Reviewer’s report

Title: Expression of a Cu,Zn superoxide dismutase typical for familial amyotrophic lateral sclerosis increases the vulnerability of neuroblastoma cells to infectious injury

Version: 3 Date: 9 August 2007

Reviewer: Gerald Muench

Reviewer’s report:

Discretionary Revisions (which the author can choose to ignore)

The authors propose, that infections can aggravate the course of neurodegenerative diseases including amyotrophic lateral sclerosis (ALS), if they increase oxidative stress.

They should in solid and well done experiments that SH-SY5Y neuroblastoma cells transfected with the G93A mutant of SOD1 typical for familial ALS (G93A-SOD1) are more vulnerable to the neurotoxic action of pneumolysin and to the attack of monocytes stimulated by the Toll-like receptor 2 agonist and calcium influx (which might cause more oxidative stress by activation of calcium dependendt ROS)

The publication is well written, precise and draws the proper conclusions. It might have a large impact on the medical community suggesting additional antioxidant treatment in vulnerable patients during or shortly after infections.

I suggest acceptance without revisions.

What next?: Accept without revision

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests