



# EMS Response time in resuscitation of OHCAs: The sooner, the better?

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# Background



Worldwide EMS goal: response time: ≤ 8-min (CPR/ECC guideline, 2005).

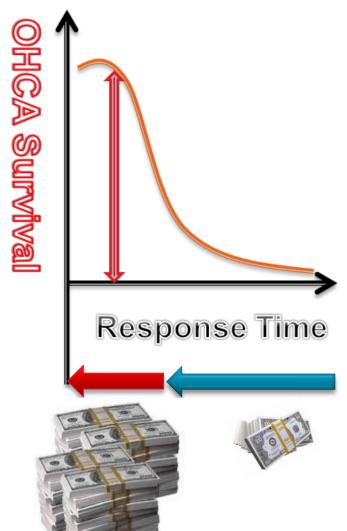
Dogma or truth? Controversial opinion? (Pons PT et al, 2005).

▶ EMS: The shorter time, the more cost!

### Hypotheses

- The shorter EMS response time in Asian cities positively correlates to the survival of OHCAs.
- But the benefits of a response time reduction becomes inefficiently if shorter than a threshold, defined as "the golden response time" for OHCA.





#### Methods



- Analyses of PAROS registered OHCA data
- Inclusion: adult non-traumatic OHCA Exclusion: OHCA caused by definite asphyxia, including submission, foreign-body airway obstruction, anaphylaxis.
- **Exposures**  $(X_i)$ : response time in calls for OHCAs, level of EMT, bystander CPR, arrest rhythm, transport time.
- Outcomes (Y): ROSC rate, survival to admission, survival to discharge, CPC at discharge.
- Statistic plans: (1) Correlation analysis (2) Multivariate logistic regression (3) Survival analysis

# Significance



- To provide the evidence of shortening response time for Asian EMS in resuscitation of OHCAs.
- To provide suggestion to international CPR/ECC guidelines on the goal of the golden OHCA response time by Asian data.
- Being a basis of cost-effectiveness analysis of systemic optimization of EMS by shortening response time.

