

**EVIDENCE APPRAISAL OF A SINGLE STUDY**

**– ETIOLOGY, HARM, CAUSATION, PREVALENCE, INCIDENCE: COHORT STUDY –**

**Project / Topic of your Clinical Question:** \_\_\_\_\_

**Reviewer:** \_\_\_\_\_ **Today's Date (mm/dd/yy):** \_\_\_\_\_ **Final Evidence Level:** \_\_\_\_\_

**Article Title:** \_\_\_\_\_

**Year:** \_\_\_\_\_ **First Author:** \_\_\_\_\_ **Journal:** \_\_\_\_\_

**Do the study purpose/objectives and inclusion/exclusion criteria assist in answering the clinical question?**

Yes  No  Unknown

*Comments:*

**A.** What is the study purpose/objective? \_\_\_\_\_

**B.** What are the Inclusion Criteria? \_\_\_\_\_

**C.** What are the Exclusion Criteria? \_\_\_\_\_

*\* **Bolded** questions represent the key criteria for each section.*

*\* **Lettered** questions (A., B., ...) provide additional information to better answer the bolded questions.*

**VALIDITY: ARE THE STUDY RESULTS VALID OR CREDIBLE?**

**1. Were there clearly defined groups of patients, similar in all important ways other than exposure to the treatment or other cause?**

Yes  No  Unknown

*Comments:*

**2. Were treatments/exposures and clinical outcomes measured in the same way in both groups?**

Yes  No  Unknown

*Comments:*

**3. Was the assessment of outcomes either objective or blinded to exposure?**

Yes  No  Unknown

*Comments:*

**4. Was the follow-up of study patients complete and long enough?**

Yes  No  Unknown

*Comments:*

**5. Do the results of the harm study fulfill part of a diagnostic test for causation?**

Yes  No  Unknown

*Comments:*

**A.** Is it clear that the exposure preceded the onset of the outcome?

Yes  No  Unknown

*Comments:*

**B.** Is there a dose-response gradient?

Yes  No  Unknown

*Comments:*

**C.** Is there any positive evidence from a "dechallenge-rechallenge" study?

Yes  No  Unknown

*Comments:*

**D.** Is the association consistent from study to study?

Yes  No  Unknown

*Comments:*

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E. Does the association make biological sense?  Yes  No  Unknown

*Comments:*

6. Was there freedom from conflict of interest?  Yes  No  Unknown

*Comments:*

A. Was there freedom from conflict of interest in the sponsor/funding agency?  Yes  No  Unknown

*Comments:*

B. Was there freedom from conflict of interest in the investigators?  Yes  No  Unknown

*Comments:*

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**RELIABILITY: ARE THESE VALID STUDY RESULTS IMPORTANT?**

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7. Is there a strong association between exposure and outcome?  Yes  No  Unknown

*Comments: (What is the estimate of risk?)*

\* A table is also available for calculation or presentation of study results on the last page of this form.

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**APPLICABILITY: CAN I APPLY THESE VALID, IMPORTANT STUDY RESULTS TO TREATING MY PATIENTS?**

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8. Can the results be applied to my population of interest?  Yes  No  Unknown

*Comments:*

A. Is the treatment feasible in my care setting?  Yes  No  Unknown

*Comments:*

B. Were all patient important outcomes considered? (Are substitute endpoints valid?)  Yes  No  Unknown

*Comments:*

C. Are the likely benefits worth the potential harm and costs?  Yes  No  Unknown

*Comments:*

D. Were the patients in this study similar to my population of interest?  Yes  No  Unknown

*Comments:*

9. Are your patient's values and preferences satisfied by the treatment and its consequences?  Yes  No  Unknown

*Comments:*

10. Would you include this study/article in development of a recommendation?  Yes  No  Unknown

*Comments:*

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Additional Comments or Notes: \_\_\_\_\_

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### – ETIOLOGY, HARM, CAUSATION, PREVALENCE, INCIDENCE: COHORT STUDY –

\* Consider each “No” answer and the degree to which this limitation is a threat to the validity of the results, then check the appropriate box to assign the level of quality for this study/article.

- THE EVIDENCE LEVEL IS:**
- Good Quality Prospective Cohort Study** (2a)
  - Lesser Quality Prospective Cohort Study** (2b)
  - Good Quality Retrospective Cohort Study** (3a)
  - Lesser Quality Retrospective Cohort Study** (3b)
  - Not Valid, Reliable, or Applicable**

TABLE OF EVIDENCE LEVELS							
DOMAIN OF CLINICAL QUESTION	TYPE OF STUDY / STUDY DESIGN						
	Systematic Review Meta-Analysis	Cohort – Prospective	Cohort – Retrospective	Case – Control	Cross – Sectional	Epidemiology Descriptive Case Series	Expert Opinion Case Reports
<b>Etiology</b>	<b>1a</b>	<b>2a</b>	<b>3a</b>	<b>4a</b>	<b>4a</b>	<b>4a</b>	<b>5</b>
<b>Prevalence</b>	<b>1b</b>	<b>2b</b>	<b>3b</b>	<b>4b</b>	<b>4b</b>	<b>4b</b>	
<b>Incidence</b>							

Development for this appraisal form is based on:

- Guyatt, G.; Rennie, D.; Evidence-Based Medicine Working Group.; and American Medical Association.: Users' guides to the medical literature : a manual for evidence-based clinical practice. *Users' guides to the medical literature : a manual for evidence-based clinical practice*: "JAMA & archives journals." Chicago, IL, 2002
- Melnyk, B. M. and E. Fineout-Overholt (2005). Evidence-based practice in nursing & healthcare : a guide to best practice. Philadelphia, Lippincott Williams & Wilkins.
- Phillips, et al: Oxford Centre for Evidence-based Medicine Levels of Evidence, 2001. Last accessed Nov 14, 2007 from <http://www.cebm.net/index.aspx?o=1025>.
- Fineout-Overholt and Johnston: Teaching EBP: asking searchable, answerable clinical questions. *Worldviews Evid Based Nurs*, 2(3): 157-60, 2005.

#### RESULTS TABLE:

COHORT STUDY	Risk (Chance)	Relative Risk
Group Exposed:	$a / (a + b)$	$[a / (a + b)]$ $[c / (c + d)]$
Group Not Exposed:	$c / (c + d)$	

	Adverse Outcome Present (Case)	Adverse Outcome Absent (Control)
Cohort Exposed to the Treatment/Harm Agent	<b>a</b>	<b>b</b>
Cohort Not Exposed to the Treatment/Harm Agent	<b>c</b>	<b>d</b>

	Prevalence	Incidence	Relative Risk	Confidence Interval [95% CI]	Other Data Results	p value
<b>Outcome 1:</b>						
<b>Outcome 2:</b>						