## Appendix Table 3—Continued

<table>
<thead>
<tr>
<th>Author, Year (Reference)</th>
<th>RR (95% CI)</th>
<th>P Value</th>
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<tbody>
<tr>
<td>Arozullah et al., 2000 (118)</td>
<td>Albumin level</td>
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<td>Albumin level &lt; 20 g/L</td>
<td>4.43 (3.99–5.52)</td>
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<td>Albumin level, 20–30 g/L</td>
<td>2.16 (1.86–2.51)</td>
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<td>Albumin level, 31–40 g/L</td>
<td>1.17 (1.05–1.31)</td>
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<td>Age ≥ 70 y</td>
<td>2.60 (2.31–3.05)</td>
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<td>1.99 (1.70–2.33)</td>
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<tr>
<td>Age 50–59 y</td>
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<tr>
<td>Weight loss &gt; 10% in 6 mo</td>
<td>1.37 (1.19–1.57)</td>
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<td>Alcohol &gt; 2 drinks per day</td>
<td>1.19 (1.07–1.33)</td>
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<td>Diabetes</td>
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<td>BUN level &gt; 40 mg/dL</td>
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<td>BUN level, 21–30 mg/dL</td>
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<td>Preoperative renal failure</td>
<td>1.67 (1.23–2.27)</td>
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<td>Transfusion &gt; 4 units</td>
<td>1.56 (1.28–1.91)</td>
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<tr>
<td>Preoperative pneumonia</td>
<td>1.70 (1.35–2.13)</td>
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<td>Dyspnea at rest</td>
<td>1.69 (1.36–2.09)</td>
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<tr>
<td>Dyspnea on minimal exertion</td>
<td>1.21 (1.09–1.34)</td>
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<tr>
<td>COPD</td>
<td>1.58 (1.44–1.75)</td>
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<td>Recent smoking</td>
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<tr>
<td>CHF</td>
<td>1.25 (1.07–1.47)</td>
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<tr>
<td>Impaired sensorium</td>
<td>1.22 (1.04–1.43)</td>
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<tr>
<td>CVA</td>
<td>1.20 (1.05–1.38)</td>
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### Notes

* RR: Relative Risk; CI: Confidence Interval; P Value: Probability Value

---

**Appendix Table 3. Significant Clinical Predictors in Multivariate Studies**

<table>
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<tr>
<th>Author, Year (Reference)</th>
<th>RR (95% CI)</th>
<th>P Value</th>
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<tbody>
<tr>
<td>Arozullah et al., 2001 (120)</td>
<td>Significant factors</td>
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<td>AAA repair</td>
<td>4.29 (3.34–5.50)</td>
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<td>Thoracic</td>
<td>3.92 (3.36–4.57)</td>
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<td>Upper abdominal</td>
<td>2.68 (2.38–3.03)</td>
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<td>Neck</td>
<td>2.3 (1.73–3.05)</td>
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</tr>
<tr>
<td>Neurosurgery</td>
<td>2.14 (1.66–2.75)</td>
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<tr>
<td>Vascular</td>
<td>1.29 (1.10–1.52)</td>
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<td>Age ≥ 80 y</td>
<td>5.63 (4.62–6.84)</td>
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<td>Age 70–79 y</td>
<td>3.58 (2.97–4.33)</td>
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<td>Age 60–69 y</td>
<td>2.38 (1.98–2.87)</td>
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<td>Age 50–59 y</td>
<td>1.49 (1.23–1.81)</td>
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<tr>
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<td>Partially dependent</td>
<td>1.83 (1.63–2.06)</td>
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<tr>
<td>Weight loss &gt; 10% in 6 mo</td>
<td>1.92 (1.68–2.18)</td>
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<td>1.51 (1.26–1.82)</td>
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<td>History of CVA</td>
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<td>BUN level &lt; 8 mg/dL</td>
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<td>BUN level, 22–30 mg/dL</td>
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<td>BUN level, ≥ 30 mg/dL</td>
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<td>Transfusion &gt; 4 units</td>
<td>1.35 (1.07–1.72)</td>
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<td>1.33 (1.16–1.54)</td>
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<td>Steroid use</td>
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<td>3.4 (1.4–8.0)</td>
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<td>Arrhythmia</td>
<td>2.9 (1.1–7.5)</td>
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<td>Intraoperative vasopressor use</td>
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<tr>
<td>Emergent surgery</td>
<td>3.0 (1.2–7.6)</td>
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<td>Abnormal chest radiograph</td>
<td>6.3 (2.6–15.2)</td>
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<td>Barisione et al., 1997 (112)</td>
<td>Chronic bronchitis</td>
<td>133 (14.8–1199)</td>
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<td>FEV1 (% predicted)</td>
<td>0.93 (0.88–0.98)</td>
<td>&lt;0.001</td>
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<tr>
<td>RV (L)</td>
<td>3.11 (1.25–7.75)</td>
<td>&lt;0.001</td>
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<td>DLCO (% predicted)</td>
<td>0.91 (0.10–8.16)</td>
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<td>FEV1 (% predicted)</td>
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<td>RV (L)</td>
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<td>DLCO (% predicted)</td>
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<td>Chronic bronchitis</td>
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<td>Preoperative stay &gt; 5 d</td>
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<td>Abnormal chest radiograph</td>
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<td>Charlson comorbidity index, per point</td>
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### Appendix Table 3—Continued

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<th>Author, Year (Reference)</th>
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<td>Blood loss &gt; 1.2 L</td>
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<td>Preoperative inhalational therapy</td>
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<td>Oller Sales et al., 1992 (106)</td>
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<td>Poor exercise capacity</td>
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<td>Upper vs. lower abdominal incision</td>
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<td>Protein depletion</td>
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<td>Age</td>
<td>1.03 (0.97–1.09)</td>
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<td>Obesity</td>
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<td>Longer duration of surgery</td>
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* To convert BUN values to mmol/L, multiply by 0.357. To convert creatinine values to μmol/L, multiply by 88.4. To convert HDL cholesterol values to mmol/L, multiply by 0.02586. AAA = abdominal aortic aneurysm; ASA = American Society of Anesthesiologists; BMI = body mass index; BUN = blood urea nitrogen; CHF = congestive heart failure; COPD = chronic obstructive pulmonary disease; CVA = cerebrovascular accident; DLCO = diffusing capacity of carbon monoxide; HDL = high-density lipoprotein; NA = not available; RR = relative risk; RV = residual volume.