

Letter to the Editor: Alvimopan to Decrease POI in Radical Cystectomy (RC) Patients

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We read with interest the article by Cui, Chen, Qi and others, on the use of alvimopan to decrease POI in radical cystectomy (RC) patients. Their Meta-analysis included 5 studies (n=613 patients) and concluded that alvimopan use significantly reduced length of stay (LOS) and also reduced times to clear liquid and solid food. Time to first bowel movement was also significantly shorter in alvimopan treated patients [1].

This agrees with the Cochrane review of alvimopan when used in RC patients published in 2017 [2]. Though limited by inclusion of only one randomized controlled study [3], Sultan et al. conclude that patients who received alvimopan “probably tolerate food faster, are discharged from the hospital quicker and have fewer adverse events”.

In addition to participating in the multinational trial, these results agree with our internal case-controlled review of 75 patients who underwent RC by a single surgeon at our academic hospital setting. We found that alvimopan decreased our average LOS by 3.63 days compared to the control arm (7.24 vs. 10.87 days, $p < 0.001$). Alvimopan use was also related to a decrease in hospital-stay cost of \$2,909.00, but this was not significantly different from the control arm ($p=0.20$). Significantly less pro-kinetic medications were used in the alvimopan arm than the controls ($p=0.015$). Patients on average received 11.49 doses of alvimopan 12-mg. Our patients follow an enhanced recovery after surgery (ERAS) protocol after surgery which includes the peripherally-acting mu-opioid receptor antagonist (PAMORA) administration, thoracic epidural catheter placement, early enteral feeding, ambulation, and the judicious use of fluid administration during surgery. We believe that this combination of medications and interventions significantly contributes to a decreased length of stay for our RC patients.

Authors Cui and colleagues recommend future large scale RCTs to study this further [1] and we concur. At the cost of an additional \$2,320 (\$290 per day) for alvimopan, we also wonder if similarly-acting agents such as naloxegol (\$9.00 per day) may have similar efficacy and have started our own internal randomized controlled trial to evaluate the possibility. If this appears to have equivalent benefits for decreased LOS, POI and adverse events, hospitals may potentially realize an additional savings of around \$2,250 per patient.

References

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