Synthesis

METHODS NOTE (E156 entry 678)

NCT-bridge methodology is structurally blind to PACTR-registered African trial publications

Zaki Khan

Ahmadiyya Hospital, Kenema, Sierra Leone

Correspondence: zakikhan101@gmail.com

Primary estimand: Algorithm gate-2 sensitivity (algorithm True / auditor True) for peer-publication detection on PACTR-registered African trials.

Abstract

How well does NCT-bridge methodology, used by every existing ClinicalTrials.gov-style synthesis audit, capture publications from PACTR-registered African trials? We scraped 5,878 PACTR trials (snapshot 2026-05-04, sha256 44f99b14), assigned 768 to ten high-burden conditions, and tracked four gates by algorithm and a blinded 30-trial spot-check. Algorithm and auditor applied identical gate definitions: gate 2 via NCT-bridge to Europe PMC (algorithm) or direct title/PACTR-ID search (auditor), and gate 3 via the Pairwise70 index. The algorithm found 3.6% peer-published and 0.5% Cochrane-cited; the blinded spot-check found 53.3% peer-published (16/30) and one Cochrane match the algorithm missed (WOMAN trial, CDE coverage gap). Algorithm publication-detection sensitivity was 6.2%; 96.0% of trials carry no NCT cross-reference and are structurally unreachable through NCT-bridge. NCT-bridge methodology is blind to PACTR publications even when published, undercounting trial-to-publication conversion by an order of magnitude. The preregistered 30-trial spot-check returned 0/30 verdict-level agreement and the threshold was not lowered — the disagreement is the finding.

FIGURES

Figure 1. Peer-publication detection by the NCT-bridge algorithm versus a blinded 30-trial auditor, gate-2 sensitivity, and the share of trials carrying no NCT cross-reference. Algorithm sensitivity 6.2%; 96.0% of trials structurally unreachable.

Visual abstract. Algorithm (NCT-bridge → Europe PMC) versus a blinded auditor on 768 PACTR-registered African trials across ten high-burden conditions.

METHODS NOTE

PACTR full-registry scrape (snapshot 2026-05-04, sha256 44f99b14); 5,878 trials retrieved. Condition mapping: 768 trials assigned to 10 high-burden conditions by keyword. Gate 2 algorithm: NCT-bridge to Europe PMC. Gate 2 auditor: direct title/PACTR-ID search (blinded, 30-trial sample). Gate 3: Pairwise70 index match. STROBE (observational audit) and PRISMA-S (search methodology) applied.

DATA & CODE AVAILABILITY

PACTR full-registry scrape pinned by sha256 44f99b14 (snapshot 2026-05-04); blinded spot-check artifacts archived with the project release. All upstream data sources publicly accessible. Funding: None. Competing interests: None declared.

REFERENCES

1. TrialScout. Registry-to-publication linkage on ClinicalTrials.gov via NCT-bridge. medRxiv; 2026. 2026.03.15.

2. PACTR. Pan African Clinical Trials Registry. pactr.samrc.ac.za. Accessed 2026-05-04.

3. WOMAN Trial Collaborators. Effect of early tranexamic acid administration on mortality following haemorrhage (WOMAN). Lancet. 2017;389(10084):2105-2116.

4. Ghersi D, Pang T. From Mexico to Mali: four years in the history of clinical trial registration. J Evid Based Med. 2009;2(1):1-7.