

Decision Tools to Improve Personalized Care in Cardiovascular Disease



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Average Treatment Effect Assessed in a Heterogeneous Population


Conventional presentation of randomized clinical trial results focuses on average treatment effects, despite a potentially wide range of treatment responses among patients.





estimation of
average treatment
effect

The resulting estimate may not
accurately describe the expected
response for individual patients.

 = expected to derive benefit
from treatment

 = expected to have an
equivocal response

 = expected to be harmed by
treatment

 = response in the
"average"

Identification of Heterogeneous Responses to Treatment

Analysis of data that allows for the identification of subgroups of patients with the most to gain or lose from treatment can serve as the basis for new personalized decision tools.



segregation of
patient population
based on
treatment
response

Figure adapted from the ideas of
John A. Spertus, MD, MPH

Kramer and Yeh. *Circulation* March 2017

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