

EVIDENCE APPRAISAL OF A SINGLE STUDY
– PROGNOSIS: CROSS-SECTIONAL 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. Is the study purpose clearly stated? (e.g., aim, hypothesis, or objective) Yes No Unknown

Comments:

2. Are the study methods clearly described and appropriate for the question? Yes No Unknown

Comments:

A. Is the setting clearly described and appropriate? Yes No Unknown

Comments:

B. Was there a representative sample of patients at a well-defined point in the course of disease? Yes No Unknown

Comments:

C. Is the sample population clearly described and sufficient? Yes No Unknown

Comments:

D. Were the participants recruited prospectively? Yes No Unknown

Comments:

3. Were all potentially important prognostic factors assessed? Yes No Unknown

Comments:

A. Were the patients sufficiently homogeneous with respect to prognostic risk? Yes No Unknown

Comments:

B. Are there subgroups in the sample with very different prognosis compared to other subgroups in the study? Yes No Unknown

Comments:

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- 4. Were objective and unbiased outcome criteria used?** Yes No Unknown
Comments:
- Were instruments used to measure the outcomes tested to be valid and reliable? Yes No Unknown
Comments:
- 5. Is there a description of withdrawals and dropouts?** Yes No Unknown
Comments:
- Were all patients who entered the study accounted for at its conclusion? 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:

RELIABILITY: ARE THESE VALID STUDY RESULTS IMPORTANT?

- 7. Were the statistical analysis methods clearly described and appropriate?** Yes No Unknown
Comments:
- 8. Did the studies have a sufficiently large sample size?** Yes No Unknown
Comments:
- 9. Were the endpoints quantifiable and precisely measurable?** Yes No Unknown
Comments:
- Was the assessment of the endpoint made independent of knowledge of prognostic factors? Yes No Unknown
Comments:
- 10. Does the prognosis change by age?** Yes No Unknown
Comments:
- 11. What are the main results of the study?**
(Enter or calculate results in the appropriate fields in the tables below. Point estimates? Effect Size?)
* A table is also available for calculation or presentation of study results on the last page of this form.
- A.** What are the main tables or graphs of results in the article? *(Page #s, Table #s, Figures, Graphs)*
- B.** How precise were the results? *(Were the results presented with Confidence Intervals?)*

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

12. 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:

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

Comments:

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

Comments:

Additional Comments or Notes: _____

* 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 Cross-Sectional Study** (4a)
 Lesser Quality Cross-Sectional Study (4b)
 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	Cross – Sectional	Epidemiology Descriptive Case Series	Expert Opinion Case Reports
Prognosis	1a 1b	2a 2b	3a 3b	4a 4b	4a 4b	5

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.

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2X2 TABLE / STUDY CALCULATIONS / RESULTS TABLE:

	Outcome / Disease		Unexposed / Control Event Rate CER = c / c+d
	Yes	No	Exposed / Experimental Event Rate EER = a / a+b
Exposed / Experimental / Treatment Group	a	b	Relative Risk – RR = EER / CER RR Reduction – RRR = (CER – EER) / CER = 1-RR Odds Ratio – OR = ad / bc
Unexposed / Control Group	c	d	Standard Error – SE = square root of ((p x (1-p)) / N) Confidence Interval <i>proportion</i> CI = +/-1.96 (square root of ((CER*(1-CER) / # control pts.) + ((EER*(1-EER) / # exper. pts.))

PROGNOSIS ENDPOINTS	Sample Size [N]	Proportion (n/N)	Standard Error [SE]	Confidence Interval [95% CI]	Relative Risk [RR]	Odds Ratio [OR]	Other Data Results	p value
Prognosis 1:	N = _____ n _{prognosis} = _____	p = _____ %						
Prognosis 2:	N = _____ n _{prognosis} = _____	p = _____ %						
Prognosis 3:	N = _____ n _{prognosis} = _____	p = _____ %						
Prognosis 4:	N = _____ n _{prognosis} = _____	p = _____ %						
Prognosis 5:	N = _____ n _{prognosis} = _____	p = _____ %						