

Appendix 1 (as submitted by the authors): Supplementary Table 1 and Figure 1

Supplemental Table 1: Patient Characteristics for 1,185 Eligible COPD Patients Not Enrolled Compared to those who Were Enrolled		
Characteristic	Not Enrolled N = 1,185	Enrolled N = 1,415
Age, Years (Mean, SD)	70.5 (11.0)	70.6 (10.6)
Range	50-99	50-96
Female (%)	600 (50.6)	710 (50.2)
Hospital Site (%)		
Ottawa Hospital General Campus	406 (34.3)	313 (22.1)
Kingston General	124 (10.5)	304 (21.5)
Ottawa Hospital Civic Campus	304 (25.7)	292 (20.6)
University Alberta - Edmonton	86 (7.3)	220 (15.6)
Foothills - Calgary	205 (17.3)	178 (12.6)
Mount Sinai – Toronto	60 (5.1)	108 (7.6)
Admitted (%)	517 (43.6)	636 (44.9)

Supplemental Figure 1: Physician Data Form Used in the Study

RAD-2 Study – Validation of Ottawa COPD Risk Scale

Date: (yy/mm/dd) ___/___/___ Patient Initials: ___ Chart No.: _____

Physician's Name (please print): _____

Ottawa COPD Risk Scale

Inclusion Criteria: Adults ≥ 50 years of age with Shortness of Breath due to acute exacerbation of COPD:

- Pre-existing diagnosis of COPD with hx of smoking, use of inhalers, OR
- New diagnosis of COPD in heavy smoker

<p>Total the points for the following items:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">Items</th> <th style="text-align: right; border-bottom: 1px solid black;">Points</th> </tr> </thead> <tbody> <tr> <td colspan="2">1. Initial Assessment</td> </tr> <tr> <td>a) History of CABG</td> <td style="text-align: right;">(1) _____</td> </tr> <tr> <td>b) History of intervention for PVD</td> <td style="text-align: right;">(1) _____</td> </tr> <tr> <td>c) History of intubation for respiratory distress</td> <td style="text-align: right;">(2) _____</td> </tr> <tr> <td>d) Heart rate on ED arrival ≥ 110</td> <td style="text-align: right;">(2) _____</td> </tr> <tr> <td colspan="2">2. Investigations</td> </tr> <tr> <td>a) ECG has acute ischemic changes</td> <td style="text-align: right;">(2) _____</td> </tr> <tr> <td>b) Chest x-ray has any pulmonary congestion</td> <td style="text-align: right;">(1) _____</td> </tr> <tr> <td>c) Hemoglobin < 100 g/L</td> <td style="text-align: right;">(3) _____</td> </tr> <tr> <td>d) Urea ≥ 12 mmol/L</td> <td style="text-align: right;">(1) _____</td> </tr> <tr> <td>e) Serum CO₂ ≥ 35 mmol/L</td> <td style="text-align: right;">(1) _____</td> </tr> <tr> <td colspan="2">3. Re-Assessment after ED treatment</td> </tr> <tr> <td>a) SaO₂ < 90% on room air or usual O₂, or HR ≥ 120</td> <td style="text-align: right;">(2) _____</td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 10px;">Total Score (0 - 16): _____</td> </tr> </tbody> </table>	Items	Points	1. Initial Assessment		a) History of CABG	(1) _____	b) History of intervention for PVD	(1) _____	c) History of intubation for respiratory distress	(2) _____	d) Heart rate on ED arrival ≥ 110	(2) _____	2. Investigations		a) ECG has acute ischemic changes	(2) _____	b) Chest x-ray has any pulmonary congestion	(1) _____	c) Hemoglobin < 100 g/L	(3) _____	d) Urea ≥ 12 mmol/L	(1) _____	e) Serum CO ₂ ≥ 35 mmol/L	(1) _____	3. Re-Assessment after ED treatment		a) SaO ₂ < 90% on room air or usual O ₂ , or HR ≥ 120	(2) _____	Total Score (0 - 16): _____		<p>COPD Risk Categories for Serious Adverse Events within 14 days</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="border: none;">Total Score</th> <th style="border: none;">Risk</th> <th style="border: none;">Category</th> </tr> </thead> <tbody> <tr><td style="border: none;">0</td><td style="border: none;">2.2%</td><td style="border: none;">Low</td></tr> <tr><td style="border: none;">1</td><td style="border: none;">4.0%</td><td style="border: none;">Medium</td></tr> <tr><td style="border: none;">2</td><td style="border: none;">7.2%</td><td style="border: none;">Medium</td></tr> <tr><td style="border: none;">3</td><td style="border: none;">12.5%</td><td style="border: none;">High</td></tr> <tr><td style="border: none;">4</td><td style="border: none;">20.9%</td><td style="border: none;">High</td></tr> <tr><td style="border: none;">5</td><td style="border: none;">32.9%</td><td style="border: none;">Very High</td></tr> <tr><td style="border: none;">6</td><td style="border: none;">47.5%</td><td style="border: none;">Very High</td></tr> <tr><td style="border: none;">7</td><td style="border: none;">62.6%</td><td style="border: none;">Very High</td></tr> <tr><td style="border: none;">8</td><td style="border: none;">75.6%</td><td style="border: none;">Very High</td></tr> <tr><td style="border: none;">10</td><td style="border: none;">91.4%</td><td style="border: none;">Very High</td></tr> </tbody> </table>	Total Score	Risk	Category	0	2.2%	Low	1	4.0%	Medium	2	7.2%	Medium	3	12.5%	High	4	20.9%	High	5	32.9%	Very High	6	47.5%	Very High	7	62.6%	Very High	8	75.6%	Very High	10	91.4%	Very High
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A) According to the Risk Scale, what is the estimated risk category for this patient? (see above)
 low medium high very high

B) How comfortable would you be using this scale to assist making a disposition decision for this patient?
 very comfortable comfortable neutral uncomfortable very uncomfortable

C) Please request the following:
 Venous blood gas

D) Please have RN measure vitals at 4-8 hours after treatment:
 Heart Rate: _____ SaO₂ on Room Air: _____

Thank you for your help!