



RESPONSE TO COMMENT ON LENT ET AL.

## All-Cause and Specific-Cause Mortality Risk After Roux-en-Y Gastric Bypass in Patients With and Without Diabetes.

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We thank Drs. Pontiroli and Zakaria (1) for their thoughtful comments in response to our recent study (2). Our results indicate that the large, significant overall reduction in mortality risk (when combining patients with and without diabetes) is driven by patients with diabetes. We found that Roux-en-Y gastric bypass (RYGB) patients with diabetes at the time of surgery experienced a survival benefit compared with nonsurgical control subjects with diabetes. The mortality risk in RYGB patients without diabetes was weaker and did not significantly differ from nonsurgical control subjects without diabetes (hazard ratio 0.92 [95% CI 0.64–1.32]). RYGB continues to be the gold standard in bariatric surgery procedures, and our study adds to the strong body of literature documenting the durable benefits of RYGB for patients with obesity and diabetes.

We believe that our findings (2) diverge from those of Pontiroli et al. (3) because of our differing matching strategies for bariatric surgery patients and nonsurgical control subjects (age/sex/BMI/diabetes status vs. age/sex/BMI and blood pressure), duration of follow-up (median 5.8–6.7 vs. 5–15

years), rates of diabetes in bariatric patients (25.7% vs. 13.5%), bariatric patient sample sizes (2,428 vs. 385), and procedures studied (RYGB vs. gastric band).

Additionally, Davidson et al. (4) used self-reported driver's license application information (height, weight) to match RYGB patients to nonsurgical control subjects. Therefore, Davidson et al. (4) did not have clinical information about the control subjects, including diabetes status, with which to stratify analyses by diabetes status at the time the bariatric patient underwent surgery.

We agree that replication of our findings in larger studies, with longer follow-up time frames and a greater breadth of bariatric surgery procedures, is needed. We intend to reassess mortality risk in the next 5 to 10 years when our gastric bypass patients are a median of >10 years post-surgery for meaningful comparison with findings of Pontiroli et al. (3) in gastric banding patients.

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