Reviewer’s report

Title: Cardiac involvement in beagle-based canine X-linked muscular dystrophy in Japan (CXMDJ): electrocardiographic, echocardiographic, and morphologic studies

Version: 2 Date: 15 August 2006
Reviewer: Dominic Wells

Reviewer’s report:

This manuscript reports the characterisation of the cardiac phenotype in the canine X-linked muscular dystrophy animal model developed in Japan by breeding the dystrophic golden retriever onto the beagle background to develop a small canine model for Duchenne muscular dystrophy. The authors demonstrate that the cardiac phenotype is less severe in the smaller canine model. The data are necessarily limited by the availability of the dogs but are a useful addition to the literature and provide important details for an additional large animal model in which cardiac pathology associated with muscular dystrophy can be examined.

Minor Essential Revisions:

1. Table 1 has normal misspelled in the header for the first 4 columns.
2. Figure 1 is titled Echocardiographic findings in CXMDJ. Surely this should be Electrocardiographic?
3. For the text relating to figure 1 the term normal littermates should be replaced with the normal littermate as data are only presented for one normal dog (page 11).
4. The author’s contributions section appears incomplete. Is FY actually YF? What was the role of MY?

Discretionary Revisions:

1. The authors discuss reasons for differences between the GRMD and CXMD on page 16 but do not appear to consider the effect of genetic background on the cardiac pathology. Although dog breeds are not as genetically uniform as many laboratory rodents, it seems quite possible that genetic differences between the two breeds may play some role in modifying disease progression.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests.