

### **Category E Explanation**

1. Registration Number: 14-R-0036
2. Number: 13
3. hamster

#### **Survivorship Analysis:**

Many DSG-deficient animals develop cardiomyopathy by approximately 250 days of age. This progresses so that life span is shortened. The scientific rationale is to assess survivorship (life span) resulting from dsg knockout, circadian phase shifts, and their interaction. The genetic defect causes dilated and/or hypertrophic cardiomyopathy. We cannot give therapeutic treatments to ameliorate heart disease that extend life span without compromising the study. Animals that have trouble reaching food or that become dehydrated are given moist nutritional gel on the cage floor, and any animals having health problems apparently unrelated to the dsg knockout receive appropriate veterinary care. Animals are monitored in order for them to be humanely euthanized near to the end of their natural life span. Occasionally animals are found dead before humane euthanasia can be performed.