LEGEND Evidence Appraisal of a Single Study
Prognosis
Systematic Review / Meta-Analysis

Reviewer:　　　　　　　　　　**Today's Date:**　　　　　　　**Final Evidence Level:**

Project/Topic of your Clinical Question:

Article Title:

Year:　　　　　　**First Author:**　　　　　　　　　**Journal:**

Do the study aim/purpose/objectives and inclusion/exclusion criteria assist in answering your clinical question?　　　☐ **Yes**　　☐ **No**　　☐ **Unknown**

- Study Aim/Purpose/Objectives:

- Inclusion Criteria:

- Exclusion Criteria:

When reading the bolded questions, consider the bulleted questions to help answer the main question.

If you are uncertain of your skills in evidence evaluation, please consult a local evidence expert for assistance:
- CCHMC Evidence Experts

Unfamiliar terms can be found in the LEGEND Glossary.

Validity　　　　　*Are the results of the systematic review or meta-analysis valid?*

		Yes	No	Unknown
1.	**Did the overview address a focused clinical question?**	☐ Yes	☐ No	☐ Unknown
2.	**Was the search for relevant studies detailed and exhaustive?** • Was it *unlikely* that important, relevant studies were missed?	☐ Yes	☐ No	☐ Unknown
3.	**Were the included studies appraised and assigned a high level of quality?**	☐ Yes	☐ No	☐ Unknown
4.	**Were the methods consistent or homogeneous from study to study?** *(such as the bullets below)* • Did the overview describe the study populations at a well-defined point in the course of disease? • Were the patients sufficiently homogeneous with respect to prognostic risk? • Were objective and unbiased outcome criteria used? • Was the follow-up sufficiently complete?	☐ Yes	☐ No	☐ Unknown
5.	**Were the outcomes quantifiable and precisely measurable?** • Was the outcome assessed independent of knowledge of prognostic factors?	☐ Yes	☐ No	☐ Unknown
6.	**Was there freedom from conflict of interest?**	☐ Yes	☐ No	☐ Unknown

Comments on Study Validity:

Reliability　　　　　*Are these valid study results important?*

		Yes	No	Unknown
7.	**Were the statistical analysis methods appropriate?** • Were the statistical analysis methods clearly described? • If subgroups in the sample had different prognostic factors *(e.g., demographics, disease specifics, comorbidity)*, was an adjustment made for the differences between groups? • Was an adjustment made for changes that occur as the patient ages, if any?	☐ Yes	☐ No	☐ Unknown
8.	**What are the main results of the study?** *(e.g., Helpful data: Page #, Table #, Figures, Graphs)* • How likely are the outcomes over time? *Absolute results (e.g., 5 year survival rate)* or *Relative results (e.g., risk from prognostic factor)* or *Survival Curves (e.g., cumulative events)* • What were the measures of statistical uncertainty *(e.g., precision)*? • Were the results presented with Confidence Intervals or Standard Deviations?			

9.	**Were the results statistically significant?**	☐ **Yes**	☐ **No**	☐ **Unknown**
10.	**Were the results clinically significant?**	☐ **Yes**	☐ **No**	☐ **Unknown**

Comments on Study Reliability:

Applicability   *Can I apply these valid, important study results to my patients?*

11.	**Can the results be applied to my population of interest?** • Do the patient outcomes apply to my population or question of interest? • Were the patients in the studies similar to my population of interest? • Is the setting of the study applicable to my population of interest?	☐ **Yes**	☐ **No**	☐ **Unknown**
12.	**Are my patient's values and preferences satisfied by the knowledge gained from this study** *(such as outcomes considered)***?**	☐ **Yes**	☐ **No**	☐ **Unknown**
13.	**Would you include this study/article in development of a care recommendation?**	☐ **Yes**	☐ **No**	☐ **Unknown**

Comments on Study Applicability:

Additional Comments or Conclusions *("Take-Home Points")*

Quality Level / Evidence Level

- *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.*
- *Consider an "Unknown" answer to one or more questions as a similar limitation to answering "No," if the information is not available in the article.*

The Evidence Level is:

☐ **Good Quality Systematic Review** **[1a]**
☐ **Lesser Quality Systematic Review** **[1b]**

☐ **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	Descriptive Study Epidemiology Case Series	Mixed Methods Study	Decision Analysis Economic Analysis Computer Simulation	Guidelines	Case Reports N-of-1 Study	Bench Study	Published Expert Opinion	Local Consensus Published Abstracts
Prognosis	1a 1b	2a 2b	3a 3b	4a 4b	4a 4b	4a 4b	2/3/4 a/b	5a 5b	5a 5b	5a 5b	5a 5b	5a 5b	5

Development for this appraisal form is based on:

1. 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
2. Melnyk, B. M. and E. Fineout-Overholt (2005). Evidence-based practice in nursing & healthcare : a guide to best practice. Philadelphia, Lippincott Williams & Wilkins.
3. 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.
4. Fineout-Overholt and Johnston: Teaching EBP: asking searchable, answerable clinical questions. *Worldviews Evid Based Nurs*, 2(3): 157-60, 2005.
5. Porzsolt F, Ohletz A, Thim A, *et al.* Evidence-based decision making—the six step approach. *BMJ Evidence-Based Medicine* 2003;**8**:165-166.
6. Clark, E., Burkett, K., & Stanko-Lopp, D. (2009, Dec). Let Evidence Guide Every New Decision (LEGEND): an evidence evaluation system for point-of-care clinicians and guideline development teams [CCHMC LEGEND development]. J Eval Clin Pract, 15(6), 1054-1060.