Reporting checklist — computational methods case audit

This checklist records the study-specific reporting items and their location in the manuscript or scientific supplements. No human participants were recruited, no treatments were assigned, and no systematic review was performed. Figure 2 illustrates the procedure. The scientific records appear in Additional files 1–3.

Reporting item	Completed record / location	Status
Research question and bounded contribution	Manuscript Background; novelty review	Reported
Study design and unit	Methods; eight claim pairs, sixteen states, four paper clusters	Reported
Source population/selection	Source eligibility audit; original six candidates, four purposively selected	Reported; not representative sampling
Original publication identity	Original PDF receipts and bibliography; independent source audit	Checked
Original claim wording and qualifiers	Frozen requests; exact published wording	Preserved
Original evidence and versions	Original tables/PDFs; SHA-256 source/view bindings	Preserved
Controlled alterations	Original/modified tables and diffs; no new measured results	Documented
Reference construction and disagreements	Independent AI references before diagnostic inference; original references retained separately	Reported; no human-expert ground truth
Evidence supplied to each condition	Request-bound packet manifests and selected-context provenance	Frozen before diagnostic inference
Post-exposure selection and changed input roles	Diagnostic protocol and Methods	Explicit; no holdout or content-only causal claim
Model/execution configuration	Exact aliases, reasoning setting, timestamps/session IDs, raw logs	Recorded; immutable backend snapshot unavailable
Independent single-version assessment	Separate A/B sessions, assigned-version packet copies and isolation probes	Executed
Baselines and measurements	Always-supported, byte/text screens, single/paired; claim/state/cluster CSVs	Reported with denominators
First passes, errors, abstentions	Raw responses, validation receipts, prior failures	Preserved; no semantic retries
Citation identity versus semantic meaning	Scientific post-audit; link-level qualification	Reported separately
Statistical scope	Three diagnostic losses and three stable controls; four purposive clusters	Descriptive only; no significance/generalization claim
Reproducibility	Unchanged-code replays; method/reference/source manifests	Verified
Relation to prior work	Twenty authenticated published works; eight target-journal items; sixteen cited manuscript works	Checked; no firstness or paired-superiority claim
Limitations and source conflicts	Explicit Limitations; MPGD/C uncertainty and VeLoRA local scope	Retained
Data/materials and code access	Additional files1–3, manifest and reproduction instructions	Prepared; no public-deposit claim
Human/animal study reporting guidelines	No recruited participants/tissue/intervention in reported experiment	Not applicable

Reporting item	Completed record / location	Status
Funding/interests/current author details and review status	Current title-page metadata, manuscript declarations and final independent review	Reported in manuscript declarations