



XI congresso nazionale

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Abbot's VS Backman VS Saha cut off della troponina I ultrasensibile nell'evoluzione del dolore toracico: predittori di outcome o semplici numeri?

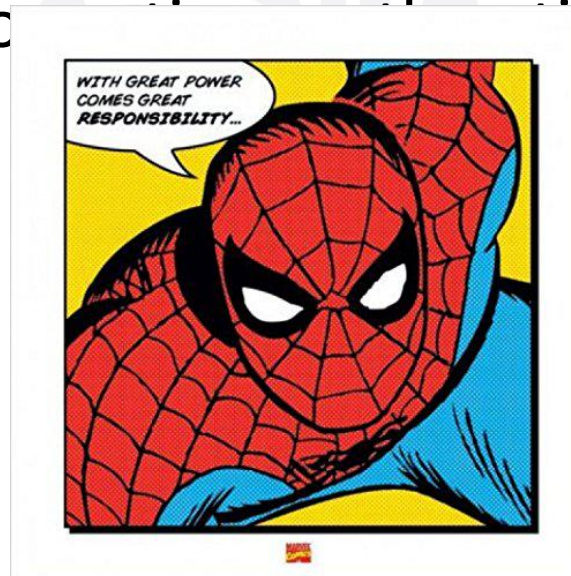
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With the advent of high-sensitivity troponin assays...
allowing for **detection of very low levels** of
troponin ...**with greater sensitivity comes the**
responsibility to integrate laboratory biomarker data
with clinical data.

While troponin is highly specific for myocardial necrosis,
it provides no information on the pathophysiology of myocyte
death



Limit of Detection (ng/L)	99% (CV) (ng/L)	10% CV (ng/L)	
Hs-cTn-T			
Roche Elecsys	5.0	14 (13%)	13
Hs-cTn-I			
Abbot ARCHITECT	1.2	16 (5.6%)	3.0
Beckman ACCESS	2 to 3	8.6 (10%)	8.6
Mitsubishi Pathfast	8.0	29 (5%)	14
Nanosphere	0.2	2.8 (9.5%)	0.5
Radiometer AQT90	9.5	23 (17.7%)	39
Singulex Erenna	0.09	10.1 (9.0%)	0.88
Siemens Vista	0.5	9 (5.0%)	3
Siemens Centaur	6.0	40 (10%)	30



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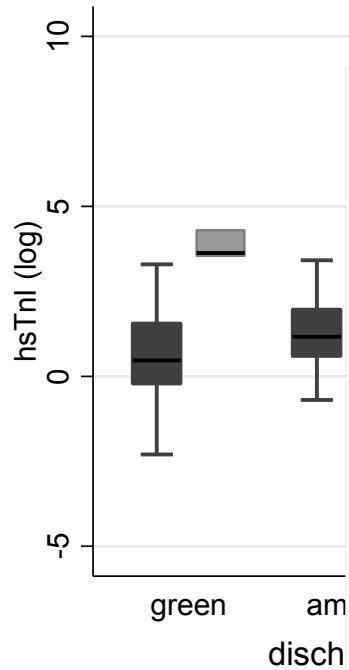
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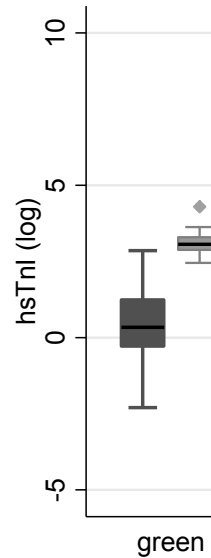
- Retrospective: 1st of June 2017 to 30th June 2017
- Chest pain
- hsTnI Tested
- Cardiologic competence (no traumas...)
- Total patients number: 161
- Collected age, sex, color code given at the triage, outcome (hospitalization/death or discharge) and hsTnI
- Compared 3 different methods to assess troponin and to establish pathologic cut-off: Abbott Architect, Backman Coulter DXI® and Shah new gold standard method



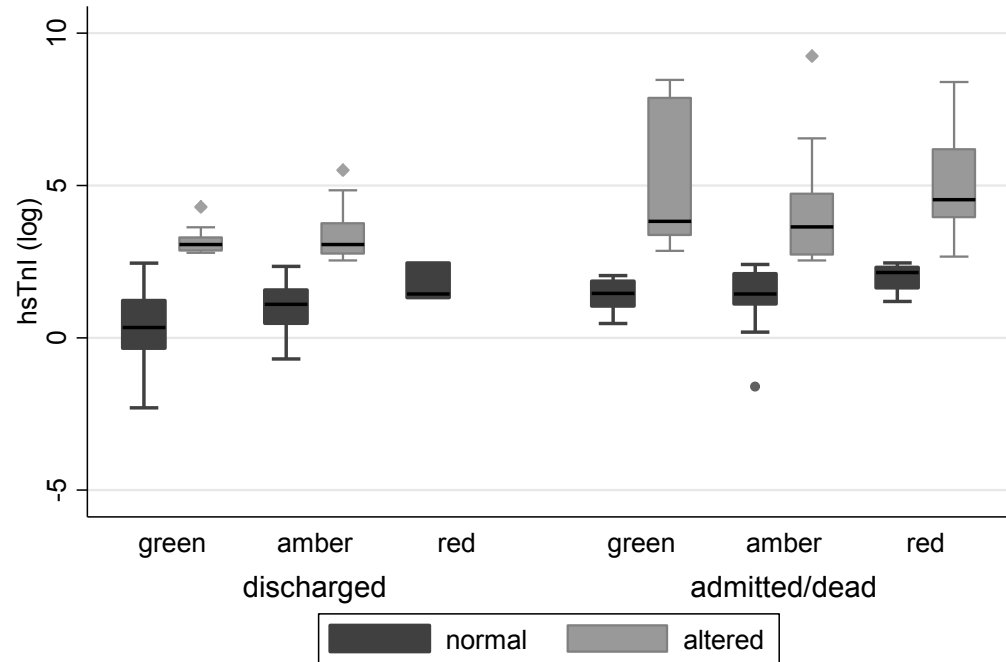
Abbott



Backman



Shah



Results: The need of hospitalization was associated with a value above the cut-off for each method taken into consideration in a statistically significant way, corrected for age, gender and color code:

- Abbott OR 7.74, 95% CI 2.89-20.75, $p < 0.001$
- Backman OR 3.93, 95%CI 1.89-8.18, $p < 0.001$
- Shah OR 5.06, 95% CI 2.51-10.22, $p < 0.001$



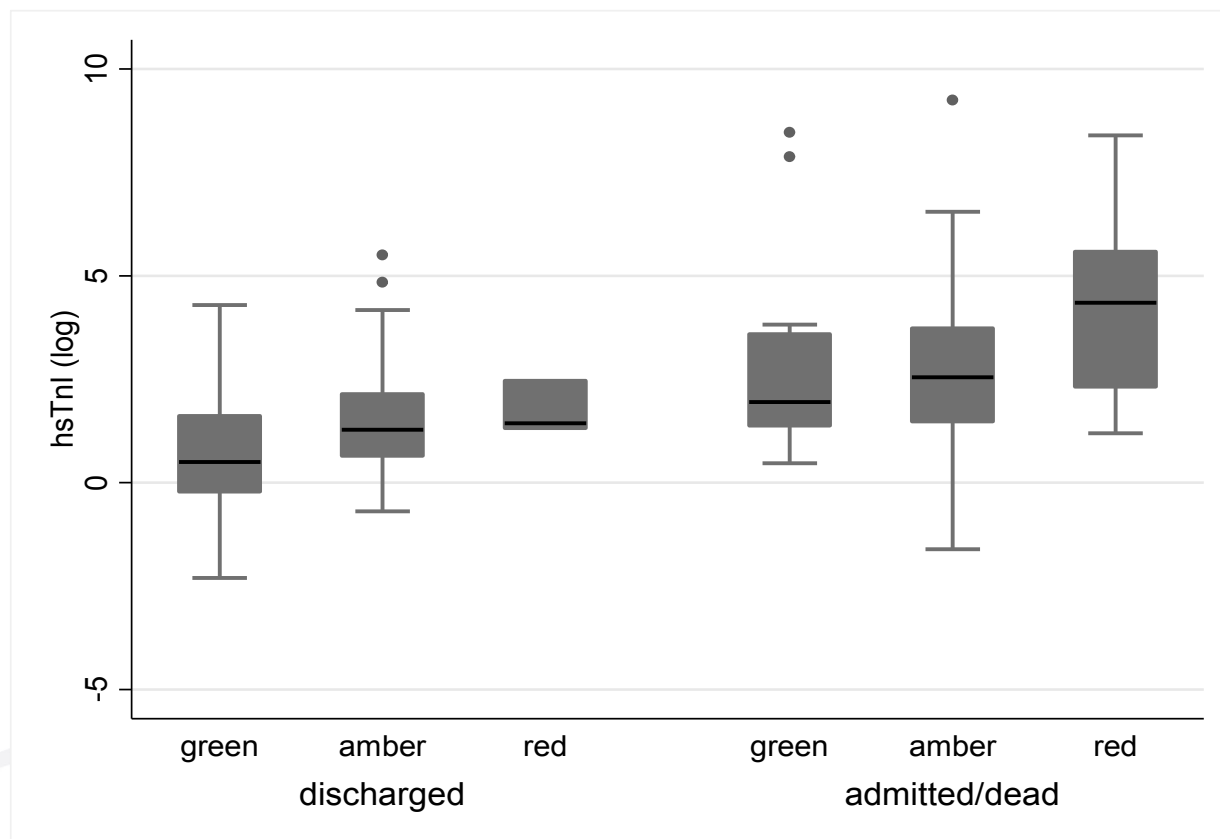


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Conclusions

- There is not a statistically significant difference between the old and new methods taken into consideration in identifying patients who need hospitalization
- Statistically significant association between the color code given during the triage, the highly sensitive troponin I level and the outcome (hospitalization)

Grazie per l'attenzione!

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