Letter to the Editor: Reply

Bruno Vielle^{1,2} · Antoine Hamy^{2,3} · Aurélien Venara^{2,3,4}

Published online: 18 July 2017
© Société Internationale de Chirurgie 2017

Dear Editor-in-Chief,

We thank Ayubi et al. for their constructive remarks and appreciate the opportunity to further improve our methodological quality to assess the risk of failure of nasogastric tube removal [1]. Here we respond to the methodological points they noted.

First, the odds-ratio of the left-sided tumor in Table 2 was calculated with the reference group defined as the pooled transverse tumors and right-sided tumors.

Modified Table 2: Multivariate analysis of factors associated with the need for nasogastric tube reinsertion

	Odd ratio	95% CI	<i>p</i>
Small bowel dilatation	0.6	0.2–1.4	0.22
Postoperative ileus	4.2	1.6–10.9	0.003
Severe morbidity	4.4	1.7–11.5	0.003
Left-sided tumour	7.8	2.7–23.1	<0.001

Secondly, in order to decrease or remove the sparse data bias, we carried out a penalized multivariate logistic regression using the *penlogit* command in Stata V13, which

is based on the penalization via data augmentation principle [2]. The corrected odds-ratio values and their 95% confidence intervals are presented on the following modified Table 2. The values for odds-ratios are similar, with narrower 95% CI.

These results have to be taken in a body of relevant evidence. Indeed, early nasogastric tube removal has been assessed in several studies in the context of enhanced recovery programs. Safety and feasibility of such programs has been confirmed in the context of emergency surgery [3–5] but early naso-gastric tube removal has not been, since now, studied in the context of colon obstruction. We believe that early nasogastric tube removal is safe and not associated with an important rate of reinsertion, but it should be performed with caution in case of left-sided tumor.

References

1. Venara A, Barbieux J, Colas P, Le Foulher A, Lermite E, Hamy A (2017) Primary surgery for malignant large bowel obstruction: postoperative nasogastric tube reinsertion is not mandatory. *World J Surg* 41:1903–1909. doi:10.1007/s00268-017-3949-z
2. Greenland S, Mansournia MA (2015) Penalization, bias reduction, and default priors in logistic and related categorical and survival regressions. *Stat Med* 34:3133–3143
3. Lohsiriwat V (2014) Enhanced recovery after surgery vs conventional care in emergency colorectal surgery. *World J Gastroenterol* 20:13950–13955
4. Paduraru M, Ponchietti L, Casas IM, Svenningsen P, Zago M (2017) Enhanced recovery after emergency surgery: a systematic review. *Bull Emerg Traum* 5:70–78
5. Roulin D, Blanc C, Muradbegovic M, Hahnloser D, Demartines N, Hübner M (2014) Enhanced recovery pathway for urgent colectomy. *World J Surg* 38:2153–2159. doi:10.1007/s00268-014-2518-y

✉ Aurélien Venara
a.venara@yahoo.fr

¹ Department of Biostatistics and Methodology, University Hospital of Angers, 4 rue Larrey, 49933 Angers Cedex 9, France

² LUNAM, University of Angers, Angers, France

³ Department of Visceral Surgery, University Hospital of Angers, 4 rue Larrey, 49933 Angers Cedex 9, France

⁴ UMR INSERM U1235, TENS, The Enteric Nervous System in Gut and Brain Disorders, Institut des Maladies de l'Appareil Digestif, 1, rue Gaston Veil, 44035 Nantes, France