Reviewer's report

Title: Toxicology and Teratology Review of the Active Ingredients of Professional Therapy Muscle Care Products

Version: 3  Date: 31 October 2014

Reviewer: ronald wang

Reviewer's report:

The current report reviewed the toxicological data of active ingredients in professional therapy muscle care products, particularly focused on the developmental and reproductive effects during pregnancy and lactation. The review is comprehensive, but it is better to have a table to summarise the available human and animal data for ease of reference and further potential investigations. In the table, please separate human data and animal data, including the US, EU and Australia teratological category classification, and separating general toxicology, development and reproductive effects. For human, please provide the medical indications (if medical conditions applied), recommended dose, systemic and local effects, etc. For animal studies, please provide the species, exposure, test doses, NOEL, LD50 dose, systemic and local effects, etc. If there is no data available, it is important to state also.

Since it is indicated that compounds in similar creams are present at different ratios, please provide the ranges in Table 2. In addition, it is better to divide the ingredients in terms of anti-inflammatory, analgesics, circulation enhancers and tissue repairs.

A paragraph of physiological and pharmacological characteristics of pregnancy subject to topic administration will be helpful. Please also address some muscle care products are used for some medical conditions which may be more sensitive to the adverse effects than someone had no medical problem.

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.'