

Predicting the risk of significant lesions on capsule endoscopy in patients with suspected small bowel bleeding: External validation of the SSB Capsule Dx score

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INTRODUCTION

The role of small bowel capsule endoscopy (SBCE) for suspected small bowel bleeding (SSB) is unquestionable, but deciding which patients with SSB would benefit most from SBCE is challenging.

The recently described SSB Capsule Dx score¹ includes 3 variables:

- A. Admission to the hospital with overt bleeding - (No=0;Yes=1)
- B. Hemoglobin (Hg) <6.4 g/dL - (No=0;Yes=1)
- C. Age <54 years old at the time of the SBCE - (No=0;Yes=1)

This score has been shown to be potentially **useful** in **limiting** the use of **SBCE** in **SSB low-risk patients**.

AIM

To perform an external validation of the recently developed SSB Capsule Dx score.

METHODS

- Retrospective single-center study.
- Consecutive adult patients undergoing SBCE for SSB.
- Patients' demographic, clinical and biochemical data at the time of SBCE were recorded.
- Only P2 lesions, according to Saurin classification², were considered significant.
- The SSB Capsule Dx score was calculated and its accuracy for the prediction of significant lesions in SBCE was assessed through the area under the receiver operating characteristic curve (AUROC).
- Patients with insufficient data or incomplete SBCE were excluded.

CONCLUSION

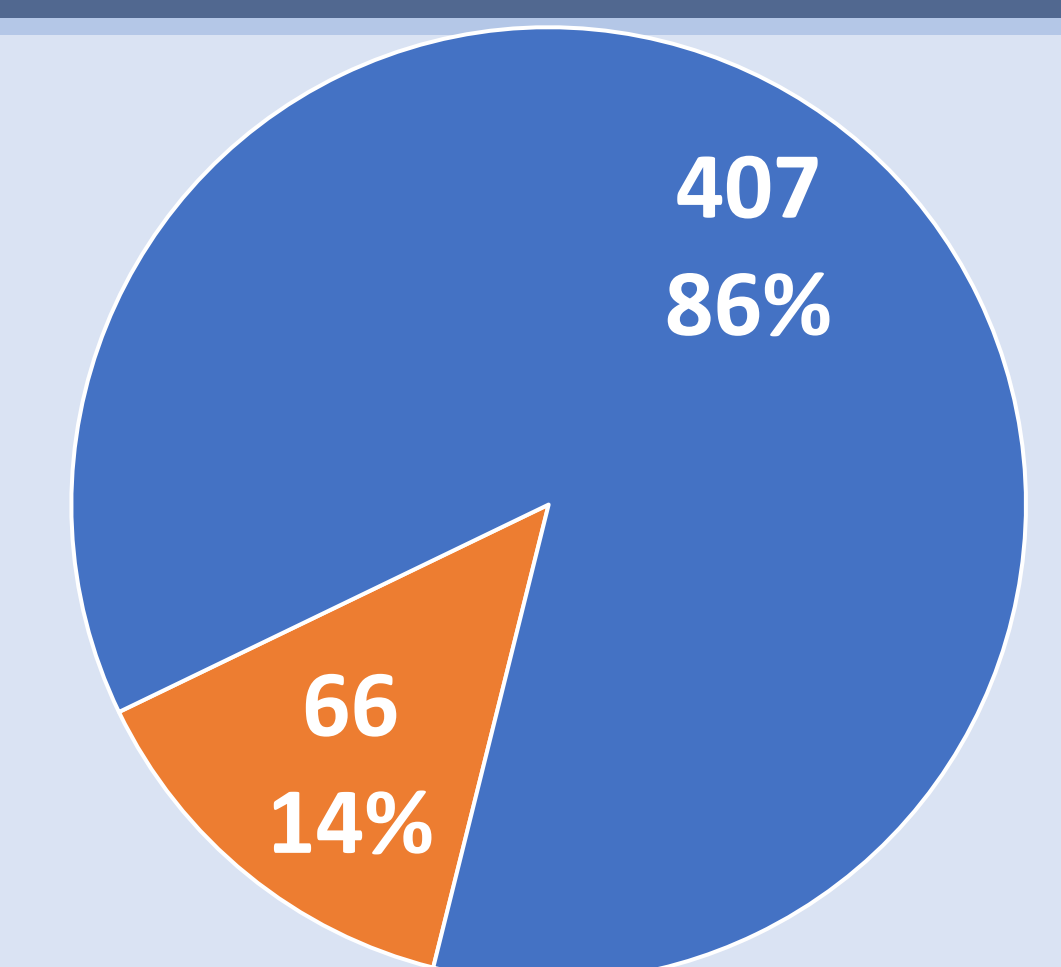
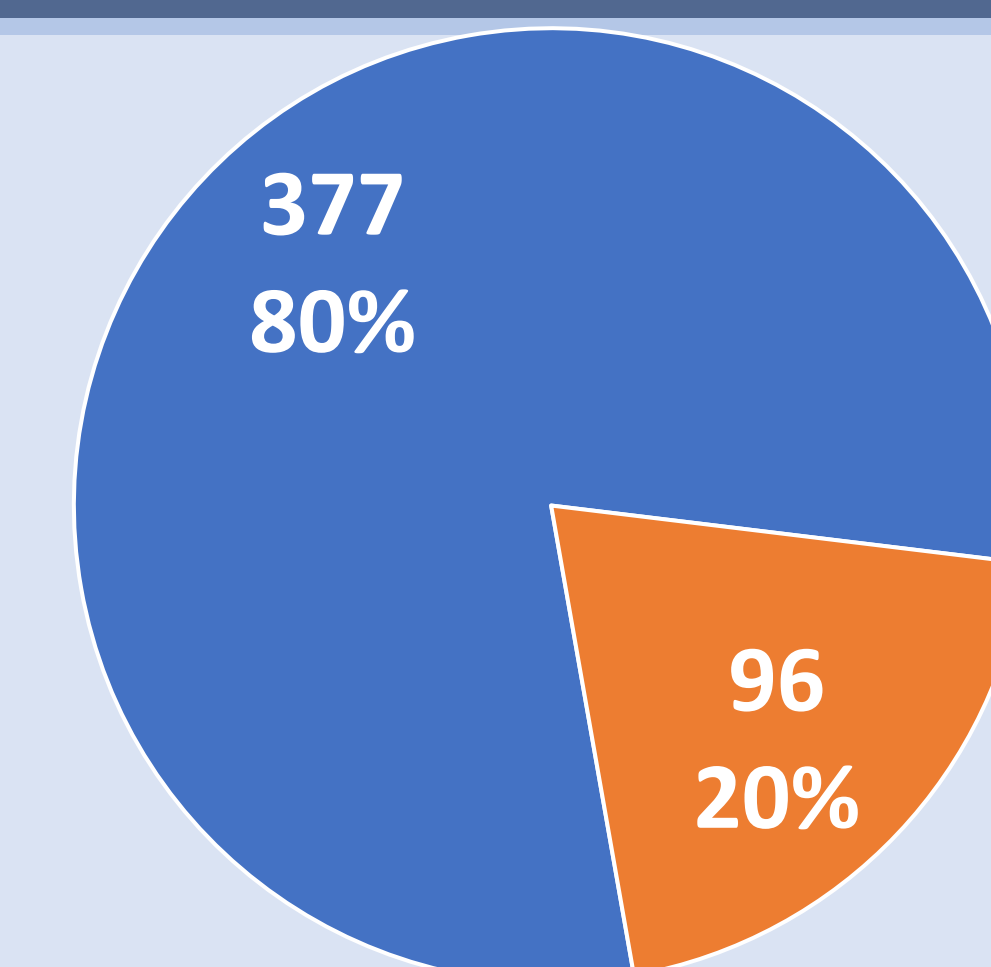
This external validation cohort study confirms that patients with a **SSB Capsule Dx score <0** are **unlikely** to have a **significant lesion** on **SBCE**.

RESULTS

N = 473 SBCE

65.8%

Mean age: 61 years



■ Anaemia ■ Overt bleeding

■ Inpatient ■ Outpatient

A- Inpatients with overt bleeding

N= 29
(6.1%)

B - Hg < 6.4 g/dL

N= 41
(8.7%)

Mean Hg: 9.5 g/dL

C- Age < 54 years

N= 163
(34.5%)

SSB Capsule Dx score

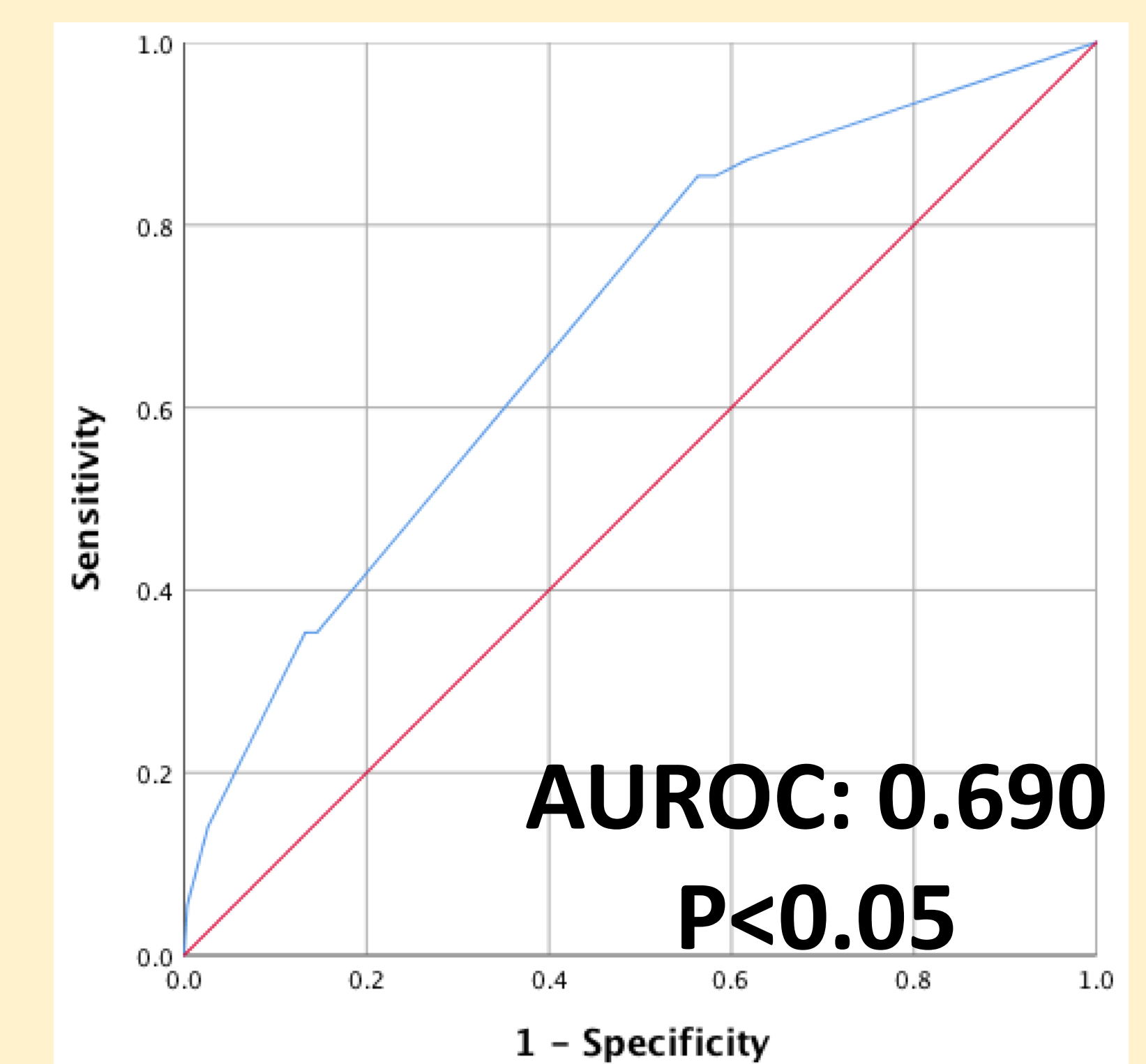
$(0.87 \times A) \times (0.99 \times B) - (1.38 \times C)$

Range: [-1.38, 1.86]
Mean score: -0.21



Score ($\mu \pm SD$)	SBCE findings*		P Value
	P2	Other	
0.19 \pm 0.81	-0.43 \pm 0.83	P<0.05	

*According to Saurin classification²



SSB Dx Score <0

Sensitivity: 85.4%

Negative Predictive value: 84.9%

Specificity: 43.6%
Positive predictive value: 44.6%