<u>Critical appraisal teaching 29th July 2009</u>
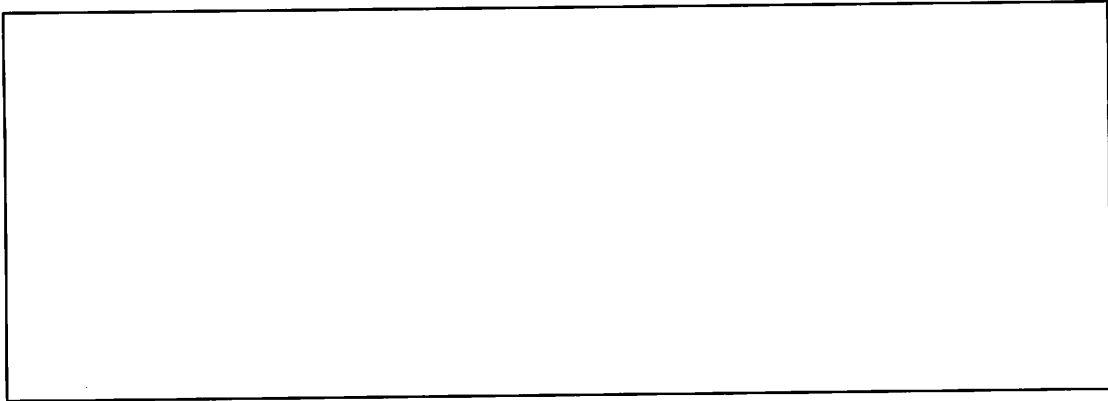
RCT NEJM

Thrombolysis during resuscitation for out-of-hospital cardiac arrest
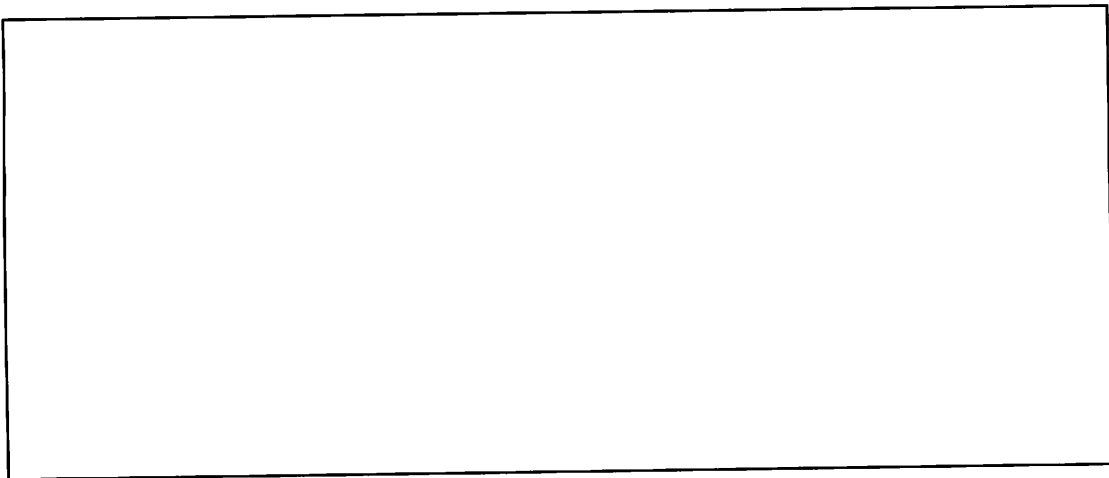
Bottiger et al.

1. Give a summary of the paper in no more than 200 words. (6 points)
(bullet points are allowed)

2. What was the aim of the study? (1 point)

3. What is the purpose of randomisation and what is meant by allocation concealment? (2 points)

4. Comment on the method of randomisation in the paper. Give a reason why it is used and one disadvantage to its use. (3 points)

5. Why were the investigators blinded to the safety data? Define bias (2 points)

6. What components are required for a sample size calculation? (2 points)
Define power (1 point)

Variance in the population of the outcome
minimum difference required
α — 0.05 β

7. Define a p-value, relative risk and a confidence interval (3 points)

$$RRR = \frac{EER - CER}{CER}$$

$$NNT = 1/ARR$$

8. Summarise the results (4 points)

9. What is the problem with subgroup analyses if the study is not powered for them? (2 points)

10. What can be the problem with post-hoc analyses? (2 points)

11. Provide a short conclusion for this paper (2 points)

TOTAL /30