

Supplementary Table S1. Principles and criteria that are the basis for the Welfare Quality® assessment protocols

| Welfare principles | Welfare criteria |
|---------------------------|--|
| Good feeding | Absence of prolonged hunger Absence of prolonged thirst |
| Good housing | Comfort around resting Thermal comfort Ease of movement |
| Good health | Absence of injuries Absence of disease Absence of pain induced by management procedures |
| Appropriate behavior | Expressing of social behaviors Expressing of other behaviors Good human-animal relationship Positive emotional status |

Supplementary Table S2. Five Freedoms and Five-Domain Model

| Five Freedoms | Five Domains |
|---|---------------------|
| 1. Freedom from hunger and thirst | 1. Nutrition |
| 2. Freedom from discomfort | 2. Environment |
| 3. Freedom from pain, injury and diseases | 3. Health |
| 4. Freedom to express normal behavior | 4. Behavior |
| 5. Freedom from fear and distress | 5. Mental state |