Supplementary Online Content


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This supplementary material has been provided by the authors to give readers additional information about their work.
**eFigure 1. Flow of Surgical Patients and Matched Patients From January 1, 2000, to September 30, 2011**

- **2,752 Surgical Cases**
  - Removed n=15; never obese
  - **2737 Surgical cases**
  - Removed n=32; no BMI
  - **2,705 Surgical Cases**
    - Removed n=40; no valid bariatric surgery code or surgery was revision
    - **2,665 Surgical Cases**
    - Removed n=120; medical exclusions*
    - **2,545 Surgical Cases**
    - Removed n=33; pre-surgical stay >5 days or no record of inpatient stay at date of surgery
    - **2,512 Surgical Cases**
    - Removed n=12; no match within VISN on diabetes, race, gender, BMI, or DCG
    - **2,500 Surgical Cases**

- **1,447,165 individuals who were potential matches**
  - Removed n=179,992; no match on gender, BMI, age categories
  - **1,267,173 individuals who were potential matches**
  - Removed n=639,626; no VISN match and medical exclusions
  - **627,547 individuals who were potential matches**
  - Removed n=179,992; no match on gender, BMI, age categories
  - **7115 individuals in 3:1 match for a total of 7462 matches** (Note: 149 individuals (161 of the matches) were future cases and were censored at date of surgery)

* Medical Exclusions (n=120; patients may have multiple exclusions)
  2 Alzheimer's/Dementia; 100 Cancer; 12 Crohn's/Inflammatory bowel disease; 3 End-stage renal disease; 0 Gestational diabetes mellitus; 1 Peritoneal effusion; 6 Pregnancy

** Potential matches often had many BMI measurements over the study period, so each could match to more than one surgical patient.
Figure 2A. 2000-2005 cohort (n=1,159 surgical patients and 3,452 matched patients); follow-up censored at December 31, 2007. Kaplan-Meier estimated mortality rates at 1, 5, and 8 years were 4.0%, 8.8%, and 13.0%, respectively, for the surgical patients and 2.1%, 11.8%, and 21.9% for the matches. A log-rank test stratified by matched group indicated a significant difference in the survival curves (p=0.047).
Figure 2B. 2006-2011 cohort (n=1,341 surgical patients and 4,010 matched patients); follow-up censored at December 31, 2013. Kaplan-Meier estimated mortality rates at 1, 5, and 8 years were 1.1%, 3.7%, and 7.4%, respectively, for the surgical patients and 1.4%, 9.0%, and 16.8% for the matches. A log-rank test stratified by matched group indicated a significant difference in the survival curves (p<0.0001).
eFigure 3. Kaplan-Meier Estimated Mortality Curves Stratified by Diabetes Status at Time of Surgery

A. *Diabetes Diagnosis at baseline (n=1,367 surgical patients and 4,077 matched patients).* Kaplan-Meier estimated mortality rates at 1, 5, and 10 years were 2.8%, 7.6%, and 15.8%, respectively, for the surgical patients and 2.3%, 13.1%, and 30.5% for the matches. A log-rank test stratified by matched group indicated a significant difference in the survival curves (p<0.0001).
B. No Diabetes Diagnosis at baseline (n=1,133 surgical patients and 3,385 matched patients). Kaplan-Meier estimated mortality rates at 1, 5, and 10 years were 2.0%, 4.9%, and 11.5%, respectively, for the surgical patients and 1.1%, 7.2%, and 16.6% for the matches. A log-rank test stratified by matched group indicated a significant difference in the survival curves (p<0.001).
eFigure 4. Kaplan-Meier Estimated Mortality Curves Stratified by Sex

A. Male (n=1,849 surgical patients and 5,542 matched patients). Kaplan-Meier estimated mortality rates at 1, 5, and 10 years were 3.0%, 7.5%, and 16.3%, respectively, for the surgical patients and 2.1%, 12.6%, and 28.8% for the matches. A log-rank test stratified by matched group indicated a significant difference in the survival curves (p<0.0001).
B. Female (n=651 surgical patients and 1,920 matched patients). Kaplan-Meier estimated mortality rates at 1, 5, and 10 years were 0.9%, 3.4%, and 6.9%, respectively, for the surgical patients and 0.7%, 3.9%, and 9.5% for the matches. A log-rank test stratified by matched group indicated no significant difference in the survival curves (p=0.24).
A. *Super obese at baseline (n=730 surgical patients and n=2,130 matched patients).* Kaplan-Meier estimated mortality rates at 1, 5, and 10 years were 4.9%, 10.5%, and 18.7%, respectively, for the surgical patients and 2.8%, 14.8%, and 29.6% for the matches. A log-rank test stratified by matched group indicated a significant difference in the survival curves (p<0.0001).
B. Not super obese at baseline (n=1,770 surgical patients and n=5,332 matched patients). Kaplan-Meier estimated mortality rates at 1, 5, and 10 years were 1.4%, 4.6%, and 11.4%, respectively, for the surgical patients and 1.3%, 8.5%, and 21.0% for the matches. A log-rank test stratified by matched group indicated a significant difference in the survival curves (p<0.0001).