Reviewer’s report

Title: The role of CACN1AS in predisposition to malignant hyperthermia

Version: 1 Date: 13 August 2009

Reviewer: Frank Lehmann-Horn

Reviewer’s report:

Reviewer’s report: General comments:
1. It addresses an important and timely issue. 2. It is well reasoned. 3. It is well balanced. The authors avoid over-interpretation of the identified genetic alteration that potentially causes MH susceptibility in a single core family.
4. The report is well written and does not contain any errors of fact.

Minor Essential Revisions

More clinical information on the anesthesia-related event that occurred in the Arg174Trp patient is required, particularly all items of the Larach score as well as serum potassium levels, etc. Were the muscle spasms which lasted 2 weeks generalized or present in the masseter muscles only.

Discretionary Revisions

Ser606Asn was identified in a single MH pedigree but discordant with the MH status; add details on the discordance.

Reference 22: correct Hirn to Horn

Table 2: correct Jurken to Jurkat and add Jurkat-Rott et al. 1994 for Arg1239His

Table 2: correct: Ala1492Asp is a polymorphism and not a disease-causing mutation.

Over all, although specialized, the manuscript is interesting.

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

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.