**Supplemental Table 1. Risk factors for Opioid Induced Respiratory Depression**

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| --- | --- | --- |
| **Patient** | **Anesthesia** | **Surgical and other factors** |
| • Sleep disordered breathing38,40,70 • Obesity hypoventilation syndrome41 • Pulmonary disease42,49• Cardiac disease (CHF, CAD, dysrhythmia, hypertension)46• Diabetes mellitis46• Obesity3,44,49• Renal impairment46-49 • CYP450 enzyme polymophism47,49,50• Female sex1,49,51• ASA 3,444• Older age1,42-45• History of substance abuse1 | • Non-opioid sedating medications3,43,45,54,55• PCA and epidural basal opioid infusion43,53• Greater median dose of opioids54,56 | • 1st 24h after surgery3,42,46,52-54• General surgery patients45,53• Pneumonectomy or Lobectomy1• Multiple prescribers3• Inadequate nursing assessments or response3• Adverse respiratory events in PACU54 |

CAD = coronary artery disease; CHF = congestive heart failure; CYP = cytochrome; PACU = post-anesthesia care unit; PCA = patient-controlled analgesia.