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Table 2: Risk Assessment Models with attempted external validation and reported outcome data in general hospital admission cohorts, identified through systematic review.

	Study	Size	Population	RAM evaluated	C-statistic (95% CI) <i>a</i>	Sensitivity (95% CI) <i>b</i>	Specificity (95% CI) <i>b</i>	Major bleeding rate in patients receiving pharmacological prophylaxis (by score threshold)	PROBAST Risk of Bias
Bahl, 2010 ¹	ROCS	8,216	Hospitalised surgical patients	Caprini	0.698 (NR)	NR	NR	NR	High
Barbar, 2010 ²	POCS	1,180	Hospitalised medical patients	Padua	NR	94.6 (NR)	62.0 (NR)	1.6%	High
Woller, 2011 ³	ROCS	46,856	Hospitalised medical patients	Kucher	0.68 (0.67 to 0.69)	NR	NR	NR	High
Mahan, 2014 ⁴	CC	417	Hospitalised medical patients	IMPROVE (7)	0.773 (NR)	NR	NR	NR	High
Nendaz, 2014 ⁵	POCS	1,478	Hospitalised medical patients	Geneva Padua	NR NR	90.0 (73.5 to 97.9) 73.3 (54.1 to 87.7)	35.3 (32.8 to 37.8) 51.9 (49.3 to 54.5)	3.4% <i>c</i>	High
Rosenberg, 2014 ⁶	CC	19,217	Hospitalised medical patients	IMPROVE (7)	0.7 (NR)	NR	NR	NR	Unclear
Zhou, 2014 ⁷	CC	998	Hospitalised medical and surgical patients	Caprini Padua	NR NR	82.3 (NR) 30.1 (NR)	60.4 (NR) 12.7 (NR)	NR	High
De Bastos, 2016 ⁸	POCS	11,091	Hospitalised medical and surgical patients	Caprini	NR	86.5 (NR)	47.0 (NR)	NR	High

POCS – Prospective observational cohort study; ROCS – Retrospective Observational Cohort Study; CC – Case Control

a A summary measure of prognostic accuracy (<0.7 = weak, 0.7 to 0.8 = good, >0.8 = excellent)

b Refers to prognostic test characteristic data when score applied at recommended threshold.

c Listed as bleeding events requiring medical attention in patients receiving thromboprophylaxis

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Grant, 2016 ⁹	ROCS	63,548	Hospitalised medical patients	Caprini	NR	69.7 (NR)	50.28 (NR)	NR	High
Greene, 2016 ¹⁰	ROCS	63,458	Hospitalised medical patients	IMPROVE	0.57 (0.57 to 0.58)	NR	NR	NR	Unclear
				Kucher	0.56 (0.56 to 0.57)	NR	NR		
				Padua	0.61 (0.51 to 0.7)	NR	NR		
Liu, 2016 ¹¹	CC	640	Hospitalised medical patients	Caprini	0.77 (0.73 to 0.81)	70.9 (NR)	73.4 (NR)	NR	High
Blondon, 2018 ¹²	POCS	1,478	Hospitalised medical patients	IMPROVE	NR	87 (NR)	NR	NR	High
				Geneva	NR	90.0 (73.5 to 97.9)	35.3 (32.8 to 37.8)		
				Padua	NR	73.3 (54.1 to 87.7)	51.9 (49.3 to 54.5)		
Vincentelli, 2018 ¹³	CC	1,215	Hospitalised medical patients	Kucher	0.69 (0.67 to 0.7)	25.1 (17.0 to 55.1)	92.9 (81.0 to 95.4)	NR	High
				Padua	NR	52.4 (38.4 to 81.9)	72.3 (63.9 to 79.4)		
Zhou, 2018 ¹⁴	CC	1,804	Hospitalised medical patients	Caprini	0.71 (0.69 to 0.73)	84.3 (NR)	66.2 (NR)	NR	High
				Padua	0.66 (0.57 to 0.75)	49.1 (NR)	16.2 (NR)		
Blondon, 2019a ¹⁵	ROCS	1,180	Hospitalised medical patients	Geneva	NR	95.0 (NR)	44.0 (NR)	0.7%	High
Blondon, 2019b ¹⁶	ROCS	991	Hospitalised medical patients	Geneva IMPROVE	NR NR	86.4 (NR) 57.6 (NR)	NR NR	NR	Unclear

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				Padua	NR	72.7 (NR)	NR		
Cobben, 2019 ¹⁷	CC	556	Hospitalised medical patients	Caprini	0.64 (0.54 to 0.74)	88.6 (NR)	21.4 (NR)	NR	High
				Geneva	0.61 (0.51 to 0.71)	75.0 (NR)	34.1 (NR)		
				IMPROVE (4)	0.65 (0.56 to 0.74)	27.9 (NR)	85.4 (NR)		
				IMPROVE (7)	0.66 (0.57 to 0.75)	63.3 (NR)	70.7 (NR)		
				Kucher	0.61 (0.53 to 0.70)	28.0 (NR)	85.7 (NR)		
				Padua	0.68 (NR)	61.8 (NR)	48.8 (NR)		

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