

Criteria to Estimate Causality from Non-Randomized Studies.

Hill's Criteria (Proceedings Royal Society of Medicine 58:295-300, 1965)

Strength of association

Consistency (across trials, investigators, persons)

Specificity (can other things cause it)

Temporal precedence (do we know if cause precedes effect)

Dose-responsivity

Plausibility (biological and psychological)

Coherence (consistent with other lines of evidence)

Analogy (do similar agents act similarly)

Other possible criteria

Replicated by others

Convergent validity

Consistency across Ss

External validity