



# Applied Pharmacoeconomic and Outcomes Research Forum

February 10<sup>th</sup> 2014



UNIVERSITY *of* CALIFORNIA  
SAN DIEGO

SKAGGS SCHOOL *of* PHARMACY  
*and* PHARMACEUTICAL SCIENCES

# Ten Forums and Seven Years ...

1. AMCP Dossiers: Useful for Decision Making or Not? A Debate
2. Biologics: Drawing (or Crossing) the line of Cost vs. Benefit: A Case in Oncology
3. Quality Adjusted Life Years (QALY' s) for Decision Making: Views from Canada & the US
4. Using Large Databases to Inform Decision Making: Experience in Three Health Care Systems
5. Real World Data for Decision Making: Moving Beyond Clinical Trials
6. Pharmacoeconomics of Pharmacogenomics
7. Pharmacoeconomics & Pricing: Now & After Health Care Reform
8. What is the Business Case for Quality Improvement Initiatives?
9. Specialty Pharmacy Distribution Channels & Processes: Challenges & Opportunities Today & Under Health Care Reform
- 10. Biosimilars: Challenges and Opportunities for All Today & Under Health Care Reform.**



# Forum Objectives

- Discuss commonly encountered obstacles to conducting or utilizing results of PE studies for decision making
- Explore solutions from various perspectives
  - Managed Care
  - Government
  - Pharmaceutical/Biotech Firms
  - Medical Centers
  - Academia
- Create an environment & foundation to foster larger PE/Outcomes Research Interest Group



# Steering Committee

***Charles Daniels, R.Ph., Ph.D.***  
*UCSD Healthcare Department of Pharmacy*

***Ted Ganiats, MD***  
*UCSD School of Medicine*

***Jan D. Hirsch, R.Ph., Ph.D.***  
*UCSD, Skaggs School of Pharmacy &  
Pharmaceutical Sciences*

***Mirta Millares, Pharm.D., FCSHP, FASHP***  
*Kaiser Permanente – CA Regions*

***Anthony P. Morreale, Pharm.D., MBA, BCPS***  
*PBM Services, Department of Veterans Affairs*

***Michael Pollock***  
*Reynolds Pollock & Associates*

***Robert Schoenhaus, Pharm.D.***  
*Sharp HealthCare*

# Sponsors - Thanks!



## PE Forum Sponsorship Fund



***GOAL: Sustainable fund for future PE Forums***



**Biosimilars**  
**Challenges and Opportunities**  
**for all**  
**Today & Under Health Care Reform.**



# Top 10 Most Important Drugs

“... how the drug changed whole infrastructure of the drug industry and the practice of medicine.”

*John Swann, Historian FDA*

Leslie Z. Benet, PhD, Professor Bioengineering and Therapeutic Sciences, UCSF School of Pharmacy

Stephen Greenberg, PhD, Medical Historian, National Library of Medicine at NIH

2004 WebMD [\\_http://www.webmd.com/features/10-most-important-drugs](http://www.webmd.com/features/10-most-important-drugs)

# Number 10

## Digoxin (Lanoxin)<sup>®</sup>



”... because a lot of people with heart failure would be dead without it”



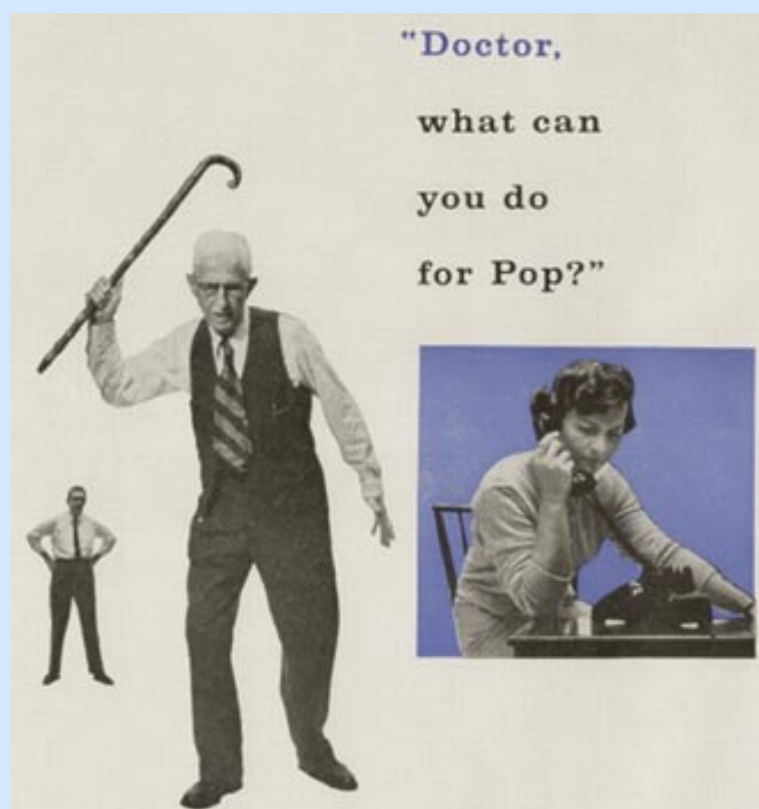
# Number 9

## Oral Contraceptives



”... far-reaching and social impact”

# Number 8



**Thorazine®**



“... led directly to today's  
deinstitutionalization...”

chlorpromazine

# Number 7

Salvarsan<sup>®</sup>

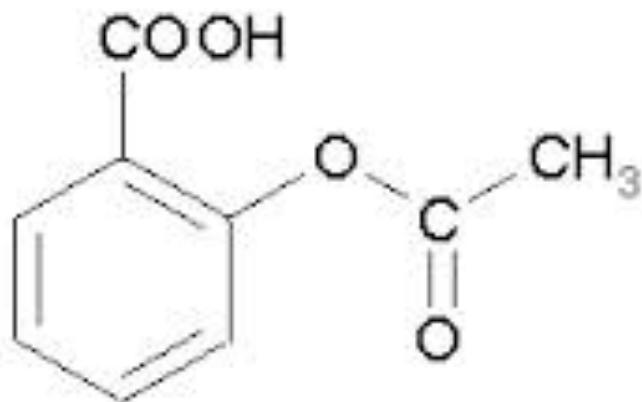


“... specific treatment for specific disease...” “...first chemotherapy”

arsphenamine

# Number 6

## Aspirin



“...first drug to ... treat simple pain,” “... it is more or less crucial for quality of life”

acetylsalicylic acid



# Top 10 Most Important Drugs

**#5**

**#4**

**#3**

**#2**

**#1**

**AFTER THE BREAK!**

# Agenda

***Moderator: Michael Pollock***

UCSD Healthcare Department of Pharmacy

**Overview of Biosimilar Markets and Issues**

**Bryan A. Liang, MD, PhD, JD**

Professor and Director, San Diego Center  
for Patient Safety, UCSD

**Views from a Manufacturer's Perspective**

**Jim Hayes**

Senior Director, Government Affairs &  
Reimbursement Strategy: Managed Markets  
Allergan

***BREAK***

**Views from a Payer Perspective**

**Kevin D. Host, PharmD**

Senior Vice President, Specialty Pharmacy,  
OptumRx

**Panel Q & A/Discussion**

***ALL***

# AFTER THE BREAK



# Number 5

1898: Efforts to create a non-addictive form led to Bayer marketing brand name: Heroin.



## Morphine



“...forerunner of several generations of pain-alleviating drugs”



# Number 4

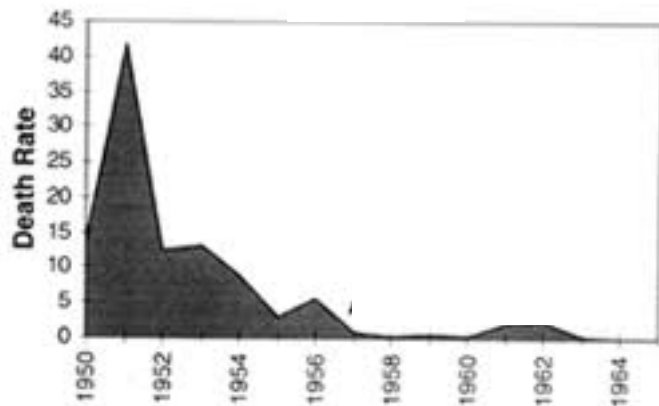
## Ether



“...first drug used as an anesthetic”  
“The making of modern surgery”

# Number 3

## Smallpox & Polio Vaccine

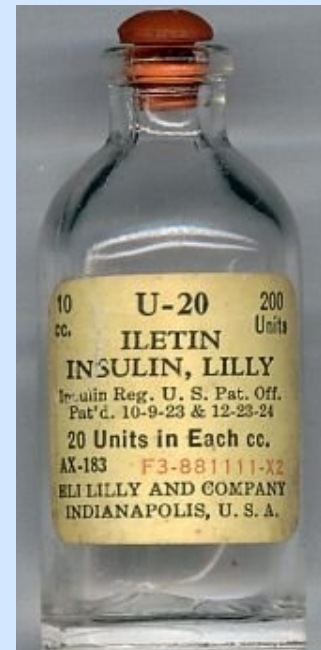


“...few preventive medicines have had the impact of the smallpox and polio vaccines”

# Number 2

- Word first used in 1922
- “great example of what can be accomplished in terms of collaboration between industry and academic researchers.”
- “... grandfather of all other hormone-replacement therapies.”

## Insulin



# Number 1

## World Population



## Penicillin



“Without penicillin, 75% of the people now alive would not be alive because their parents or grandparents would have succumbed to infections.



# Top 10 Most Important Drugs

1. Penicillin
2. Insulin
3. Smallpox and Polio Vaccine
4. Ether
5. Morphine
6. Aspirin
7. Salvarsan<sup>®</sup> (arsphenamine)
8. Thorazine<sup>®</sup> (chlorpromazine)
9. Oral Contraceptives
10. Lanoxin<sup>®</sup> (digoxin)