Reviewer’s report

Title: Detecting acute neurotoxicity during platinum chemotherapy by neurophysiological assessment of motor nerve hyperexcitability

Version: 1 Date: 26 May 2010

Reviewer: Richard Stark

Reviewer’s report:

This is an interesting well conceived study which clarifies some of the features of early oxaliplatin neurotoxicity. The numbers of cases in each group analysed are small, but the differences between the groups seem convincing nevertheless. The study would have been strengthened by having a well-defined hypothesis to be tested (for example that post-oxaliplatin studies would demonstrate more motor hyperexcitability than the other studies pre-treatment or after other platinum compounds) and indicating explicitly whether a statistically significant difference had been seen. While it is intuitive that motor hyperexcitability could cause spontaneous high frequency motor unit activity, the same cannot be said for repetitive CMAPs. A sentence or two clarifying how these are thought to be generated would be of value; where in the nerve do they originate?

Strengths of the study include the blinding of the neurophysiologist: as the authors correctly state, neurophysiological studies are more subjective than may be assumed. The paper highlights the unusual clinical symptoms seen after oxaliplatin use, explores a plausible physiological mechanism and proposes a method for investigating this further.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.