

## CRITICAL APPRAISAL: DIAGNOSIS

### 1. Are the Results of the Study Valid?

- a. Was there **diagnostic uncertainty**
- b. Was there an **independent, blind comparison** with a **reference standard**? . (gold standard or criterion standard) that was **applied to both groups** equally?
- c. Did the patient sample include an appropriate **spectrum** of patients to whom the diagnostic test will be applied in clinical practice? (spectrum bias)
- d. Did the results of the test being evaluated **influence** the decision to perform the reference standard? (work-up bias)
- e. Were the methods for performing the **test described** in sufficient detail to permit replication? (operational definition)

### 2. What Were the Results?

- a. Are **likelihood ratios** for the test results presented with estimates of precision or are the data necessary for their calculation provided (i.e raw data or Sn/Sp) as well as possible test results

### 3. Will the Results Help Me in Caring for my Patients?

- a. Will the reproducibility of the test result and its interpretation be satisfactory in **my setting**?
- b. Are the results applicable to **my patient**?
- c. Will the results **change my management**?
- d. **Will patients be better off as a result of the test?**

Adapted from:

- Users guide to the medical literature III. How to use an article about a diagnostic test: a. Are the results of the study valid? Jaeschke R, Guyatt G, Sackett DL JAMA Feb 2, 271(5);389-391, 1994

- Users guide to the medical literature III. How to use an article about a diagnostic test: b. What were the results and will they help me in caring for my patient? Jaeschke R, Guyatt G, Sackett DL JAMA Mar 2, 271(9);703-707, 1994.

-Guyatt G and Rennie D. Users' Guides to the Medical Literature: Essentials in Evidenced Based Clinical Practice. JAMA, 2001

## TYPES OF BIAS OR ERROR

Study	Ref Criterion Std.	Dx/Test Review	Spectrum ?	Op. Definition	Sn	Sp