Reviewer's report

Title: Would artificial neural networks implemented in clinical wards help nephrologists in predicting epoetin responsiveness?

Version: 1 Date: 4 August 2006

Reviewer: Roger W Jelliffe

Reviewer's report:

General
The paper has been much improved by a more specific discussion of neural networks. Unfortunately, my experience and knowledge of them is limited, and much of what they say I simply do not understand, nor would most readers, I fear. If they could somehow make their statements more clear to the ordinary reader, that would be a great help. It might be very helpful to have the paper reviewed by someone better acquainted with neural networks.

They have discussed many of the points previously raised. They have compared well the predictions of the software with the nephrologists. They have not yet shown how this will be used in routine clinical practice, nor how the models will be further updated (if at all) by making more individualized models based on each subjects own data. Will this be done? It would be helpful; to clarify this, and how. It would also be useful to have some comparison of the use of neural networks with compartmental models and differential equations, and other methods of population PK/PD modeling, for example.

The paper is certainly publishable now. If the authors would respond to these other points, the paper would be strengthened.

-------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

-------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

-------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)