Reviewer's report

Title: Central neuropeptide Y receptors are involved in 3rd ventricular ghrelin induced fasted motor activity of the colon in conscious fed rats.

Version: 1 Date: 24 September 2004

Reviewer: Akio Inui

Reviewer's report:

General
The authors demonstrated the interesting findings that exogenous ghrelin either icv or ip stimulates colonic transit time in conscious rats via neuropeptide Y Y1 receptor in the central nervous system.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1) The authors used the word ‘fasted motor activity’ in the title, but they actually measured colonic transit time.
2) BIBP-3226 may produce central depressive effects in contrast to BIBO-3304 developed later. Could the authors show the evidence that B1BP-3226 acted specifically in their system at the dose used?
3) Labeling of figures 1 and 2 is wrong.
4) The authors should refer to not only Ref.23 but also Ref.1 (and potentially Nat Rev Neurosci 2:551-560, 2001) to indicate that NPY Y1 receptor mediates ghrelin-induced feeding.
5) It is already reported that ghrelin induces fasted motor activity in the stomach and the duodenum of conscious fed rats via the vagus nerve (Refs.10 and 11). NPY Y2 receptor appears to be involved in this action. The authors need to include these findings and to discuss in more detail the potential mechanisms by which ghrelin stimulates colonic motor function.

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
None