

# **UK CEC Journal Clubs Requirements**

## **Office of Experiential Education**

### **Objectives**

After completion of the journal club the participants should be able to:

- Evaluate a clinical trial according to provided criteria
- Describe the clinical applicability of the results of the trial
- Describe a topic of recent interest to pharmacy practice

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### **Participants**

Participants include pharmacy students, pharmacy residents, clinical training coordinator, preceptors from APPE rotations, and other interested people.

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### **Preparation**

The topic for the CEC assigned Journal Club will be selected jointly by the student presenter and preceptor during the first week of the APPE rotation and approved by the CEC clinical training coordinator. The article should be circulated at least 3 days prior to the scheduled presentation to allow for the group to prepare for the discussion. The following criteria should be used for selection of the topic:

- Topic of recent interest in pharmacy practice (e.g.. within twelve months of publication)
- Clinical study in a peer-reviewed journal
- Topic with possible implications for practice

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### **Keys to Success**

- Select an article with clinical applicability
- Organize the presentation
- Sequential presentation - put yourself in the shoes of the investigator
- Be familiar with related trials, methods of measurement
- When do you incorporate your critique? During discussion of each section vs. end of article

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# Evaluation Criteria

- **I. The Journal**
  - Discuss the journal.
    - Peer review
    - Affiliation with a professional society or organization
    - Can authors pay to have their studies published in the journal?  
Check the Information for Authors section.
    - Impact factor - Journal Citation Reports
- **II. The Article**
  - Discuss general aspects of the article.
    - **A. General Comments**
      - Author expertise and qualifications
      - Financial support - independent vs. industry
      - Other conflicts of interest
    - **B. Title**
      - Descriptive
      - Reflects objectives
      - Imply unsubstantiated conclusions
    - **C. Abstract**
      - Intelligible
      - Objectives, methods, results, conclusions -not just favorable findings
    - **D. Introduction**
      - Discuss the background, study rationale, purpose and objectives
        - **Study rationale**
          - Logical
          - Sufficient detail on study background
        - **Study purpose and objectives**
          - Clear
          - Unbiased
          - Logical
    - **E. Methods**
      - Discuss the study methods, step-by-step (as written in the article)
        - **Methods**
          - Logical
          - Sufficient detail, or are you left guessing?
          - Contemporary or outdated methods
          - References to standard methods, or Description of modified methods, if applicable
        - **Patient selection methods**

- Inclusion and exclusion criteria - logical, all-inclusive
- **Study design**
  - Supports objectives
  - Study location - single center vs. multicenter
  - Appropriate controls used
    - Placebo
    - Gold-standard treatment
  - Blinding (e.g., placebo)
    - Single dummy vs. double dummy
  - Randomization procedure used
  - Washout, if necessary
  - Appropriate doses and duration of therapy
  - Sufficient follow-up
  - Adherence assessment (e.g., pill counts, diaries, blood levels)
  - Methods to assess adverse reactions
  - Was the study ethical?
- What were the study endpoints or outcomes?
- **F. Statistical Tests**
  - Discuss the statistical methods used
    - What was sample size?
    - How determined - what change or difference (%) were they looking for?
    - What was the study power?
    - What statistical tests were used? Were they appropriate?
- **G. Results**
  - Discuss the study results
    - Review the patient demographics
    - Did they enroll the desired types of patients according to inclusion/exclusion criteria?
    - Are the patients representative of the population you may be treating (e.g., can you extrapolate these results to your patients?)?
    - Patient withdrawal description
      - Adverse effect on sample size
      - Intention to treat
    - Describe all results listed
      - Are all the study measurements reported?
      - Logical, unbiased interpretations
      - Check graphic representations closely
    - Adverse reactions
    - Relevance of data
- **H. Discussion**
  - Objectives met; If not, why?

- Results put in perspective to available information
  - References to unpublished work
  - Speculation; adequate data interpretation
  - Conclusions supported by data
  - Do authors try to extrapolate results to other populations?
  - Study limitations should be discussed
- **I. Bibliography**
  - Referencing key information
  - Overzealous references to author publications
  - Primary vs. tertiary literature
- **III. Applications**
  - Impact on practice, and your practice specifically
  - Clinical vs. statistical significance

As of April 20, 2007

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