Protecting intellectual property associated with health technology trials – another barrier to multi-centre trials?

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Objective

- To examine the approaches to protection of intellectual property (IP) in two multi-centre trials currently being conducted in Canada.

What is/is not an “academic trial”?

- IS NOT:
  - industry initiated
- IS:
  - initiated by the principal investigator
- COULD BE:
  - clinical
  - health technology assessment
  - compare treatments or treatment policies
- Funded or not
- Peer-reviewed or not

What is IP?

- Legal rights that result from intellectual activity in the industrial, scientific, literary and artistic fields.
- Outcome of creative work
- Trade marks and patents

- What is the IP in academic trials?

IP in academic trials

- Sample selection
- Recruitment/consent
- Baseline data
- Randomisation
- Intervention
- Outcome measurement
- Analysis
- Interpretation

The art of trial design

Standardised elements

IP associated with the package

Two examples

- **CHIPS (Control of Hypertension in Pregnancy Study, ISRCTN71416914)**
  - women with hypertension - randomised to tight or less tight control of hypertension.
  - primary outcome: composite of pregnancy loss/neonatal intensive care.
  - recruiting 1028 pregnant women in 14 countries.
- **FACT (Folic Acid Clinical Trial, ISRCTN23781770)**
  - pregnant women - randomised to receive either 4 mg folic acid or placebo daily.
  - primary outcome: development of pre-eclampsia.
  - recruiting 3656 pregnant women in 4 countries.

Approaches to protecting IP

- CHIPS – "open access"
  - publish protocol
  - http://sunnybrook.ca/research/content/?page=sri_proj_cmicr_trial_chips_home
  - Lancet
- FACT – "restricted access"
  - non-disclosure agreements (NDAs)
  - local investigators/institutions must sign NDA before full protocol is provided

Open access

- Positive consequences
  - possible/actual sites have easy access to full study design;
  - potential for open discussion between collaborators;
  - study investigators held to high standards of reporting.
- Negative consequences
  - details are available with potential for plagiarism.

Restricted access

- Positive consequences
  - details of study only available if legal agreement is signed.

- Negative consequences
  - may restrict academic openness and collegiality;
  - provide additional barriers to site recruitment;
  - investigators may select the results they wish to present (even if trial is registered).

Discussion

- Academic institutions
  - rapidly changing academic environment, increasing competition for funding
  - reputation and wealth depends on IP
  - need to protect their IP and that of investigators
  - risk management approach
- NDAs
  - the legal way to “protect” IP
  - may suggest lack of trust in co-investigators
- IP in academic trials is difficult to pinpoint

Discussion

- Selective reporting of outcomes from RCTs
  - half of registered trials not published
  - inadequate description in registries
  - description of outcomes
    - vague description
    - unreported substantive changes between registration/publication
    - outcomes not reported
    - significant outcomes more likely to be reported than non-significant

Discussion

- Open access to trial protocols will not prevent bias in reporting
- But investigators will be held to higher standards of reporting
- NDAs are becoming more common in Canada
  - could be unstoppable trend
  - delaying recruitment of sites
  - potential for bias in reporting

Conflict of interest/ bias

- Laura Magee – PI for CHIPS
- Sue Ross – Steering/working committee member for CHIPS
- Stephen Wood – Calgary site investigator for FACT


Thanks!

References

Chan et al. Empirical evidence for selective reporting of outcomes in randomized trials. *JAMA* 2004;291(20):2457-65.

Chan et al. Outcome reporting in randomized trials funded by the Canadian Institutes of Health Research. *CMAJ* 2004; 171(7):735-40.

Ewart et al. Undisclosed changes in outcomes in randomized controlled trials: an observational study. *Ann Fam Med* 2009;7(6):542-6.

Hewitt et al. Heed the data when results are not significant. *BMJ* 2008; 336: 23-5.

Moha et al. Compliance of clinical trial registries with the World Health Organization minimum data set: a survey. *Trials* 2009;10:56.

Reveiz et al. Reporting of methodologic information on trial registries for quality assessment: a study of trial records retrieved from the WHO search portal. *PLoS One* 2010;5(8):e12484.

Rhoten & Powell. The frontiers of intellectual property: expanded protection versus new models of open science. *Ann Rev Law Soc Sci* 2007;3:345-73.

Ross et al. Trial publication after registration in ClinicalTrials.gov: a cross-sectional analysis. *PLoS Med* 2009;6(9):e10000144.

Ryder et al. Extent of publication bias in different categories of research cohorts: a meta analysis of empirical studies. *BMC Med Res Method* 2009;9:79.

Siegal & Wright. Intellectual property: the assessment. Oxford Rev Econ Policy 2007; 23(4):529-40.

Smyth et al. Frequency and reasons for outcome reporting bias in clinical trials; interviews with trialists. *BMJ* 2010;342:c7153.

Song et al. Dissemination and publication of research findings; an updated review of research biases. *Health Technol Assess* 2010;14:8.