

# Session 4 Panel Discussion

## Questions:

- How do we fill evidence gaps in care and prevention using epidemiology?
- What is the role of observational epidemiology in a "data rich" environment where randomized clinical trials may not always be feasible?

**Moderator:** Sheri D. Schully, Ph.D., EGRP, DCCPS, NCI

## Panelists:

- Barnett Kramer, M.D., M.P.H.  
*Division of Cancer Prevention, NCI*
- Michael Lauer, M.D.  
*Division of Cardiovascular Sciences, National Heart Lung and Blood Institute (NHLBI)*
- Jeffrey A. Meyerhardt, M.D., M.P.H.  
*Harvard Medical School*
- Olufunmilayo I. Olopade, M.D. F.A.C.P.  
*University of Chicago*

Barnett Kramer, M.D., M.P.H.

*Division of Cancer Prevention, NCI*

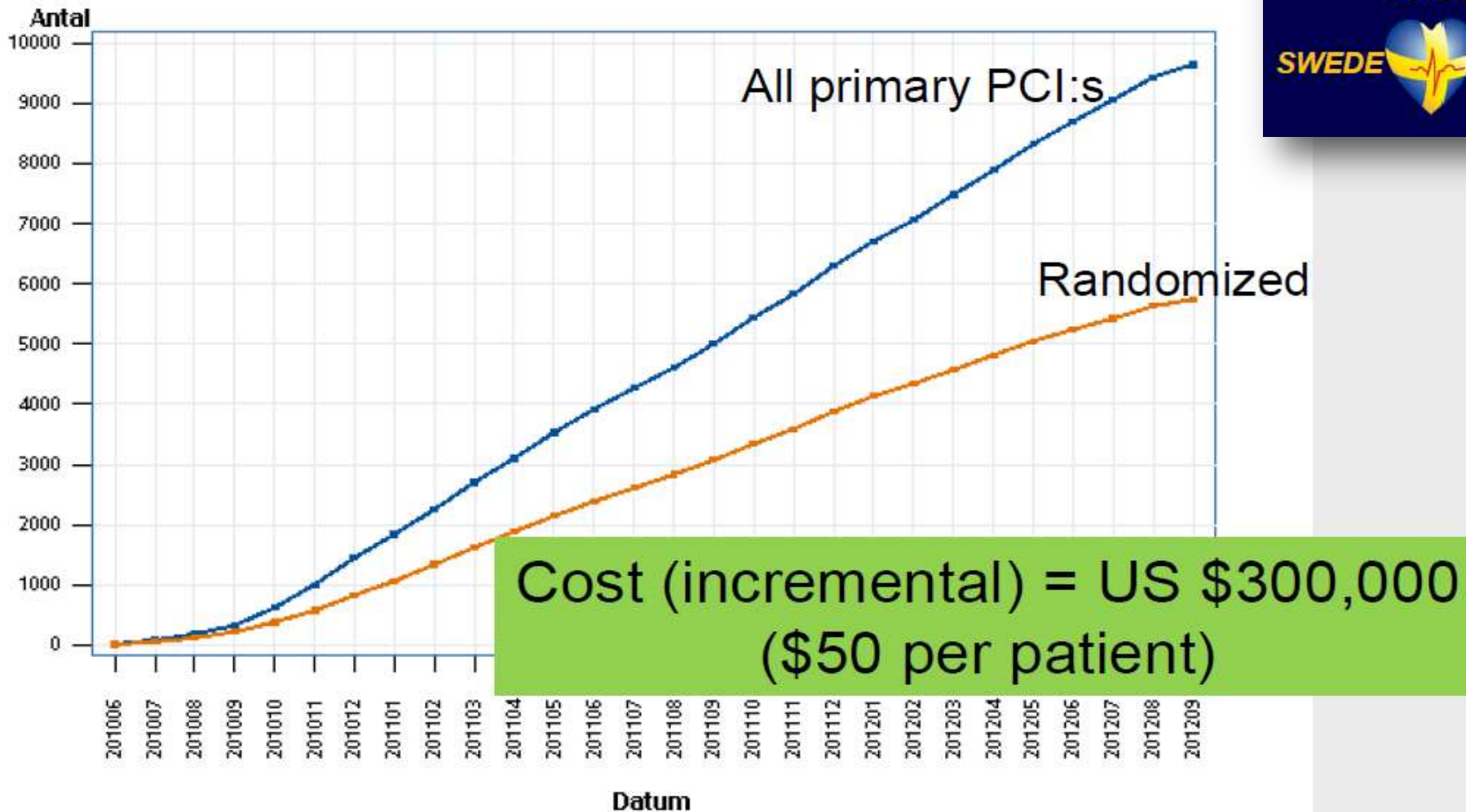
# Description of Evidence in PDQ: Five Domains

1. Study design: ranked by design strength
2. Internal validity: “quality” of execution within study design (good, fair, poor)
3. Consistency (coherence)/volume of evidence
  - One vs. multiple studies
  - Small vs. large studies
  - Consistent direction of outcomes
4. Magnitude of effects: prefer absolute vs. relative effects
  - Change from 1% to 0.5%, or from 4/1000 to 2/1000
  - Not: 50% decrease
5. External validity (good, fair, poor)
  - Applicability in usual practice with same effect?

Michael Lauer, M.D.

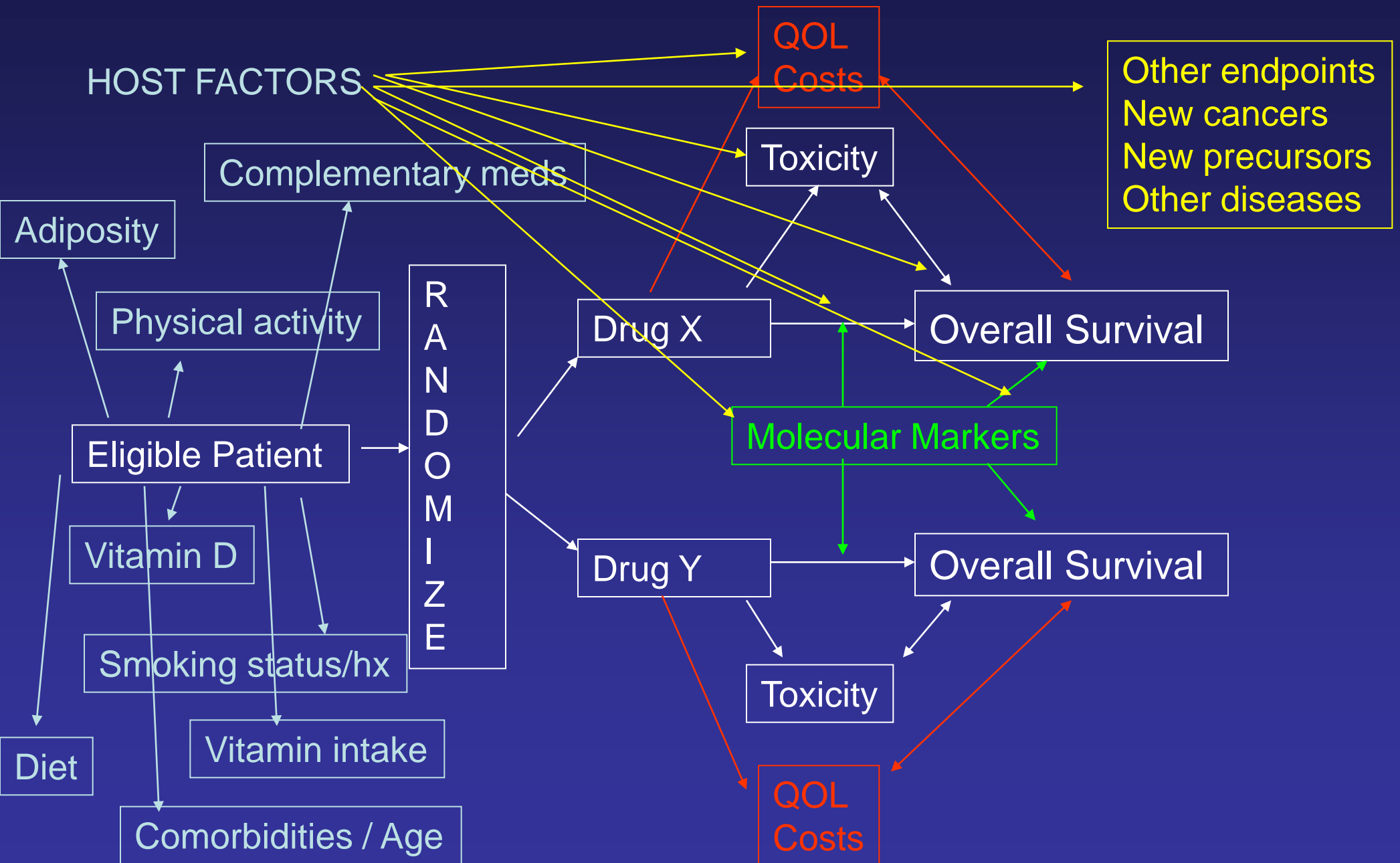
*Division of Cardiovascular Sciences  
National Heart Lung and Blood Institute*

# Trends in Epidemiology (M. Lauer, NHLBI)



Jeffrey A. Meyerhardt, M.D., M.P.H.  
*Harvard Medical School*

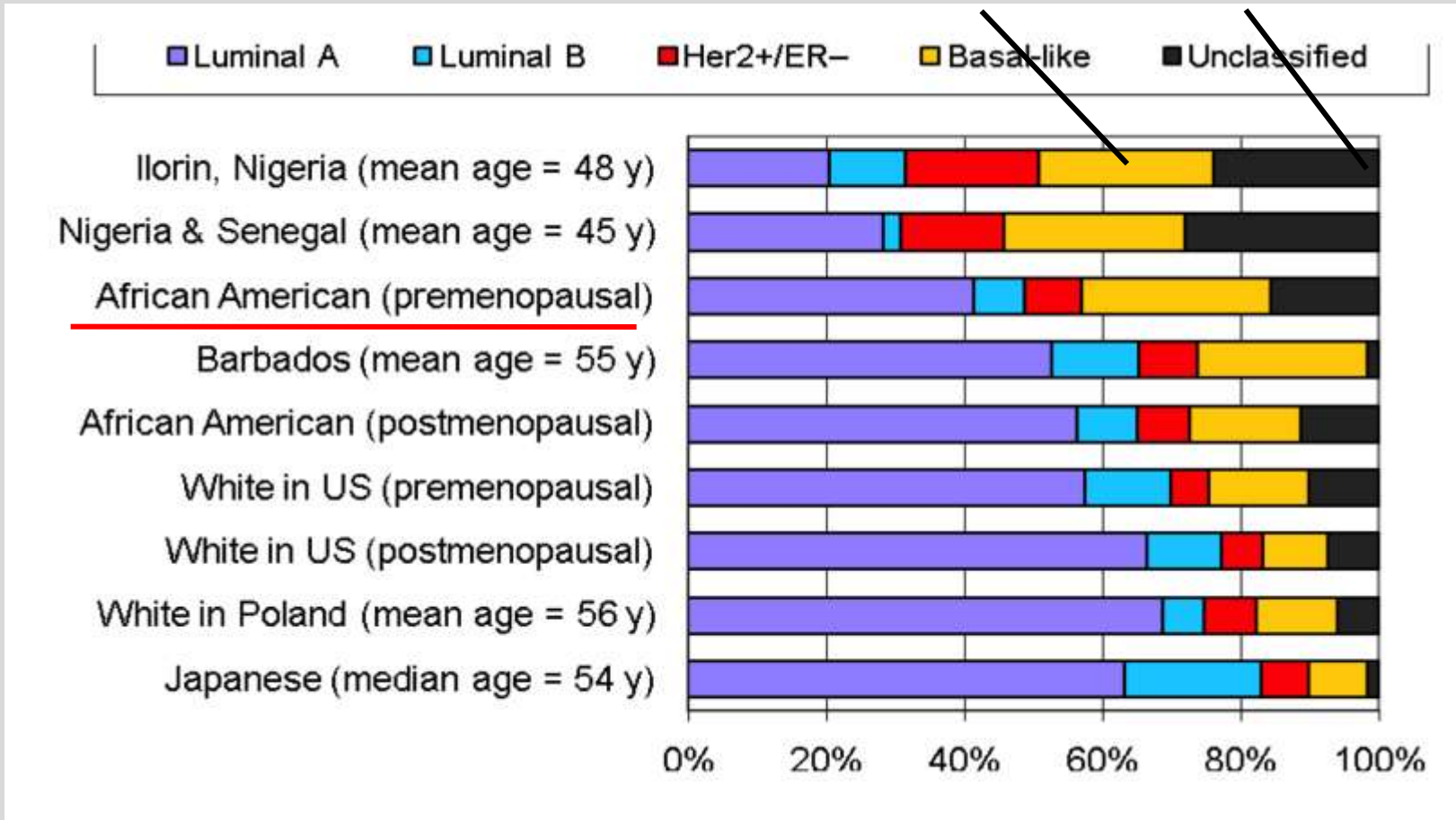
# Integrating Epidemiology into Randomized Clinical Trials



Olufunmilayo I. Olopade, M.D. F.A.C.P.  
*University of Chicago*



# Population Differences in Breast Cancer: Survey in Indigenous African Women Reveal Overrepresentation of Triple Negative Breast Cancer.



Huo D, Ikpatt OFR et al. *JCO* 27:4515-21, 2009  
Data abstracted from Adeniji et al. *ASCO Proceedings* 2010, Yang et al 2007, Kurebayashi et al. 2007