

Supplementary Table 1 Scoring systems calculations

Scores	Calculation
Child-Turcotte-Pugh (CTP) score ¹	Bilirubin (Total) < 34.2 μmol/L (1 point) 34.2-51.3 μmol/L (2 points) > 51.3 μmol/L (3 points)
	Albumin > 35 g/L (1 point) 28-35 g/L (2 points) < 28 g/L (3 points)
	INR < 1.7 (1 points) 1.7-2.2 (2 points) > 2.2 (3 points)
	Ascites Absent (1 points) Slight (2 points) Moderate (3 points)
	Encephalopathy No Encephalopathy (1 points) Grade 1-2 (2 points) Grade 3-4 (3 points)
Model for end-stage liver disease (MELD) score ²	$(0.957 * \ln(\text{Serum Cr}) + 0.378 * \ln(\text{Serum Bilirubin}) + 1.120 * \ln(\text{INR}) + 0.643) * 10$ (if hemodialysis, value for Creatinine is automatically set to 4.0)
MELD-Na score ³	$\text{MELD Score} - \text{Na} - 0.025 * \text{MELD} * (140 - \text{Na}) + 140$ (Sodium is limited in a range of 125-140, and if outside of these bounds, is set to the nearest limit).
Clinical Rockall score (CRS) ⁴	Age (years) < 60 (0 point) 60-79 (1 points) ≥ 80 (2 points)
	Shock No shock (0 point) (SBP ≥ 100mmHg and Pulse rate < 100 beats/minute)

	Tachycardia (1 point) (SBP \geq 100mmHg and Pulse rate \geq 100 beats / minute)
	Hypotension (2 points) (SBP < 100 mmHg)
Comorbidity	No major comorbidity (0 point) Cardiac failure, ischemic heart disease, any major comorbidity (2 points) Renal failure, liver failure, disseminated malignancy (3 points)
AIMS65 score	Age > 65 years (1 point)
(AIMS65) ⁵	SBP \leq 90 mmHg (1 point) Altered level of consciousness (1 point) Serum albumin < 30 g/L (1 point) INR > 1.5 (1 point)
Glasgow Blatchford score (GBS) ⁶	Blood urea nitrogen (mmol/L) 6.5 \leq BUN < 8 (2 points) 8 \leq BUN < 10 (3 points) 10 \leq BUN < 25 (4 points) BUN \geq 25 (6 points) Hemoglobin for men (g/L) 120 \leq Hb < 130 (1 point) 100 \leq Hb < 120 (3 points) Hb < 100 (6 points) Hemoglobin for women (g/L) 100 \leq Hb < 120 (1 point) Hb < 100 (6 points) SBP (mmHg) 100-109 (1 point) 90-99 (2 points) < 90 (3 points)
Other markers	Pulse rate \geq 100 beats/min (1 point) Presentation melena (1 point) Presentation syncope (2 points) Hepatic disease (2 points)

		Cardiac failure (2 points)
Modified Glasgow Blatchford score (mGBS) ⁷	Blood urea nitrogen (mmol/L)	6.5 ≤ BUN < 8 (2 points)
		8 ≤ BUN < 10 (3 points)
		10 ≤ BUN < 25 (4 points)
		BUN ≥ 25 (6 points)
	Hemoglobin for men (g/L)	120 ≤ Hb < 130 (1 point)
		100 ≤ Hb < 120 (3 points)
		Hb < 100 (6 points)
	Hemoglobin for women (g/L)	100 ≤ Hb < 120 (1 point)
		Hb < 100 (6 points)
	SBP (mmHg)	100-109 (1 point)
90-99 (2 points)		
< 90 (3 points)		
Other markers	Pulse rate ≥ 100 beats/min (1 point)	
CANUKA score ⁸	Age (years)	< 50 (0 point)
		50–64.9 (1 point)
		≥ 65 (2 points)
	Melena	No (0 point)
		Yes (1 point)
	Hematemesis	No (0 point)
		Yes (1 point)
	Syncope	No (0 point)
		Yes (1 point)
	Liver disease	No (0 point)
Yes (2 points)		
Malignancy	No (0 point)	
	Yes (2 points)	
Heart rate (beats / minute)	< 100 (0 point)	
	100–124.9 (1 point)	
	≥ 125 (2 points)	
SBP (mmHg)	≥ 120 (0 point)	

	100–119.9 (1 point)
	80–99.9 (2 points)
	< 80 (3 points)
Hemoglobin level (g/L)	≥ 121 (0 point)
	101–120 (1 point)
	81–100 (2 points)
	≤ 80 (3 points)
Urea level (mmol/L)	< 5 (0 point)
	5–9.9 (1 point)
	10–14.9 (2 points)
	≥ 15.3 (3 points)

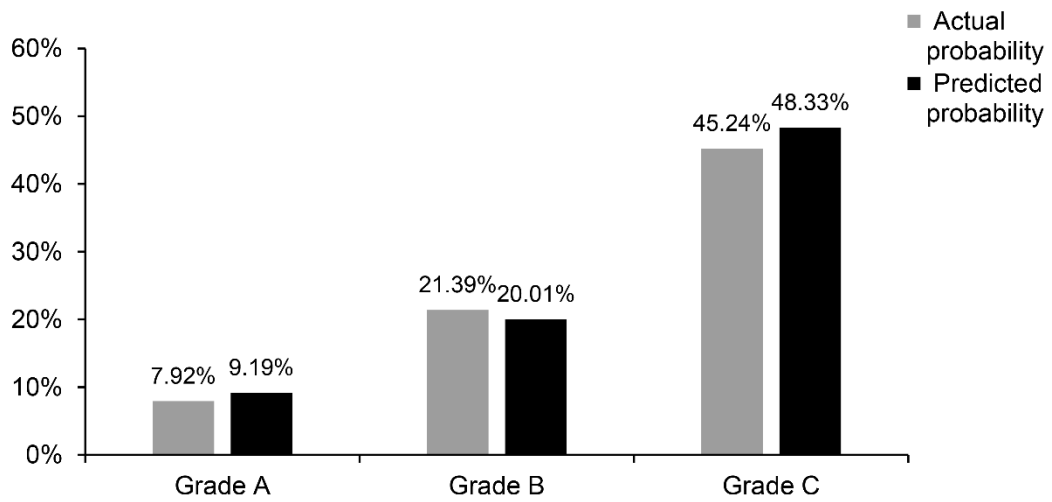
Supplementary reference

- 1 **Child CG**, Turcotte JG. Surgery and portal hypertension. In: The liver and portal hypertension. Edited by CG Child. Philadelphia: Saunders 1964: 50-64
- 2 **Kamath PS**, Wiesner RH, Malinchoc M, Kremers W, Therneau TM, Kosberg CL, D'Amico G, Dickson ER, Kim WR. A model to predict survival in patients with end-stage liver disease. *Hepatology* 2001; **33**: 464-470
- 3 **Kim WR**, Biggins SW, Kremers WK, Wiesner RH, Kamath PS, Benson JT, Edwards E, Therneau TM. Hyponatremia and mortality among patients on the liver-transplant waiting list. *N Engl J Med* 2008; **359**: 1018-1026
- 4 **Rockall TA**, Logan RF, Devlin HB, Northfield TC. Risk assessment after acute upper gastrointestinal haemorrhage. *Gut* 1996; **38**: 316-321
- 5 **Saltzman JR**, Tabak YP, Hyett BH, Sun X, Travis AC, Johannes RS. A simple risk score accurately predicts in-hospital mortality, length of stay, and cost in acute upper GI bleeding. *Gastrointest Endosc* 2011; **74**: 1215-1224
- 6 **Blatchford O**, et al. A risk score to predict need for treatment for upper gastrointestinal haemorrhage. *Lancet* 2000. **356**: 1318-1321
- 7 **Cheng DW**, Lu YW, Teller T, Sekhon HK, Wu BU. A modified Glasgow Blatchford Score improves risk stratification in upper gastrointestinal bleed: a prospective comparison of scoring systems. *Aliment Pharm Ther* 2012; **36**:

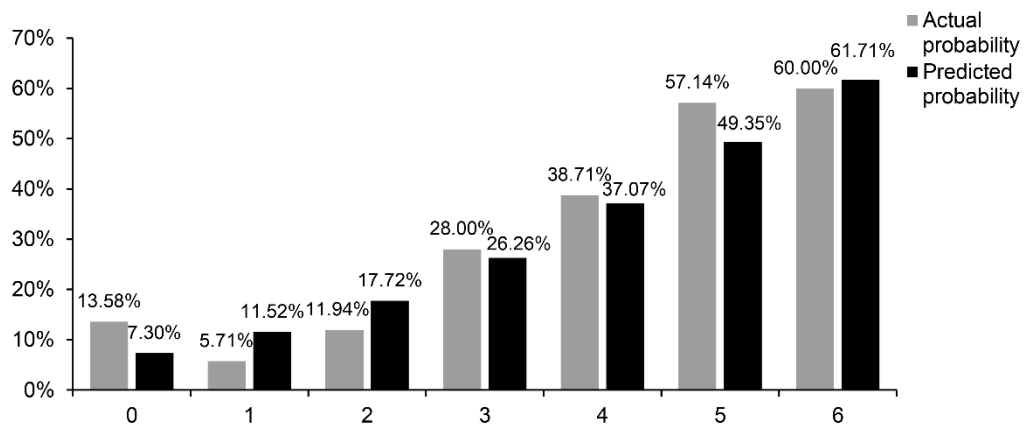
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- 8 **Oakland K**, Kahan BC, Guizzetti L, et al. Development, Validation, and Comparative Assessment of an International Scoring System to Determine Risk of Upper Gastrointestinal Bleeding. *Clin Gastroenterol H* 2019; **17**: 1121-1129

A

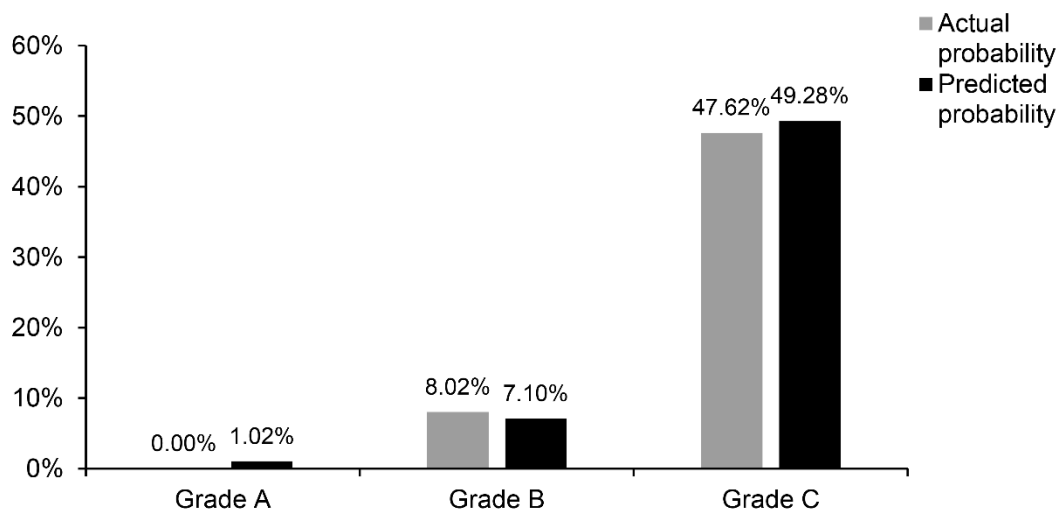


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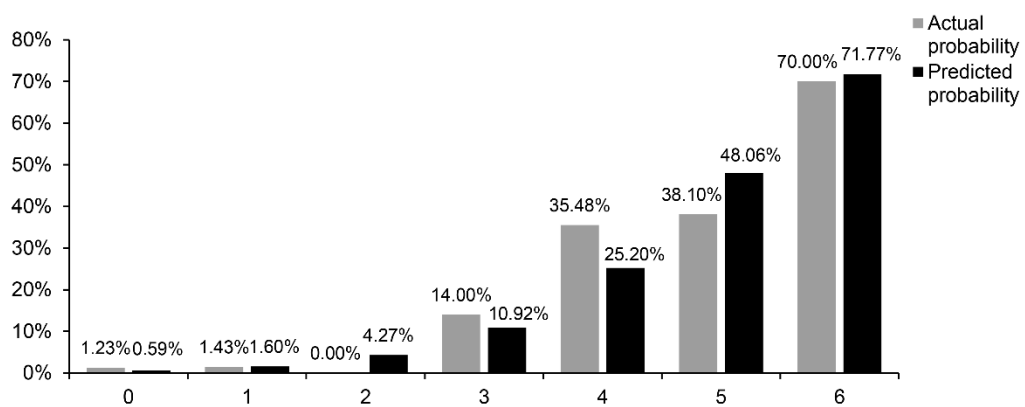


Supplementary Figure 1 Graphical analysis of calibration for the Child-Turcotte-Pugh score (A) and clinical Rockall score (B) with regard to in-hospital rebleeding.

A

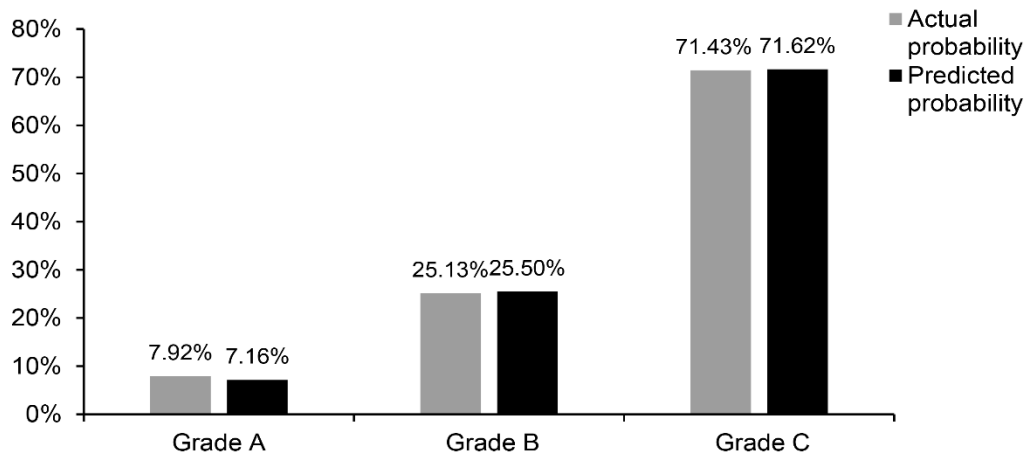


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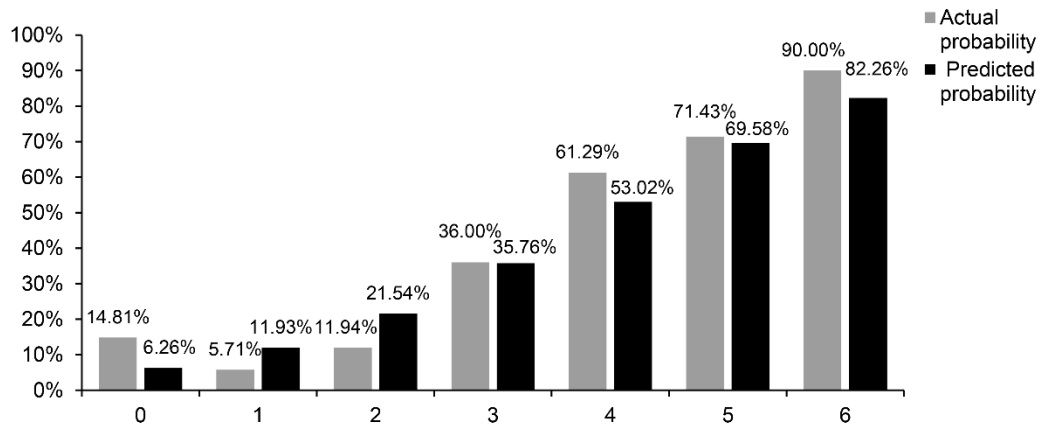


Supplementary Figure 2 Graphical analysis of calibration for the Child-Turcotte-Pugh score (A) and clinical Rockall score (B) with regard to in-hospital mortality.

A



B



Supplementary Figure 3 Graphical analysis of calibration for the Child-Turcotte-Pugh score (A) and clinical Rockall score (B) with regard to in-hospital adverse outcomes.