

Manual versus Automatic Scoring of the APACHE II

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Introduction

- APACHE II = age + history of organ failure + acute physiology score (APS)
- APS = time consuming to score
- Automatic scoring through PDMS might be the future

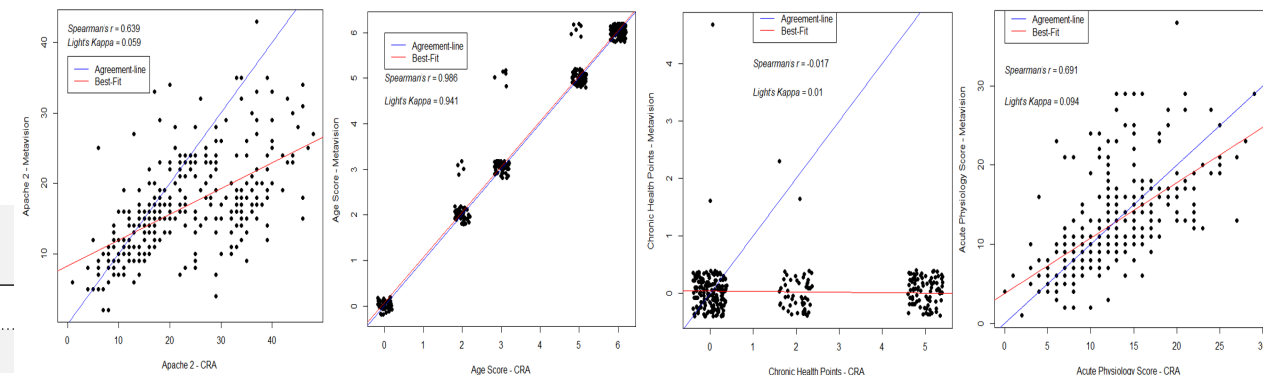
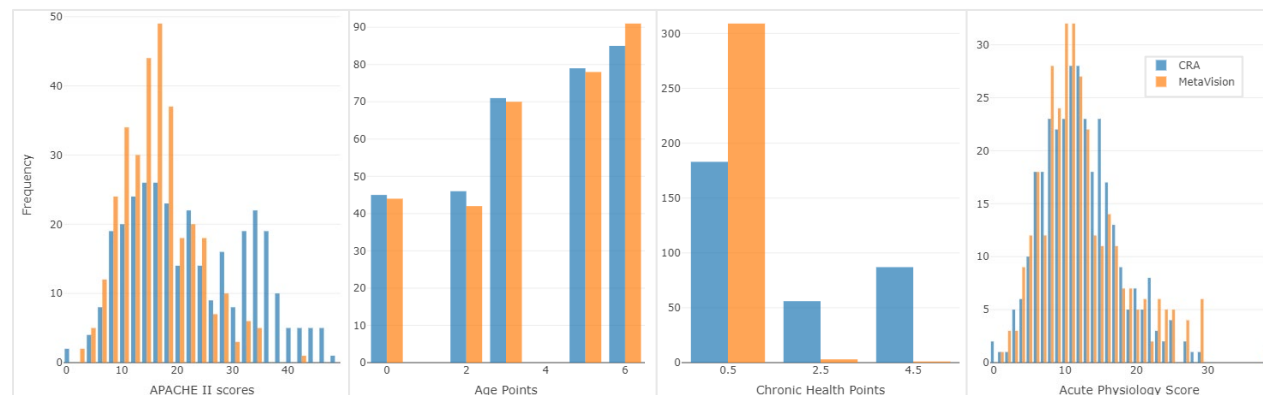
Methods

- Secondary analysis of prospective ICU study

Results

- n=326

	Manual vs Automatic Scoring	P-value	Correlation Kappa	
Apache II	21 (14-33) vs 16 (12-20)	<0,001	0,639	0,059
Age Points	5 (2-6) vs 5 (2-6)	<0,001	0,986	0,941
Chronic Health Points	0 (0-5) vs 0 (0-5)	<0,001	-0,017	0,01
Acute Physiology Score	12 (8-15) vs 11 (8-15)	0,225	0,691	0,094
Mean Arterial Pressure score	2 (2-2) vs 2 (2-2)	0,123	0,387	0,319
Heartrate score	2 (2-2) vs 2 (2-2)	0,562	0,61	0,523
Respiratory Rate score	2 (1-4) vs 1 (0-1)	<0,001	0,819	0,085
Glasgow Coma Scale	14 (3-15) vs 15 (14,25-15)	<0,001	0,341	0,215



Conclusion

- Automatic scoring insufficient
- APS, history of organ failure not adequately scored
- MAP, HR, RR, GCS showed least agreement