

## A clinical audit of the efficacy of tegaserod as a prokinetic agent in the intensive care unit

Adam Deane, Robert Young, Marianne Chapman and Robert Fraser

**TO THE EDITOR:** We read with interest the report by Stephens and colleagues on the success of tegaserod as a prokinetic agent for rescue therapy in patients intolerant of nasogastric feeding.<sup>1</sup> While the results of their study are encouraging, we suggest caution before tegaserod is used outside clinical trials. Since they submitted their study to the Journal, there have been reports of an increase in ischaemic cardiovascular events related to tegaserod,<sup>2</sup> resulting in the Food and Drugs Administration withdrawing the drug from market in the United States. Recently, a restricted permit for use of the drug was reinstated for patients who "meet strict criteria and have no known or pre-existing heart problems and [are] in critical need of this drug".<sup>3</sup>

As the mechanism underlying the increase in ischaemic events with tegaserod is unknown, it seems prudent to be cautious about its use, especially in the intensive care unit where a significant proportion of patients are at risk of cardiovascular events. Delayed gastric emptying in critically ill patients is associated with adverse outcomes and remains difficult to treat, and there is a need for effective prokinetic agents with an acceptable profile of side effects. While the combination of erythromycin and metoclopramide has proven efficacy for patients who fail feeding,<sup>4</sup> the limita-

tions of this approach mandate an ongoing search for other prokinetic drugs.

Adam Deane, Research Fellow<sup>1</sup>

Robert Young, Director<sup>1</sup>

Marianne Chapman, Staff Specialist<sup>1</sup>

Robert Fraser, Director of Unit<sup>2</sup>

1 Department of Intensive Care, Royal Adelaide Hospital, Adelaide, SA.

2 Department of Investigation and Procedures, Repatriation General Hospital, Adelaide, SA.

adam.deane@adelaide.edu.au

### References

1. Stephens DP, Thomas JH, Collins SJ, et al. A clinical audit of the efficacy of tegaserod as a prokinetic agent in the intensive care unit. *Crit Care Resusc* 2007; 9: 148-50.
2. Pasricha PJ. Desperately seeking serotonin. A commentary on the withdrawal of tegaserod and the state of drug development for functional and motility disorders. *Gastroenterology* 2007; 132: 2287-90.
3. US Food and Drug Administration. Center for Drug Evaluation and Research. Zelnorm (tegaserod maleate) information. Available at: <http://www.fda.gov/cder/drug/infopage/zelnorm/default.htm> (accessed Aug 2007).
4. Nguyen NQ, Chapman MJ, Fraser RJ, et al. Erythromycin is more effective than metoclopramide in the treatment of feed intolerance in critical illness. *Crit Care Med* 2007; 35: 483-9. □

Dianne P Stephens, Jane H Thomas, Sarah J Collins, Paul B Goldrick and Stephen Fowler

**IN REPLY:** We thank Deane and colleagues for their response to our audit of the use of tegaserod as a prokinetic agent in our intensive care unit.<sup>1</sup> We have been using tegaserod for a few years in the ICU and have never noted any problems associated with its use. It was a very useful drug that appeared to work where other prokinetics failed. Having said that, we have ceased using it since its withdrawal from the market in the United States pending a full assessment of the evidence on which this withdrawal was based. We will then make a considered assessment of the risk-benefit ratio of its use in a more limited population. Given the side effect profile and limited efficacy of the prokinetics currently in use, it is definitely worth continuing to evaluate new agents in the ICU setting.

Dianne P Stephens, Director of Intensive Care Medicine

Jane H Thomas, ICU Research Coordinator

Sarah J Collins, ICU Staff Specialist

Paul B Goldrick, ICU Supervisor of Training

Stephen Fowler, Critical Care Pharmacist

Intensive Care Unit, Royal Darwin Hospital, Darwin, NT.

dianne.stephens@nt.gov.au

### References

1. Stephens DP, Thomas JH, Collins SJ, et al. A clinical audit of the efficacy of tegaserod as a prokinetic agent in the intensive care unit. *Crit Care Resusc* 2007; 9: 148-50. □