



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

111 Criteria for Approval #3 Equitable selection of subjects



Belmont Report & 45 CFR 46.111 & 21 CFR 56.111



- 1) Risks minimized Belmont: Respect for Persons & Beneficence
- 2) Favorable risk : benefit ratio Belmont: Respect for Persons & Beneficence
- 3) **Equitable selection of subjects Belmont: Justice**
- 4) Informed consent sought Belmont: Respect for Persons
- 5) Informed consent documented Belmont: Respect for Persons
- 6) Monitoring plan for safety Belmont: Beneficence
- 7) Privacy & confidentiality protected Belmont: Respect for Persons
- 8) Additional safeguards for vulnerable populations Belmont: Respect for Persons, Beneficence & Justice



Justice

Belmont: Distributive Justice

- Distribution of scarce benefits &
- Distribution of burdens

Ethics & Regulation of Clinical Research

Robert J. Levine



§46.111 & §56.111 (3) “Selection of Subjects is Equitable”

- IRB responsibility
 - Purpose of research
 - Research setting
 - Does it include subjects vulnerable to coercion or undue influence?
 - Children
 - Prisoners
 - Impaired decisionmaking capacity
 - Economically or educationally disadvantages





Factors to consider

- Sex of animals & people
- Ethnic Groups
- Genetic factors
- Age differences
- What is the target population for this drug/device?



Considerations for the IRB

- Appropriate balance of male & female subjects
- Provisions for consent in other languages & staff with those same abilities to answer questions
- Will minors be enrolled? Appropriate?
- Recruitment strategy appropriate & through?



Cost to bring a drug to market

Based on costs of 63 drugs between 2009 & 2018

\$985 million:
cost of failed trials
research & design



Sad Fact

- Let's start with a very sobering **fact**: More Americans die from adverse effects of prescription drug medications than from illegal drugs.

Source: [8 FDA Approved Drugs That Were Pulled From The Market - Drugsdb.com](http://www.drugsdb.com/blog/fda-approved-drugs-pulled-from-market.html#ixzz6Wvlzoox8) <http://www.drugsdb.com/blog/fda-approved-drugs-pulled-from-market.html#ixzz6Wvlzoox8>



FDA Classes of Drug Recalls

1. “Violations of labeling or manufacturing laws
2. Those that cause a temporary health problem or pose a slightly serious threat
3. Those dangerous or defective products that could cause serious health problems or death.”

*10 dangerous drugs recalled by the FDA
Naveed Saleh, MD, MS
MDLinx July 24, 2019*



10 Recalled Drugs

| | | |
|----------------------------|-------------|----------|
| 1. Valdecoxib (Bextra) | 2001 – 2005 | 4 Years |
| 2. Pemoline (Cylert) | 1975 – 2010 | 35 years |
| 3. Bromfenac (Duract) | 1997 – 1998 | 1 year |
| 4. Levamisole (Ergamisol) | 1989 – 2000 | 11 years |
| 5. Rofecoxib (Vioxx) | 1999 - 2004 | 5 years |
| 6. Isotretinoin (Accutane) | 1982 – 2009 | 27 years |
| 7. Sibutramine (Meridia) | 1997 – 2010 | 13 years |
| 8. Terfenadine (Seldane) | 1985 – 1998 | 13 years |
| 9. Troglitazone (Rezulin) | 1997 – 2000 | 3 years |
| 10. Efalizumab (Raptiva) | 2003 – 2009 | 6 years |



Post approval SAEs

- Heart attacks; heart valve issues; HBP & stroke
- Deaths
- Severe kidney damage
- Stomach & intestine tears
- Stevens-Johnson syndrome
- GI Bleeding,
- Liver damage & transplants
- Suicidal ideation



