

**Appendix 4 (as supplied by authors): Validation of Classification Performance of the Serious Adverse Event Score in COPD using Bootstrapping**

Score	Observed Sensitivity (95% CI)	Observed Specificity (95% CI)	Observed PLR (95% CI)	Observed NLR (95% CI)	Bootstrap Sensitivity (95% CI)	Bootstrap Specificity (95% CI)	Bootstrap PLR (95% CI)	Bootstrap NLR (95% CI)
0	1.00 (0.93,1.00)	0 (0,0)	1.00 (1.00,1.00)	Not Estimable	1.00 (1.00,1.00)	0 (0,0)	1.00 (1.00,1.00)	Not Estimable
1	0.91 (0.81,0.96)	0.45 (0.42,0.49)	1.67 (1.51,1.84)	0.20 (0.09,0.42)	0.91 (0.91,0.91)	0.45 (0.45,0.46)	1.67 (1.66,1.67)	0.20 (0.19,0.20)
2	0.81 (0.69,0.89)	0.60 (0.57,0.64)	2.03 (1.75,2.34)	0.32 (0.20,0.52)	0.81 (0.80,0.81)	0.60 (0.59,0.60)	2.02 (2.01,2.03)	0.32 (0.31,0.33)
3	0.60 (0.48,0.72)	0.84 (0.81,0.86)	3.66 (2.85,4.69)	0.48 (0.35,0.64)	0.60 (0.59,0.61)	0.84 (0.83,0.84)	3.67 (3.64,3.70)	0.48 (0.47,0.48)
4	0.52 (0.39,0.64)	0.90 (0.87,0.92)	4.99 (3.66,6.81)	0.54 (0.42,0.69)	0.51 (0.51,0.53)	0.89 (0.89,0.90)	5.04 (4.99,5.09)	0.54 (0.53,0.55)
5	0.25 (0.16,0.37)	0.97 (0.95,0.98)	8.08 (4.57,14.29)	0.77 (0.67,0.89)	0.25 (0.24,0.25)	0.97 (0.96,0.97)	8.39 (8.23,8.55)	0.78 (0.77,0.78)
6	0.19 (0.11,0.31)	0.99 (0.98,0.99)	16.48 (7.31,37.16)	0.82 (0.73,0.92)	0.19 (0.18,0.19)	0.99 (0.98,0.99)	18.69 (18.06,19.33)	0.82 (0.81,0.82)
7	0.07 (0.03,0.17)	0.99 (0.99,1.00)	19.02 (4.65,77.88)	0.93 (0.87,1.00)	0.07 (0.07,0.08)	0.99 (0.99,1.00)	22.91 (21.71,24.11)	0.93 (0.92,0.93)
8	0.06 (0.02,0.15)	0.99 (0.99,1.00)	45.65 (5.17,402.70)	0.94 (0.89,1.00)	0.06 (0.05,0.06)	0.99 (0.99,1.00)	33.86 (32.21,35.51)	0.94 (0.93,0.94)
10	0.03 (0.01,0.11)	1.00 (0.99,1.00)	Not Estimable	0.97 (0.93,1.01)	0.03 (0.03,0.04)	1.00 (1.00,1.00)	Not Estimable	0.97 (0.96,0.97)
<b>AUC</b>	0.79 (0.74,0.85)				0.79 (0.79,0.80)			
<b>HL test P</b>	0.665				0.256			

AUC=area under ROC; HL=Hosmer Lemeshow; PLR=Positive likelihood ratio; NLR=Negative likelihood ratio