Reviewer's report

Title: Potential of stratum corneum lipids liposomes for the topical delivery of 5-aminolevulinic acid in photodynamic therapy of skin cancer.

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Reviewer: Arto Urtti

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Accept after revision, which I do not need to see

This is a small study that shows some interesting data. The mechanistic interpretation of the data is, however, quite superficial.

Why would SCLL target to the living epidermis and dermis? These layers have very different lipid composition compared to the stratum corneum. Therefore, one would expect that SCLL resides in the stratum corneum, not in living epidermis (like the data shows). This should be further discussed or commented. Concentration gradient in the stratum corneum as the driving force can not explain these findings as the levels of the drug appear to be similar in the SC for both solution and liposome administration.

What kind of ceramides were used in the liposomes?

It is not clear from the methods how the formulations were applied (volumes, contact times etc).

What was the time period that was used for the calculation of permeability coefficients? Different values can be obtained from Fig 2 depending on the data points that are used.

There are several small spelling mistakes that should be corrected. Especially spacing between many words is missing.

Competing interests:
None declared.