



HHS Public Access

Author manuscript

J Am Coll Surg. Author manuscript; available in PMC 2017 January 06.

Published in final edited form as:

J Am Coll Surg. 2016 August ; 223(2): 423–424. doi:10.1016/j.jamcollsurg.2016.05.009.

Alvimopan Use, Outcomes, and Costs In reply to Fujita

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We thank Dr Fujita for his thoughtful comments regarding our analysis of the effectiveness of alvimopan in routine practice.¹ His first concern was that patients who received alvimopan were healthier than patients who did not, which puts them at lower risk for postoperative ileus and other complications. We were concerned about this very issue because it may make it appear that alvimopan was associated with better outcomes overall. However, despite conducting 2 separate forms of adjustment, both accounting for the fact that alvimopan patients were at lower risk to begin with, we still found an association between alvimopan and a shorter length of stay (LOS). Although it is possible that there are unmeasured sources of bias, the results of our primary analysis closely approximate results from randomized studies, which do not have the problem of confounding, so we believe that we have accounted for the majority of confounding bias in this study.

The second concern was that the shorter LOS associated with alvimopan might lead to higher rates of readmission because patients are leaving the hospital sooner. One important consideration is that alvimopan is intended solely to reduce the incidence of postoperative ileus, and not to decrease the incidence of other postoperative conditions that might lead to a longer LOS or readmission. We did not reinvestigate this because previous studies have shown no association between alvimopan use and readmission among patients undergoing colorectal surgery.^{2,3} Alvimopan is often used in the context of Enhanced Recovery After Surgery (ERAS) programs, but it is just 1 component in the pathway. A well-designed and evaluated ERAS program would ideally not result in a higher readmission rate. However, we agree with Dr Fujita that any intervention, including an ERAS program, may have unintended consequences. It is important to remember that use of pathways and ERAS programs cannot be a substitute for provider judgment. One way to potentially improve on existing programs is to extend ERAS pathways beyond the hospital doors to provide post-discharge monitoring. This could occur through follow-up phone calls or mobile health applications to ensure that patients continue to improve after discharge.

Dr Fujita's third concern was that there may be unknown effects of alvimopan on postoperative morbidity and mortality beyond readmission, such as overall complications and rates of opioid addiction. This is a valid concern, but several randomized studies have found no difference in the rate of adverse events between patients who were and were not given alvimopan.^{4,5} Opioid addiction is an important concern. Fortunately, several randomized studies showed that patients treated with alvimopan had opioid consumption that was clinically similar to that in patients who were not treated with alvimopan.^{4,5} This may be due to the fact that alvimopan is not systemically absorbed and therefore does not interfere with peripheral pain control.

Acknowledgments

Disclosure Information: Dr Ehlers was supported by a training grant from the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health under Award Number T32DK070555. Dr Farjah received support as a Cancer Research Network Scholar (CRN4: Cancer Research Resources & Collaboration in Integrated Health Care Systems, grant number U24 CA171524). SCOAP is a program of the Foundation for HealthCare Quality. The Comparative Effectiveness Research Translation Network (CERTAIN) is a program of the University of Washington that provided research and analytic support for this publication and was supported by funding from the Agency for Healthcare Research and Quality under award number R01HS020025. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health, the Cancer Research Network, the Foundation for HealthCare Quality, or the Agency for Healthcare Research and Quality.

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