



CLINICAL
TRIALS
TRANSFORMATION
INITIATIVE

Guiding Principles for Efficient Data Collection
20 Years of CV Outcomes Trials

Lisa G Berdan Nov 12 2013

Does the Few Page CRF Even Exist?



Cardiovascular Outcomes Trial Profile

- ▶ **Phase 3-4 drug trials**
- ▶ **5000- 20,000 patients in 15-50 countries**
- ▶ **Acute (ADHF, AMI/ACS, PCI) and Chronic (lipids, primary, secondary prevention post AMI/ACS)**
- ▶ **Intent to treat analysis with DSMB; endpoints adjudicated**
- ▶ **Typically double blinded**
- ▶ **No run in phase**
- ▶ **Monitoring- infrequent on-site visits, RBM**
- ▶ **AE Reporting-typically negotiated with regulatory**

DCRI Guiding Principles

- 1. Have we enrolled the right participants according to the protocol with adequate consent?**
- 2. Did participants receive the assigned treatment and did they stay on the treatment?**
- 3. Was there complete ascertainment of primary and secondary efficacy data?**
- 4. Was there complete ascertainment of primary and secondary safety data?**
- 5. Were there any *major* GCP related issues?**

Streamlining ^{SE} By Section

- ▶ **Past Medical History**
- ▶ **Physical Exam, Labs/Vital Signs**
- ▶ **Post Randomization Events**
- ▶ **Con Meds**
- ▶ **SAEs**

PMH- Focus on Risk Factors/Predictors of Risk

| | | |
|-----|---|--|
| 5.* | Hypertension | <input type="radio"/> Yes Currently medically treated <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> No |
| 6.* | Cigarette smoking | <input type="radio"/> Currently smoking <input type="radio"/> Prior history of smoking (N Year most recently quit <input type="text"/> <input type="radio"/> Never smoked |
| 7.* | Angina pectoris | <input type="radio"/> Yes Current CCS class <input type="radio"/> I <input type="radio"/> II <input type="radio"/> III <input type="radio"/> IV <input type="radio"/> No |
| 8.* | Coronary stenosis >70 % documented in at least 1 major epicardial coronary artery | <input type="radio"/> Yes <input type="radio"/> No |

Labs, Physical Exam and Vital Signs

- ▶ Part of the Primary Endpoint definition: record all
- ▶ NOT Part of the Primary Endpoint: collect either nadir or peak, closest to critical event or not at all
- ▶ Baseline PE rarely if ever collected

Post Randomization Events

| | | |
|-----|---|---|
| | | <input type="radio"/> No |
| 2.* | Death | <input type="radio"/> Yes <input type="radio"/> No |
| 3.* | Myocardial infarction | <input type="radio"/> Yes <input type="radio"/> No |
| 4.* | Stroke | <input type="radio"/> Yes <input type="radio"/> No |
| 5.* | TIA | <input type="radio"/> Yes <input type="radio"/> No |
| 6.* | Unstable angina / recurrent ischemia or any chest pain that led to intervention / hospitalization | <input type="radio"/> Yes <input type="radio"/> No |

Concomitant Medications

- ▶ **Classes of Meds with check boxes for time periods (on admission, at enrollment, at discharge)**
- ▶ **Dosing Details limited to (similar) Medications of Interest (ie antiplatelets, diabetes Rx, lipid Rx)**
- ▶ **Non- collection of drugs given during procedures- CABG, PCI**
- ▶ **“Snapshots” of Meds during long-term follow-up**
- ▶ **SAEs- all meds, all details pertinent**
- ▶ **All meds, all details (i.e route, dose, start/stop)**

Summary

- ▶ **Develop Guiding Principles to drive data collection**
 - ▶ Focus on primary safety and efficacy definitions
- ▶ **Recognize limitations for answering “All Questions”**
- ▶ **Utilize Yes/No check boxes- PMH, Post Randomization Events, Endpoints**
- ▶ **Utilize lists for expected events- ie. Arrhythmias, hypoxia**
- ▶ **Negotiate with Regulatory Authorities on AE reporting**

Over the Ages -Size of CRF

- ▶ **1990- GUSTO, thrombolytic therapy in AMI**
 - ▶ 3 page baseline + 30 day postcard
- ▶ **1995- PURSUIT, glycoprotein IIb/IIIa Inhibitor in PCI**
 - ▶ 10 page baseline + 1 page 30 day
- ▶ **2008-ROCKET AF, oral anti-Xa inhibitor in atrial fib**
 - ▶ 20 page baseline + 7 page monthly + event pages
- ▶ **2011-dalOutcomes 2, CETP inhibitor in stable CAD**
 - ▶ 7 page baseline + 7 page q 6 mos + event pages
- ▶ **2012- Secondary Prevention post ACS, injectable, PCSK9**
 - ▶ 20 page baseline + 10 page q 3 mos + event pages

▶ THANK YOU



CLINICAL
TRIALS
TRANSFORMATION
INITIATIVE

Lisa.Berdan@duke.edu

www.ctti.clinicaltrials.org