# ARISCAT Score for Postoperative Pulmonary Complications

## INPUTS

|  |  |
| --- | --- |
| Age, years | **Options:**   * ≤50 (0) * 51-80 (3) * >80 (16) |
| Preoperative SpO₂ | **Options:**   * ≥96% (0) * 91-95% (8) * ≤90% (24) |
| Respiratory infection in the last month  *Either upper or lower (i.e., URI, bronchitis, pneumonia), with fever and antibiotic treatment* | **Options:**   * No (0) * Yes (17) |
| Preoperative anemia (Hgb ≤10 g/dL) | **Options:**   * No (0) * Yes (11) |
| Surgical incision | **Options:**   * Peripheral (0) * Upper abdominal (15) * Intrathoracic (24) |
| Duration of surgery | **Options:**   * <2 hrs (0) * 2-3 hrs (16) * >3 hrs (23) |
| Emergency procedure | **Options:**   * No (0) * Yes (8) |

## FORMULA

Addition of the selected points:

|  |  |  |
| --- | --- | --- |
| **Variable** | | **Points** |
| Age, years | ≤50 | 0 |
| 51-80 | 3 |
| >80 | 16 |
| Preoperative SpO2 | ≥96% | 0 |
| 91-95% | 8 |
| ≤90% | 24 |
| Respiratory infection in the last month\* | No | 0 |
| Yes | 17 |
| Preoperative anemia (Hgb ≤10 g/dL) | No | 0 |
| Yes | 11 |
| Surgical incision | Peripheral | 0 |
| Upper abdominal | 15 |
| Intrathoracic | 24 |
| Duration of surgery | <2 hrs | 0 |
| 2-3 hrs | 16 |
| >3 hrs | 23 |
| Emergency procedure | No | 0 |
| Yes | 8 |

\*Either upper or lower (i.e., URI, bronchitis, pneumonia), with fever and antibiotic treatment

## FACTS & FIGURES

Interpretation:

|  |  |  |
| --- | --- | --- |
| **ARISCAT Score** | **Risk group** | **Risk of in-hospital postoperative pulmonary complications\*** |
| <26 | Low | 1.6% |
| 26–44 | Intermediate | 13.3% |
| ≥45 | High | 42.1% |

\*Complications were defined as a composite including respiratory failure, respiratory infection, pleural effusion, atelectasis on chest x-ray, pneumothorax, bronchospasm treated with bronchodilators, and aspiration pneumonitis.

## EVIDENCE APPRAISAL