

**Psychiatry · Educational evidence summary**

Route and formulation issues in psychiatric anticholinergic evidence

This psychiatry article focuses on route and formulation issues in psychiatric anticholinergic evidence.

UnifiedACB · Published October 3, 2026 · Updated October 4, 2026

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A shared ingredient does not guarantee a shared evidence statement

Psychiatric medication records can describe an ingredient, a salt, a tablet, an oral solution, an injection, or a long-acting preparation. A source table may be less specific than the clinical product. The mapping problem is to retain both descriptions without silently pretending that an ingredient-level observation studied every possible preparation.

This explainer describes how to read that boundary in UnifiedACB. It does not calculate exposure equivalence across routes or change the original classifications. The central rule is to state the level of identity and context the source actually supports.

Separate identity from exposure

Identity asks which medicine or product a record describes. Exposure asks what was administered, by which route, in what amount, and over what interval. These questions are related but not identical. A correct ingredient match is necessary for a lookup, yet it does not answer all exposure questions relevant to an outcome.

For example, a record for a long-acting preparation may require a treatment timeline that differs from a current list of oral doses. The shared ingredient alone does not tell the reviewer how to compare administration periods. That comparison needs product-specific information and an explicit method rather than an assumed conversion of an ordinal category.

Read the mapping hierarchy

At the broadest level is the medication concept used for discovery. More specific levels can include ingredient form, combination components, route, dosage form, strength, and release characteristics. A source may identify some of these levels and leave others unspecified.



The public dataset's route and formulation notes explicitly caution against inferring details absent from the source label. [UnifiedACB public evidence dataset, v3.0 RC12 final](#) That boundary protects the original observation. It also lets the user see when the directory can identify a relevant concept but cannot claim a product-specific evidence match.

What aliases can and cannot do

An alias is useful for finding a medication when people use different names. It should lead the reader to examine the canonical concept and source label. It should not merge distinct preparations simply because the names look related, and it should not transfer a combination product's observation to every component.

The same caution applies to spelling variants and shortened labels. A search system may offer a likely match, while the final interpretation still requires confirmation. Search convenience and evidence certainty should be allowed to differ rather than forcing a plausible candidate to become a definite identity decision.

Ingredient-level scales have a defined scope

If a source categorizes an ingredient without route-specific data, the category should remain an ingredient-level observation. The clinical record can still preserve the actual route and preparation alongside it. The absence of route detail should be stated, not repaired by claiming that all routes have identical effects.

Conversely, when a source explicitly limits an observation to a route or formulation, the qualifier belongs to the evidence. Removing it can extend the observation beyond its support. This is why a source label and a normalized display name are both useful: one improves usability while the other preserves exactly what was classified.

Why dose arithmetic does not solve a formulation gap

An ordinal category is not a concentration. It cannot be converted between preparations by multiplying by the dose, dividing by the dosing interval, or applying an assumed bioavailability factor. Those operations would require a defined pharmacokinetic and outcome model that the category itself does not provide.

Chew and colleagues' laboratory work is useful here as an example of a different measurement layer: it assessed anticholinergic activity under specified assay and concentration conditions. It was not a universal clinical conversion table for every route or psychiatric formulation. [Chew et al., 2008](#)

A formulation-aware comparison

A careful comparison begins with the two actual products and asks whether the source records are at the same level of specificity. If both are ingredient-level observations, report that limitation. If one is route-specific and the other is not, describe the asymmetry rather than treating it as a clean head-to-head comparison.



Keep unknowns explicit: route not documented, formulation unspecified, or identity unresolved. A missing field should not be populated from a usual prescribing assumption. The purpose is to make the evidence reproducible, including the places where the mapping cannot be completed.

Implications for clinical records and research

In a clinical note, preserve the actual product and the source classification as separate fields. This allows later reviewers to distinguish a formulation change from an updated source observation. It also helps when a medication is supplied by another service and the psychiatric record contains only the ingredient name.

For research, prespecify which matches are considered sufficiently compatible for the analysis. Report excluded or unresolved records and the reason. A sensitivity analysis can examine the consequences of a broader mapping rule, but it must not silently overwrite the primary definition or the underlying source evidence.

For an exported research file, consider retaining both the normalized ingredient identifier and the product description supplied by the clinical record. The normalized field supports discovery and grouping; the original description allows reviewers to see which qualifications were present. A separate mapping note can explain whether the source observation was exact, ingredient-level, or uncertain. That arrangement is more auditable than overwriting the product field with a shorter generic name and expecting future analysts to reconstruct the distinction.

The same principle applies during a conversation. A follow-up about an extended-release product should continue to refer to that product when the prior exchange established it. If the source is ingredient-level, the answer can state that scope explicitly. Preserving conversational context should preserve the qualification as well as the medication name.

Limits

The directory cannot infer route-specific central effects, serum concentrations, or equivalent risk from a shared ingredient. It also cannot resolve a missing clinical administration history. The appropriate interpretation is often bounded: a relevant source observation exists at this identity level, while the exact preparation requires additional evidence.

That statement is more informative than an unsupported conversion because it identifies precisely what is known and which question remains open.



References

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5. UnifiedACB. Public evidence dataset. v3.0 RC12 final. Read-only source observations, source registry, and preserved anomaly records. [Source](#)

Explore the evidence

[Ask UnifiedACB](#) about a medication or source, browse the [Medication Library](#), or read the [methodology](#).

Disclosure

Funding: None. Conflict of interest: None declared for the UnifiedACB educational project.

Educational evidence summary. This content does not provide patient-specific medical advice and does not replace clinical judgment, medication reconciliation, or prescribing guidance.