Discussion Points for Clinical Trials

- Lee
  - Section 2 - Strengths of Bayesian analysis of clinical trials
  - Table 1 - Increased use over time
  - Section 7 - Quote from FDA and top of page 2967
- Brophy
  - Criticism of frequentist approach using p-values
  - One way to use a range of priors
  - Table 2 - probably of a clinically important benefit
- Speigelhalter
  - Section 4 - types of priors
  - Automatic skeptical and enthusiastic priors (Figure 2)
  - Table 1 - eliciting priors from clinicians
  - Sample size by Bayesian power
  - Interpreting trials - Figure 4
  - Section 8 - problems and suggestions
- Hughes
  - "Spike" prior at zero as a skeptical prior - compare to Speigelhalter suggestion
- Fayers
  - Bayes compared to Frequentist rules for interim stopping
  - To be conservative: Stop for large effect - Skeptical prior. Stop for no effect - enthusiastic prior

- Fisher
  - Nice history and summary of trial issues.
  - Page 118: Good arguments against Bayesian analysis of Clinical Trials?
- Other points:
  - Do we need randomization at all?
  - Exchageability versus randomness
  - Ethics with and without priors
  - Priors can reduce sample sizes? What if all do not agree?