | 0,67 ± 0,58 | 1 ± 0 |
| | Reaching reflex | 3 ± 0 | 3 ± 0 | 3 ± 0 |
| | Body tone | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| Measures recorded during supine restraint | Skin color | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| | Heart rate | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| | Limb tone | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| | Abdominal tone | 1 ± 0 | 1 ± 0 | 1 ± 0 |
| | Righting reflex | 0,67 ± 0,58 | 1 ± 0 | 0,33 ± 0,58 |
| | Air righting reflex | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| | Salivation | 0 ± 0 | 0 ± 0 | 0 ± 0 |
| Provoked biting | 0,67 ± 0,58 | 1 ± 0 | 0,67 ± 0,58 | |
| Grip strength and motor coordination | Grip strength | 3 ± 0 | 3 ± 0 | 3 ± 0 |
| | Wire maneuver | 0,67 ± 0,58 | 0 ± 0 | 0 ± 0 |
| | Wire hang | 0,67 ± 0,58 | 0 ± 0 | 0 ± 0 |
| | Inverted screen | 60 ± 0 | 60 ± 0 | 60 ± 0 |
| | Pole climb | 0 ± 0 | 0 ± 0 | 0 ± 0 |