

Which Evidence Settles Which Claim

The AlphaCitation Proposition Taxonomy and Evidence-Authority Standard, version 3.0

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Version history. 1.0, 23 October 2026: first publication (doi:10.5281/zenodo.23577317). 2.0, 23 October 2026, after a critique of version 1.0 received that day (it is not peer review): two listings of one pharmacy that bracket the claim's date within three days each side now support and no longer settle (P5); a medicine is investigational only while a study of the use is ongoing on the claim's date, a new sub-proposition (P3d); P8 is divided into the regulatory safety statement (P8a, per market) and a safety finding (P8b, international); "settles" is defined as a verdict on authority, distinct from interpretation and adjudication (section 2); a listing that does not show the product for sale, and a supply record of unstated kind, settle nothing; the machine-readable files, the test vectors, the reference implementation and the conformance rule are named (section 7); AlphaCitation's own software is described in its own section (section 9). Verdicts change for P3, P5 and P8 claims, so this is a major version (doi:10.5281/zenodo.23584875). 2.1, 23 October 2026: Annex B, on dividing an answer into claims and assigning each to a proposition, with a classification test set that measures a classifier and is not part of conformance (section 7); two clarifications: that a status claim qualified only by a phrase such as "for use", "for sale" or "for distribution" is a registration claim (P1); and that label content other than a condition, population, use, safety statement or clinical effect maps to no proposition (P2); plainer wording of the P5 rule in the brief and the summary table, which a reader had taken to mean that pharmacy listings only support; the annex of evidence classes renamed Annex A; section 9 naming version 2.0 where it describes software; the versioning of classification rules and the addresses that name no version (section 7); and section 10, open questions for the next major version. No verdict that a source receives for a proposition, market and date changes, so this is a minor version (doi:10.5281/zenodo.23588555). 3.0, 24 October 2026, after an external review of version 2.1 (it is not peer review): the claim's market is fixed by the market step, which takes the market the answer states, else the question's, else the market the deploying system declares, records which step governed and never infers a market (section 2; Annex B, M1 to M7); P6 is divided into P6a (reimbursed or covered, settled by a payer's decision within its reach), P6b (health technology assessment recommendation) and P6c (formulary listing), with two new evidence classes; a formulary the sentence does not name makes a formulary-listing claim that no source can be matched to (Annex B, C9 and E2); P8c, a safety signal, is added, with a new evidence class, and never establishes causation, and its negation is that a review found no new signal; the answer change is settled per market, by observations of that market; an availability claim with no word of breadth takes the same claim form as its negation (P5); a hedged claim is recorded as a hedged unit, visible as its own category and never judged (Annex B, E5); a stated date governs only its clause, an undated earlier time leaves the claim's date not determinable, and the answer's date is read in the market's local time (Annex B, T3, T4 and T7); section 7 states the release history, the policy for the stable version and how changes are proposed and recorded; classification under Annex B was measured in a pre-registered study and the results are reported (section 9). Before release, Annex B was sharpened where two blind labellers of a development set of real AI answers, and

three machine readers of the test set, read its wording two ways, and the questions that versions 2.1 and the draft of 3.0 had left open were decided: a date the answer gives for an event dates an event claim, judged against the record of the event (Annex B, T6; Rule 7), and for a claim about a state, a stated period that contains the answer's date is read as the answer's date (T2); one unit per use, adverse effect, endpoint or study (U1); a status named only in a noun phrase, and a reference back to a claim already made, make no unit (U5); a list's lead-in makes no unit, a label's section heading supplies its predicate, and an entry whose heading is not given makes no claim (U7); a bare "Yes" or "No" asserts or denies the question's proposition (U9); P2 covers the legal category of supply, which in the EU the Commission's decision states, and the dose, route, form or restricted programme the authorisation permits, and a statement of who may receive the medicine, while a statement that a group must not receive it is a label warning, P8a (C2, C4, C7); P5 has a named-channel form, settled by the regulator's decision or label that provides a regulatory access route for the medicine by name or by the named supplier's own record, and a stock form, which nothing settles (C6); P6b covers added-benefit and value ratings (C9); "investigational" with no use named is read through P1 and "being studied" with none is P3d, P3c covers observational studies, and P4 covers a guideline named by its issuer, while a recommendation attributed to unidentified guidelines is a P4 claim that is not determinable (C10 to C12); a finding of no new safety signal is P8c negative (C14); a claim about a class makes its proposition for the class (E11); which uses of "may" hedge a claim (E5); a market attached to a noun, a body whose remit is part of a country, which governs a claim about its own decision, and places below the country, recorded by ISO 3166-2 codes, for which an authority's record speaks and a supply record does not (M1, M6); answers that differ at one time are not the answer change (C18). Verdicts change for claims whose market only the question or the deploying system states, for coverage, safety-signal and answer-change claims, for unqualified availability claims, for event claims, for claims about a place below the country, a named channel, stock, a class, the terms of a label, an HTA rating and a guideline named by its issuer or by none, so this is a major version.

The standard in brief

An answer about a medicine bundles separate claims: that it is approved, for whom, available, paid for, effective, safe, better than a competitor, recommended. Each claim except the recommendation can be settled only by the classes of evidence this standard names for it, in force on the claim's date; a claim about when an event took place is settled by the record of that event (Rule 7). For approval, indication, availability, reimbursement, health technology assessment, the regulator's safety statements and claims that AI answers changed, that means evidence that speaks for the market the claim is about: the market the answer states, else the one the question states, else the one the deploying system declares, and never one inferred from the user. For availability, a licensed pharmacy's listing dated the claim's date settles only that the pharmacy listed the product for sale that day, which settles a claim that the medicine is not available anywhere in the market and only supports a claim that it is available across it; two of its listings that both show it for sale, one dated before and one after the claim's date, each within three days of it, support at most. For trial, efficacy, safety-finding, safety-signal and comparative claims, it means international evidence; a safety signal never establishes that the medicine causes the effect. For a guideline or formulary claim, it means the named guideline or formulary, within its own scope. A recommendation is never settled: it is judged through the claims it rests on.

A conclusion may rest only on a source that settles; without one, the claim is unknown, never false.

1. Purpose

AI answers about medicines mix claims that only different kinds of evidence can settle. An answer that rules out a medicine as unapproved and unavailable, and recommends a competitor, carries a registration claim (settled by the market's regulator), an availability claim (settled by launch statements and supply records; an authorisation does not establish supply) and a recommendation (which no record settles).

The standard fixes in advance, for every market, which evidence may settle which claim. It decides the first of three questions about a claim: whether a source has the authority to settle it (section 2). The worked examples re-read two earlier AlphaCitation publications against the standard. AlphaCitation offers it for others to apply, test and cite; section 9 records how AlphaCitation's own software applies it.

2. Terms

- **Proposition.** One checkable statement inside an answer. Annex B sets out how an answer is divided into propositions.
- **Evidence class.** The kind of record a source is: one of 27, listed in Annex A.
- **Authority.** The body that issues a record. A record of a class only an authority issues (Annex A, first list) speaks for the jurisdiction of the authority that issued it and nothing else. An authority cited for a class it does not issue settles nothing: an EMA "authorisation" does not exist.
- **The claim's market.** The country or bloc the claim is about, as ISO 3166-1 codes, or ISO 3166-2 codes for a place below the country (Annex B, M6), fixed by the market step. It is the market the answer states for the claim, in the sentence or in a heading or earlier clause the sentence continues, where naming a market's regulator, payer or health technology assessment body states that market; otherwise the market stated in the question; otherwise the market the deploying system declares for its user, as configuration; otherwise it is unresolved (Rule 5). The first step that states a market governs, even a market word that names no market ("worldwide"); a later step that states a different market is recorded as a conflict and never governs. A market is never inferred from the user's address, language, spelling, currency, units or time zone. Every verdict records the step that fixed the market. Annex B (M1 to M7) applies the step to the words of an answer. For centrally authorised medicines, EU bodies speak for the 27 member states and for Iceland, Liechtenstein and Norway, which adopt corresponding decisions under the EEA Agreement; a nationally authorised medicine is settled by the national record.
- **The claim's date.** The date of the answer, or the earlier date the answer itself states for the claim ("as of October 2023"). Annex B (T1 to T7) fixes it clause by clause.
- **Settles.** A source settles a claim when it has the authority to decide it: it is of a class this standard names for the proposition, issued by an authority competent to issue it, speaks for the claim's market where the proposition is settled per market, meets the time test of Rule 7 (in force on the claim's date, or, for an event claim, the record of the event issued by the answer's date), and meets every further condition section 4 and section 5 set for it. That is the first of three questions. The second, interpretation, is whether the record, read correctly, concerns the claim's product, population, endpoint and date and says what the claim says. The third, adjudication, is whether the claim is then supported, contradicted or unresolved. This standard answers the first only (section 8). A source that settles is competent to establish what it records; its class alone does not establish that a reported effect is reliable. Where this text says that a source settles that something is so, or that a claim is settled false, it means that the source settles the claim and, read as the cited study read it, records that it is so or contradicts it.

3. Summary of the taxonomy

Type	Proposition	Settled only by	Jurisdiction
P1	Registered or authorised	Authorisation decision; register entry (current listing only); authorised label	Claim's market
P2	Authorised indication, population or terms of supply and use	Authorised label; for the legal category of supply or a restricted programme, also the authorisation decision that states it (in the EU, Annex II)	Claim's market
P3	Investigational	No single source: P3d and P2 (P1 where no use is named), each settled separately	Registry international; indication or registration per market
P4	Guideline recommendation	The clinical guideline the claim identifies, by name or by issuer	The guideline's own scope
P5	Launched or available	Dated launch statement; supply record, within its reach: a distributor's listing or a procurement record; a licensed pharmacy's listing dated the claim's date, which settles only that the pharmacy listed the product for sale that day. Two listings of one pharmacy that both show it for sale and bracket the claim's date within three days each side, none dated the claim's date, only support. A named channel: the regulator's decision or label that provides the route for the medicine by name, or the named supplier's own record	Claim's market
P6a	Reimbursed or covered	A payer's coverage decision, within its reach	Claim's market
P6b	HTA recommendation	The health technology assessment body's appraisal	Claim's market
P6c	Formulary listing	The named formulary's listing	The formulary's own scope
P7	Efficacy result	Publication of record; systematic review; regulator's assessment report; authorised label	International
P8	Safety: the regulatory statement (P8a), a safety finding (P8b) or a safety signal (P8c)	P8a: the authorised label's safety sections and the regulator's safety communications. P8b: a systematic review. P8c: a regulator's or pharmacovigilance body's safety signal record or safety communication	P8a: claim's market. P8b and P8c: international
P9	Comparative	Head-to-head trial; appraised indirect comparison	International
P10	Recommendation by the answer	Nothing: assessed through its grounds, P1 to P9	None

Sources must be in force on the claim's date, or, for a claim about when an event took place, be the record of that event issued by the answer's date (Rule 7). Section 4 names the classes that only support; any other class is irrelevant. P3 has sub-propositions **P3a** (trial registered), **P3b** (design), **P3c** (result reported) and **P3d** (study ongoing); P6 has **P6a** (reimbursed or covered), **P6b** (HTA recommendation) and **P6c** (formulary listing); P8 has **P8a** (regulatory safety statement), **P8b** (safety finding) and **P8c** (safety signal); a further proposition covers the **answer change**, settled per market. "P6" and "P8" are no longer proposition identifiers: a claim mapped to either is not assessable.

4. The ten proposition types

Each proposition is defined for a medicine. A claim about a class of medicines makes the same proposition for the class: for registration (P1), indication (P2), availability (P5), reimbursement (P6a), formulary (P6c) and regulatory safety-statement (P8a) claims it is about the class's members, and for the others only a source that speaks of the class itself can settle it (Annex B, E11).

Worked examples use only facts published in Field Note 07 [1] (GPT-4o mini through OpenAI's API with web search; Wegovy, UAE), Paper No. 01 [2] (EASD 2026) and the regulators' documents cited with them [3, 4, 5], and, in P5, the day of each availability answer, from Field Note 07's derived per-answer codes file, which it offers on request.

P1. Registered or authorised

Definition. The medicine holds a marketing authorisation, or a current registration, in a market.

Evidence. Settled by the competent authority's authorisation decision, register entry or authorised label for that market. A label in force is part of the authorisation record: the EU summary of product characteristics is Annex I to the European Commission's decision, the conditions of the authorisation, including the legal category of supply, are Annex II, and the labelling and package leaflet are Annex III. Supports, never settles: a regulatory opinion, institutional guidance, a manufacturer's or launch statement, commentary.

Example. Field Note 07 tested answers that said Wegovy was not approved in the UAE. The records of the class that settles that claim are the Emirates Drug Establishment's. Its announcement of 1 June 2026 is its own record of an authorisation decision: it states that it approved the oral form, and gives no registration date and does not mention the injection. Its directory, as recorded on 2 and 5 October 2026, listed the injection as registered on 14 November 2022 and the tablet on 4 May 2026. Field Note 07 states that those values rest on an AI-assisted transcription of a 5 October read, on records of 2 October and on a search-indexed copy of the injection's directory record seen on 13 October, that no directory page from those days was preserved, and that none of the values could be re-read on 19 October. The announcement therefore settles that the oral form is approved in the UAE, which contradicts an answer that, in the present tense and naming no form, says Wegovy is not approved there. A Dubai Health Authority document of 3 September 2024 calls the medicine "Approved by FDA and registered for obesity pharmacotherapy in UAE". It supports a UAE registration claim and settles nothing: it is guidance, and the FDA is a foreign regulator.

P2. Authorised indication, population or terms of supply and use

Definition. The medicine is authorised in a market for a stated condition, population or use, or on stated terms of supply or use, stated as what the authorisation permits: its legal category of supply (such as prescription only), its dose, its route, its form, or a restricted programme it requires for every supply.

Evidence. Settled only by that market's authorised label, in the version in force, and, for the legal category of supply or a restricted programme, also by the authorisation decision where it states it: in the EU, Annex II to the Commission's decision ("Conditions or restrictions regarding supply and use") states the legal category, and the summary of product characteristics does not. A register's category is not an indication, and a guideline is not the licence. A phrase that names the scope of an authorisation, such as "for use", "for sale" or "for distribution", is not a use: a status claim qualified only by one is P1 (Annex B, C3). A risk, warning or contraindication in the label is P8a, and an effect from its clinical section is P7. Supports, never settles: the authorisation decision (except as to the legal category or restricted programme it states), a regulatory opinion, a regulator's assessment report, a manufacturer's statement.

Example. Paper No. 01's Saudi arm concerned teplizumab (Tzielid). Its US label, in the June 2026 revision the paper cites [3], indicates it to delay the onset of Stage 3 type 1 diabetes in patients aged 1 year and older with Stage 2 disease, with a further accelerated-approval indication in patients aged 8 to 17 recently diagnosed with Stage 3 disease. The European Commission authorised it, as Teizeild, on 8 January 2026 to delay the onset of Stage 3 type 1 diabetes in patients aged 8 years and older with Stage 2 disease [4]. Neither settles a Saudi indication claim, and Paper No. 01 did not establish teplizumab's Saudi registration status. In these versions the two foreign labels differ on the youngest eligible age.

P3. Investigational

Definition. The medicine is being studied for a use for which it is not authorised in the market.

Evidence. No single source settles P3. It is composite: that an interventional study of that use is ongoing on the claim's date (P3d, international), and that the market's authorised label does not carry that use (P2, per market), each settled on its own terms. Where the claim names no use, its parts are that an interventional study of the medicine is ongoing (P3d) and that the medicine holds no marketing authorisation in the market (P1, per market). Only a status word ("investigational", "experimental") makes such a claim (Annex B, C10). A registered study that is not ongoing on the claim's date does not make a medicine investigational. A registry record, a publication of record or a manufacturer's statement supports P3.

Example. In Paper No. 01, retatrutide was named in 10 of 1,680 UAE after-window answers, and 8 were coded as stating its status correctly (that it is investigational, in trials or not approved). The paper marks these codes provisional, because UAE status was established only to 2 October 2026. Orforglipron was excluded because the EDE directory recorded it as registered from 2 April 2026. Under this standard that registration settles P1 only. A UAE claim that orforglipron is investigational for a use is settled through P3d and P2 separately: a trial of that use, ongoing or not, does not make it investigational in the UAE if its UAE label carries that use.

P3a, P3b, P3c and P3d. Registration (P3a) is settled by the registry record; a publication of record or a manufacturer's statement supports it. Design or planned endpoints (P3b) are settled by the registry record version in force on the date asked, or the published protocol; a later amendment cannot rewrite an earlier registration, and a publication of record supports it. A reported result of a study, interventional or observational (P3c), is settled by results posted to a registry or the study's publication of record; a conference abstract, a manufacturer's release or commentary supports it. That the study is ongoing (P3d) is settled only by its registry record in the version in force on the claim's date, stating an ongoing overall status: not yet recruiting, recruiting, enrolling by invitation, or active and not recruiting (ClinicalTrials.gov's terms; another registry's status is read as its equivalent, and a status with no equivalent settles nothing). A version stating the study completed, terminated, suspended or withdrawn settles that this study was not ongoing on that date; it never settles that no study of the medicine exists. A version that states no status, states it as unknown, or states an expanded-access status settles nothing. A publication of record or a manufacturer's statement supports P3d.

P4. Guideline recommendation

Definition. A clinical guideline recommends the medicine, or its class, for a use: the guideline the claim identifies by its name or by its issuer, or guidelines the claim does not identify, which no source can be matched to (Annex B, C12).

Evidence. Settled by the guideline the claim identifies, at the version in force, within its own stated scope and population; the claim's market does not govern. A claim that names only the issuer is about that issuer's guideline for the use. A claim that attributes a recommendation to guidelines it does not identify is not determinable (section 6): no source can be matched to it. A systematic review and commentary support P4.

Example. Paper No. 01 coded Singapore answers that framed SGLT2 inhibition as first-line instead of or ahead of metformin against a reference frame it fixed before results, the 2022 ADA/EASD type 2 consensus. Under the protocol count, 1 of 202 candidate answers before the congress and 1 of 53 after did so. Both framed it for high-risk patients only, consistent with that consensus's cardiorenal recommendations. First-line use together with metformin was reported, not counted. The paper, not the answers, chose the guideline. Under this standard an answer that names the guideline or its issuer makes a P4 claim settled by that guideline; an answer that attributes the framing to guidelines it does not identify makes a P4 claim that no source settles, and a framing attributed to no guideline makes none. Either may be compared with a reference frame, which settles neither.

P5. Launched or available

Definition. The medicine is on sale or supplied in a market.

Evidence. Settled by a manufacturer's dated statement that the product has launched in that market, or by a supply record (a distributor's listing or a procurement record) within its own reach. A licensed pharmacy's listing settles only that the pharmacy listed the product for sale on the listing's own date; a listing that does not show the product for sale settles nothing, and nor does a supply record that does not say whether it is a distributor's listing, a procurement record or a licensed pharmacy's listing: each is not determinable (section 6). Two listings of the same pharmacy that both show it for sale, one dated before the claim's date and one after it, each within three days of it, support and do not settle that it was listed on the claim's date: the product may have left the listing between the two reads. A listing dated the claim's date is judged on its own. A listing is not proof of stock and does not establish market-wide supply. A listing dated the claim's date therefore settles a claim that the medicine is not available anywhere in the market, which it contradicts, and only supports a claim that the medicine is available across the market. A claim that the medicine is available in the market without a word of breadth ("available in the UAE") takes the same claim form as a claim that it is not available anywhere there: a claim and its negation are one proposition, and the evidence that settles one settles the other (Annex B, C6). A claim that the medicine is available across the market needs a word of breadth, and a claim that it is not available across the market is that claim's negation, settled by the same evidence. A claim that the medicine can or cannot be obtained through a named channel is settled, for a regulatory access route (a named-patient or special-access import route, compassionate use, a restricted programme), only by the market regulator's own decision that provides the route for that medicine by name: its authorisation decision or authorised label (a restricted programme the label requires), or its decision granting the route for the medicine (an import permit or a compassionate-use authorisation that names it), each an `authorisation_decision` OR `authorised_label`. For a named supplier, it is settled by that supplier's own supply record, as above. The regulator's published rules for a route, which name no medicine, support the claim and never settle it: they show that the route exists, not that the medicine can be obtained through it. A record of another channel supports it. A claim about stock is settled by no class this version names: a listing is not proof of stock, and the claim is not determinable (section 6). The authorisation decision, a register entry, the authorised label and other manufacturer statements support P5 and never settle it, except that an authorisation decision or label that itself provides a regulatory access route for the medicine by name settles a named-channel claim about that route: registration does not prove supply.

Example. In Field Note 07, 14 answers said Wegovy was not available in the UAE. The regulator's records cannot test them. Under an availability standard the study added after the first day of collection, each was coded false against one licensed UAE pharmacy chain's listings, read on 13 and 16 October 2026, which showed the injection and the tablet for sale at that chain. By the study's per-answer codes, 9 of the 14 were given on 13 or 16 October, the days of the reads, and 5 on 14 and 15 October, between them. For the 9, a listing of the same day settles that the chain listed both forms, which contradicts "not available" in the UAE. For the 5, the listings either side support that contradiction and do not settle it. Eight of the 14 also said Wegovy was not approved. Those claims are judged under P1, or under P2 where the answer names a use, against the regulator's records and not the listings; Field Note 07 sets out the evidence for each approval answer, and the readings it lists as disputed, in its Exhibit 2. Of the six that claimed only that it was unavailable, the three given on 13 October are settled false; the three given on 14 October rest on no source that settles, so they are unknown, not false (Rule 8). Field Note 07 coded all 20 under its own stated rule and reports the listings as secondary evidence, not proof of stock on a shelf. Without the listings, only the approval answers count as false: 14 of 52.

P6. Reimbursed, recommended or listed

Definition. A claim about coverage takes one of three forms, judged separately. **P6a, reimbursed or covered:** a payer covers or reimburses the medicine, in the market or for the members of a payer or plan the claim names. **P6b, HTA recommendation:** a health technology assessment body recommends, or does not recommend, the medicine for a use, or rates its added benefit, therapeutic value or cost-effectiveness for a use. **P6c, formulary listing:** the medicine is on a formulary or list, such as a hospital's, an insurer's or a national formulary, or an essential medicines list; a formulary the claim does not name is recorded as unnamed, and no source can be matched to it (Annex B, C9). "P6" is no longer a proposition: a claim mapped to it is not assessable.

Evidence. P6a is settled only by a payer's coverage decision for its own market, within its reach. A decision that covers the market's population settles a claim of coverage in the market and a claim that names that payer; the decision of one payer or plan settles a claim that names that payer or plan and only supports a claim of coverage across the market; a decision that does not state its reach settles nothing. Whether a decision's indication, population and eligibility are the claim's is interpretation (section 8). An HTA appraisal, a formulary listing, a manufacturer's statement and commentary support P6a and never settle it: a recommendation that does not bind a payer does not establish reimbursement. P6b is settled only by the published appraisal of the body the claim is about, for the jurisdictions the appraisal speaks for (a NICE technology appraisal speaks for England; its application in Wales is the Welsh Government's direction, a different record); another jurisdiction's appraisal is a declared benchmark (Rule 2), and a manufacturer's statement and commentary support it. P6c is settled only by the named formulary's own listing, at the version in force, within its own stated scope; a payer's decision, a manufacturer's statement and commentary support it. An authorisation establishes none of them.

Example. Neither publication tested reimbursement. The pharmacy listings in Field Note 07 are supply records, and a supply record does not establish coverage.

P7. Efficacy result

Definition. The medicine produced a stated effect on a stated endpoint in a stated population.

Evidence. Settled by the trial's publication of record, a systematic review, a regulator's assessment report or an authorised label's clinical section, all international. Posted results, a conference abstract and a manufacturer's statement support P7. An unappraised posted result is a reported result (P3c), not an efficacy result.

Example. Two Gemini answers in Paper No. 01's UAE series, found by hand check, stated the headline figure of OCTANE, a retrospective real-world cohort added to the study after registration and presented as a late-breaking abstract at EASD 2026. The abstract supports the claims that the result was reported (P3c) and that it holds (P7), and settles neither.

P8. Safety

Definition. A claim about a medicine's risks takes one of two forms, judged separately. **P8a, the regulatory safety statement:** the medicine's authorised label in a market, or that market's regulator in a safety communication, states a risk, warning, contraindication or adverse effect. **P8b, a safety finding:** the medicine is associated with a stated adverse effect. **P8c, a safety signal:** a regulator or pharmacovigilance body has identified a signal that the medicine may be associated with a stated adverse effect, or is assessing one; its negation is that such a body has identified no new signal, or has closed its assessment of a signal without finding a causal association. A safety claim not assigned to P8a, P8b or P8c maps to no proposition (section 6).

Evidence. P8a is settled only by that market's authorised label, in its safety sections, and by that market's regulator's safety communications. A label or communication from another market supports it as a declared benchmark (Rule 2), and a systematic review is irrelevant to it: a review cannot say what a label carries. P8b is settled by a systematic review (international). A trial's publication of record, a regulator's assessment report, a label's safety section and a regulator's safety communication, from any market, support P8b and do not settle it. P8c is settled by a regulator's or pharmacovigilance body's safety signal record, or by its safety communication, from any market: the claim is that a body raised the signal, which the body's own record establishes wherever it sits. A P8c settlement establishes that the body identified, or is assessing, the signal, and never that the medicine causes the effect; a negative settlement establishes only that the body's review identified no new signal, or closed its assessment, and never that the medicine does not cause an effect; a signal record supports P8b and never settles it. A regulator's assessment report supports P8c. Case reports, forums, commentary and manufacturer statements support all three.

Example. On 8 October 2026 a Claude answer in Paper No. 01's Saudi arm, which was added after registration and is exploratory throughout, repeated a media round-up's wording on the first real-world teplizumab courses in Europe, including "temporary drops in white blood cell counts, rashes, and gastrointestinal issues". The paper identified no individual case safety information: the terms come from a published media summary as repeated by the answer. The answer makes a safety finding (P8b), which a media summary supports at most and a systematic review would settle, wherever the question was asked. Whether the Saudi label or the Saudi Food and Drug Authority states those risks is a separate claim (P8a), settled only by a label it authorised or by its safety communications. Paper No. 01 did not establish whether teplizumab is registered in Saudi Arabia.

P9. Comparative

Definition. One medicine is better, worse or no different from another on a stated endpoint.

Evidence. Settled by a head-to-head trial or an appraised indirect comparison with stated limits, both international. Commentary supports P9. Separate trials set side by side neither settle nor support.

Example. SMARTTEST, one of Paper No. 01's registered readouts, compared dapagliflozin with metformin; no primary-results publication had been found by 11 October 2026. For the paper's Singapore series about empagliflozin it was class evidence, not trial evidence about the medicine asked about.

P10. Recommendation by the answer

Definition. The answer tells the reader to choose, use, continue, stop or avoid a medicine or a class of medicines.

Evidence. Nothing settles P10. A recommendation is never judged true or false; it is assessed through the propositions it rests on, P1 to P9.

Example. In 19 of the 20 answers Field Note 07 coded false (19 to 21 of 52 under the codes it lists as disputed), the medicine's non-approval or unavailability was the stated reason for recommending the competitor. The recommendation was not judged. Its grounds were: the registration claim against the regulator's records (P1) and the availability claim against the pharmacy listings (P5).

The answer change

A claim that AI answers changed is settled only by preserved observations under a longitudinal design: a fixed battery, the engine and parameters recorded, a statistical floor. A single answer supports and never settles. Paper No. 01 shows the design and where a study can fall short of it. It admitted 64 of 67

cycles and declared one registered movement, a verdict the paper says depends on the reading of its band rule. Its battery was a maintained set of question slots with text changes documented. The model field each engine returned was not recorded, and the paper's post-publication note records that, for Perplexity, the per-request parameters were not stored. Observations speak for the markets they observed: an answer-change claim is settled per market, under the market step (section 2), and observations of one market are a declared benchmark for another (Rule 2). Whether observations speak for engines, parameters or framings of a question they did not observe is interpretation (section 8). A claim that answers differ at one time, between engines or framings, states no change over time and is not the answer change (Annex B, C18).

5. Rules that hold across every proposition

Rule 1. Each proposition names the only evidence that can settle it.

Rule 2. A foreign regulator's record never settles a local claim. Where a proposition is settled per market (P1, P2, P5, P6a, P6b, P8a and the answer change), the source must speak for every place of the claim's market (each country of a group, or the subdivision a claim is about: Annex B, M6), so one country's authority never settles a claim about the Gulf states together, a subdivision's body never settles a claim about its country, and a supply record speaks for the places Annex B, M6, assigns it. A record for another market is a declared benchmark: it supports and never grounds a finding. Paper No. 01, written before this standard, likewise recorded US and EU status for context and never scored it.

Rule 3. A register settles registration only, and "not listed" settles nothing. A register entry settles P1 and nothing else. A read that found no matching record, found the product only under a status not read as current, or could not read the register settles nothing. A copy whose currency is not assured settles only up to the date its currency is evidenced. On 19 October 2026 the EDE directory held 1,179 products and returned no entry for either form of Wegovy [1]. That read decided nothing.

Rule 4. An EMA opinion is not the European Commission's decision. The EMA recommends; the Commission decides. An EMA opinion supports an EU authorisation (P1) and never settles it. A Commission decision is matched to its opinion by the EMA procedure number, never by date: a later decision, even one citing an opinion adopted on the same date, may concern another procedure, such as an annual renewal.

Rule 5. An unknown or unspecified jurisdiction is unresolved, never false. Where a proposition is settled per market, a claim whose market the market step (section 2) leaves unresolved, because no step states one or the one stated is unrecognised or "global", or a source that does not state its market, is not determinable.

Rule 6. Institutional guidance is not authorisation. Bodies that do not authorise medicines, such as the Dubai Health Authority, issue guidance, which supports a registration claim and settles none.

Rule 7. No retroactive judgement. An answer is judged only against evidence in force on the claim's date or, for an event claim, against the record of the event issued by the answer's date (below). For a claim about a state, a source that came into force later, or had ceased to be in force, does not settle it: a later decision is an evidence change, not a historical error. A pharmacy listing is in force on its own date only; two listings that bracket the claim's date support at most (P5). A source with no effective date, or a date that is not valid ISO 8601, decides nothing. Sotagliflozin was authorised in the EU on 26 April 2019 as an adjunct to insulin in adults with type 1 diabetes and a BMI of at least 27 kg/m² whose glycaemic control was inadequate on optimal insulin, and the authorisation was withdrawn on 22 March 2022 at the marketing-authorisation holder's request [2, 5]. An answer calling it "approved for type 1" must therefore be read against the record of its own date. Two Field Note 07 answers dated their claim "As of

October 2023": the EDE's announcement of 1 June 2026 approving the oral form cannot speak to that date, and only the injection's directory registration date could, a value Field Note 07 could not re-read on 19 October 2026.

An event claim (Annex B, T6) asks when an event took place. It is judged against the record of that event, of a class that settles the proposition, issued on or before the answer's date. A record issued after the answer's date does not settle it. A record that later ceased to be in force, because the authorisation was withdrawn, the label revised, the appraisal replaced or the registry record updated, still settles when the event it records took place, unless before the answer's date it was annulled, retracted or corrected as to that event. A register copy settles the date it records for the event whatever its currency on the answer's date; Rule 3 bounds claims about a state. An answer of October 2026 saying that sotagliflozin "was approved in the EU in April 2019" is settled by the decision of 26 April 2019, although the authorisation was withdrawn in 2022. Whether the date the record gives for the event falls within the claim's date, or, for an undated event claim, on or before the answer's date (Annex B, T6), is adjudication (section 8).

Dates are never merged: claim, event or decision, entry into and exit from force, currency, retrieval and recording. A superseded record is closed, never rewritten.

Rule 8. Unknown is not false. A claim that no source settles is unknown, whether its sources only support it, are irrelevant to it or are not determinable (section 6): no finding may be raised on it, and it is never counted as an error. A hedged claim (Annex B, E5) is recorded and reported as hedged; it is not judged, and it is never counted as an error, whatever settles it.

6. Verdicts

Each source gets one verdict per proposition, market and date; two listings of one pharmacy that bracket the claim's date under P5 get one verdict together, which is at most Supports. Every verdict decides authority only (section 2).

Verdict	Meaning	What may rest on it
Settles	A class the proposition names, from an authority competent to issue it, for the claim's market where that applies, in force on the claim's date or, for an event claim, the record of the event issued by the answer's date (Rule 7)	A conclusion, including a finding, once the record is read correctly and the claim adjudicated against it (section 8)
Supports	A supporting class; a settling class from another market (a declared benchmark); two listings of one pharmacy that both show the product for sale and bracket the claim's date within three days each side (P5); one payer's or plan's decision for a claim of coverage across the market (P6a); or an authority cited for a class it does not issue, where what it issues may support	Corroboration, never a finding
Irrelevant	A class the proposition does not list; an authority cited for a class it does not issue, where nothing it issues may support; a source that fails the time test of Rule 7; any source for a recommendation (P10)	Nothing
Not determinable (reported as not assessable)	The claim's or source's market is unresolved; the register read found nothing, found the product only under a status not read as current, or could not be read; a date is missing or invalid; the source's currency is not assured for the date asked; a pharmacy listing does not show the product for sale, or a supply record does not say which record it is (P5); a payer's decision does not state its reach (P6a); a registry version states no study status, an unknown one or an expanded-access status (P3d); the claim names no guideline or formulary it can be matched to (P4, P6c); the claim is about stock, or a negative claim about a channel named only by kind (P5); or the claim maps to no proposition	Nothing: unknown, never false

Every verdict records the rule that decided it, a one-sentence reason, the step that fixed the claim's market and, for the checks it reached, its limitations by dimension: authority, jurisdiction, time and accessibility. Abstention is per claim: one claim that is not assessable leaves the rest of the answer assessable.

7. Citing the standard, licence and versions

Ezeife OC. *Which Evidence Settles Which Claim: The AlphaCitation Proposition Taxonomy and Evidence-Authority Standard*, version 3.0. Dubai: AlphaCitation Research; 24 October 2026.
doi:10.5281/zenodo.23594909

Licence. The text is licensed under the Creative Commons Attribution 4.0 International licence (CC BY 4.0). Anyone may copy, adapt and apply it, including commercially, with attribution, a link to the licence (<https://creativecommons.org/licenses/by/4.0/>) and an indication of changes. Quoted third-party text is excluded from that grant, and no trademark, AlphaCitation's included, is licensed.

Versions. Versions are numbered semantically. A change that can alter an existing verdict raises the major number. Such changes include what settles a proposition, a jurisdiction or time rule, the meaning of a verdict, and any addition (a proposition, an evidence class, an authority, a market) that changes the verdict a source already judged would receive. An addition that changes no such verdict raises the minor number. A correction that changes no rule raises the patch number. Every change is recorded in the version history, every version stays available, and the DOI's concept record resolves to the newest. A finding cites the version it was judged under. The rules for classifying the claims in an answer (Annex B) are versioned in the same way: a rule that changes how a sentence an earlier version classified is classified, or that assigns a sentence to a proposition whose definition in section 4 does not cover it, raises the major number; a rule that classifies a sentence no earlier version classified, within the definitions of section 4 and without deciding what settles it, raises the minor number. The classification test set deposited with this version (`classification-test-set-v3.0.json`) measures how well a classifier applies Annex B to divide answers into propositions; that measure is distinct from conformance, which the test vectors alone decide. AlphaCitation's measurement of three machine readers, against the 123 items the set held before Annex B was sharpened and under that draft, is deposited beside it (`classification-validation-v3.0.md`), and the pre-registered study of the released text is deposited in two records of its own: its protocol (doi:10.5281/zenodo.23600058) and its results with the benchmark (doi:10.5281/zenodo.23602110; section 9).

Machine-readable files and conformance. Three machine-readable files are deposited with each version from 2.0. The file names keep the series name "v1"; each file states the version it belongs to. The newest version's files are also served at addresses that name no version, <https://alphacitation.com/standards/evidence-authority/latest/> followed by `standard.pdf`, `standard.json`, `schema.json`, `test-vectors.json`, `classification-test-set.json` or `reference-implementation.zip`, and each version's record at <https://alphacitation.com/standards/evidence-authority/> followed by its number (2.0, 2.1, 3.0). The machine-readable companion (`evidence-authority-standard-v1.json`) states, with identifiers, the proposition types and sub-propositions, the classes that settle and the classes that support each, their jurisdiction and time rules, the 27 evidence classes and the 9 issued only by an authority, the verdicts, the limitation dimensions, the rules of section 5 and the order in which the conditions of section 6 are applied. Its JSON Schema is `evidence-authority-standard-v1.schema.json`. The test vectors (`evidence-authority-standard-v1.test-vectors.json`) give one case for each worked example of section 4 and cases at the edges of each rule; each gives its inputs, the expected verdict and the rule that decides it, and marks every input that is not a published fact as synthetic. Where a file and this text differ, the text governs. An implementation conforms to a version when it reproduces every test vector

of that version: for each, the claim's date, the verdict, the deciding rule and, where the vector states them, whether the registry record settles that a study was ongoing or that it was not (P3d) and the step that fixed the claim's market, with whether a later step conflicted. AlphaCitation's reference implementation, @alphacitation/evidence-authority, is licensed under the Apache License 2.0; its source is deposited with each version from 2.0 (version 3.0.0 with this version) and served at <https://alphacitation.com/research/standard-v1/alphacitation-evidence-authority-3.0.0.zip>. Version 3.0 changes three test vectors of version 2.1, each with a note saying why (EAS-V044, EAS-V050 and EAS-V057), and adds 68 (EAS-V094 to EAS-V161), 161 in all: an implementation that conforms to version 2.1 conforms to version 3.0 only once it applies the market step, the divided P6, P8c, the answer change's jurisdiction, the time test for event and undated event claims, the stated period that contains the answer's date, the P5 named-channel, stock and channel-kind forms, the P2 terms of supply and use, P3 with no use named, guidelines and formularies the claim does not identify, and places below the country by ISO 3166-2 codes. It decides from the source metadata it is given; it does not fetch, verify or interpret documents, and it holds no evidence. It takes the answer's date as supplied: a caller applies T7 by giving the date, or a date-time in the market's local offset, whose calendar day is the answer's date.

Stability, release history and proposals. Version 3.0 is the stable version. It changes only by corrections that change no rule (patch versions) and by fixes to security issues in the published implementation or API; any other change, including one that would raise the minor number, waits for the next major version. The release history is the version history above; every version stays available at its DOI. Proposals are recorded in a public issue register, <https://alphacitation.com/standards/evidence-authority/issues>, each with its status (open, adopted, declined or deferred), the version it targets and its resolution, and the process is set out at <https://alphacitation.com/standards/evidence-authority/governance>. Proposals received while 3.0 is the stable version are recorded and considered for the next major version. External reviewers are named only with their consent, and an invitation to review implies no endorsement.

8. What the standard is not

It is neither clinical judgement nor a regulatory determination. It does not say whether a medicine is right for a patient, grades no clinical evidence and decides no legal status; the authority's record remains the determination.

It decides authority, not truth. Interpretation (whether a record, read correctly, concerns the claim's product, population, endpoint and date and says what the claim says) and adjudication (whether the claim is then supported, contradicted or unresolved) belong to other steps, as does whether a source may be used at all (its licence and terms). A source of a settling class is competent to establish what it records; whether a reported effect is reliable is a question of the evidence's quality, which frameworks for grading evidence address and this standard does not.

9. Implementation status

This section records what AlphaCitation's own software does, and how closely AI models applying Annex B agree with reference labels, as of this version's date. It is not part of the standard's rules. The software it describes changes without a new version of the standard; this section is not updated between versions.

AlphaCitation adopted the standard on 22 October 2026 for its own findings about AI answers. Its software checks a finding decided by a regulator's label or register before AlphaCitation publishes it, whether a person verifies the finding or the accuracy gate publishes it, and from the release of version

3.0 it applies version 3.0. A finding records no market of its own: the check reads the market for which the scan that raised it was configured. The software does not yet apply the market step to its own findings: it does not take a market the answer states, and it does not record which step fixed the market. By 24 October 2026 the accuracy gate had cleared no class of finding to publish without a person's verification. AlphaCitation publishes the reference implementation and an open API that returns this standard's verdict for a claim and the metadata of a source, at <https://alphacitation.com/api/v1/evidence-authority/judge> (described at <https://alphacitation.com/api/v1/evidence-authority/openapi.json>). The API applies version 3.0 from its release and returns the market step's result with every verdict. It decides from what it is sent: it does not fetch or verify sources, holds no evidence, and does not read claims out of free text.

How closely AI models apply Annex B. A pre-registered study (protocol doi:10.5281/zenodo.23600058; results and data doi:10.5281/zenodo.23602110) measured how closely six AI models, applying Annex B blind, agree with reference labels on 294 sentences of the answers that three AI engines (`gpt-4o-mini`, `claude-haiku-4-5` and `sonar`, through their APIs with web search) gave to 96 neutral questions about medicines written by AlphaCitation. With Annex B in full, the three flagship models' F1 over the full record of each claim (its proposition, polarity, hedge, market, the step that fixed the market, its date and the date's kind) was 0.68 to 0.75, against 0.21 to 0.25 with a minimal guide of the definitions of section 4 and the record of B1 without Annex B's rules: 2.7 to 3.4 times as high. With the market step set aside, since the study's answer format, unlike B1, let a reader return M7 as a step, the figures are 0.72 to 0.79 against 0.30 to 0.37, 2.0 to 2.6 times as high. Their micro F1 over propositions was 0.853 to 0.905 (0.849 to 0.918 against the reference as corrected after the runs; 0.847 to 0.916 on the same 284 sentences under the frozen labels), and one of the three (0.905) was shown to exceed the pre-registered floor of 0.85 over all 294 sentences by the protocol's decision rule (Holm-adjusted p 0.005), although its interval, [0.873, 0.934], is wider than the precision the protocol planned (about plus or minus 0.026), and the protocol reports such a result as inconclusive, not as support; on the 207 public sentences alone none was (Holm-adjusted p 0.0504 for that model, above 0.05). Small models trailed their flagships in micro F1 over propositions by 0.08 to 0.19, and none was shown to be within the pre-registered 0.05 of its flagship. A model run twice on the same requests changed its propositions on 4% to 23% of the sentences (5% to 23% with calls the provider refused counted as abstentions, as the protocol reads). Only OpenAI's flagship reached the pre-registered 0.95 (0.959), and only with those calls asked again (0.946 with them counted as abstentions), so the hypothesis that every reader reaches it does not hold. Where the three flagships gave the same propositions, on 78% of the sentences, those propositions matched the reference on 97% of them (92% where only OpenAI's and Google's flagships, whose models did not write the labels, agree: 231 of 250 sentences). On the 207 public sentences alone, which anyone can rescore with the released data, the full-record figures are 0.65 to 0.74 against 0.22 to 0.26 (2.6 to 3.3 times as high; 2.0 to 2.5 with the market step set aside), the three flagships give the same propositions on 76% of the sentences, and a model run twice changes its propositions on 4% to 25% of them (6% to 25% with the refused calls counted as abstentions). Most disagreement is in whether a sentence makes a claim, the market step and the date's kind; the sentences the text did not decide are section 10, questions 3 to 10. The reference labels were written and checked by blind instances of one model (`claude-opus-5-5`), which is also one of the readers, and labelling of 100 of the sentences by people outside AlphaCitation is invited. A pilot under a draft of Annex B, on 123 constructed and published sentences, is reported in `classification-validation-v3.0.md`, deposited with this version.

10. Open questions for the next major version

This section is not part of the standard's rules. It lists questions whose answer would change a verdict, and so can be settled only in a major version (section 7). Each is recorded in the issue register (section 7) and open for comment.

Before its release, version 3.0 decided the sixteen questions that version 2.1 and the draft of 3.0 listed here: event dates and records of earlier events (Annex B, T6; Rule 7; Annex B, B6, the launch statement); places and payers below the country (M1, M6); P5 claims about a named channel, about stock and about the market as a whole (C6; section 4, P5); P3 with no use named (C10; section 4, P3); label content outside P2 (C2; section 4, P2); claims about a class (E11); reported results of studies that are not trials (C11; section 4, P3c); guidelines and formularies named only by their issuer, or not named (C9, C12; section 4, P4); answers that differ at one time (C18); a class member named only in a ground (E11); products entered under a heading (U7); lists of adverse effects and coordinated uses (U1); a market attached to a noun (M1); and a regulator's warning reported by the answer (C14). Two questions remain from the design, and the classification study added eight: each arises from items a blind adjudicator found that Annex B, as written, does not decide (issue register, EA-042 to EA-049).

1. **Shortage registers.** A claim about stock (P5, the stock form) is settled by no class this version names, so it is not determinable. Whether a regulator's register of medicine shortages settles it, for the market and the dates the register covers, is not decided.
2. **Claims that a medicine is no longer studied.** A claim that development of a medicine for a use has stopped is P3 negative (Annex B, C10). A registry record speaks for its own study only and never settles that no study of the medicine exists (P3d), so such a claim is in practice never settled. Whether a sponsor's dated statement that it has stopped developing the medicine for the use settles it is not decided.
3. **Suitability.** Whether a statement that a medicine is "unsuitable" or "not suitable" for a group is a contraindication or warning (P8a, Annex B, C2 and C14), a statement of who may receive it (P2, C4), or, where its subject is the medicine's use in practice ("their use in"), no proposition (X1).
4. **What a medicine does, stated without a result.** Whether an effect stated as what the medicine does or is used to do, with no study, magnitude or population ("is used to improve blood flow and lower pressure"), is an effect on an endpoint (P7, C13) or a description of its mechanism or use (X1).
5. **A regulator's clinical hold.** Whether a statement that a regulator placed a medicine or its study on clinical hold states that the study is not ongoing (P3d negative, C11) or only entails it (U5); whether the hold is an event (T6); and how the reason given for it is classified (C14, E8).
6. **Tense in other languages.** Whether T6 reads tense by its form or by its function in the answer's language: the French passé composé and the German Perfekt are present perfects in form and the ordinary narrative past in function.
7. **The dates of an answer change.** Which date an answer-change claim takes when the sentence states only the earlier of the two times it compares (C18; T1 to T7).
8. **Drug interactions.** Whether a label's statement of an interaction is a warning (P8a, C14), a term of dose (P2, C2) or, where it states neither a risk nor a dose, no proposition (X1).
9. **A "Yes" that is not bare.** When a "Yes" or "No" is bare (U9), and whether a statement of uncertainty about the question's proposition in the same sentence hedges it (E5).
10. **The tense of a reported result.** Where a sentence states a study's result with no word that reports it ("in the trial, it reduced the risk"), whether the tense of the result's own predicate is the tense of the report, which T6 makes an undated event in the past tense, or the result is a state on the answer's date.

How to propose a change. Write to analyst@alphacitation.com, with the case the standard decides wrongly or leaves undecided and the verdict you would expect. Each proposal is entered in the issue register (section 7). While a version is the stable version, a change to a rule waits for the next major version, with test vectors that show the change; a correction that changes no rule may be made as a patch version. Every change is recorded in the version history.

Disclosures

The author founded Akunudo LLC-FZ, which owns and operates AlphaCitation. AlphaCitation sells AI information intelligence services to life-sciences organisations and applies this standard to its own findings. The worked examples name medicines of Novo Nordisk (Wegovy), Sanofi (Tzield), Eli Lilly (retatrutide, orforglipron) and Boehringer Ingelheim (the empagliflozin series of Paper No. 01), and name dapagliflozin and sotagliflozin by their non-proprietary names. Paper No. 01 states that Novo Nordisk, Boehringer Ingelheim and Sanofi are commercial prospects of AlphaCitation and that none is a client. Paper No. 01 also states that AlphaCitation may present its findings to them when offering its services, and that its Saudi teplizumab series, used in the P2 and P8 examples, was added after registration to measure the medicine of a commercial prospect. Both publications state that AlphaCitation had sent analyses of the medicines they measured to the manufacturers' staff in commercial conversations before publication. The author was employed by Novo Nordisk from 2013 to March 2025, last as Pricing and Access Director for its obesity and diabetes portfolio in Asia-Pacific. He holds no shares, share options, pension entitlement or deferred compensation from Novo Nordisk, and has no employment or advisory role with it. No pharmaceutical manufacturer commissioned, funded or reviewed this standard.

Field Note 07 states that AlphaCitation has no commercial relationship with Eli Lilly, and that AlphaCitation may present that note's finding to Novo Nordisk or Eli Lilly when offering its services. The author holds no shares or share options in Sanofi, Boehringer Ingelheim or Eli Lilly, and has no employment or advisory role with any of them.

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Annex A. Evidence classes

Issued only by an authority: `authorisation_decision`; `register_entry`; `authorised_label`; `regulatory_opinion`; `regulator_assessment_report`; `regulator_safety_communication`; `safety_signal_record`; `institutional_guidance`; `payer_decision`.

Coverage records: `hta_appraisal` (a health technology assessment body's published appraisal, which speaks for the jurisdictions it states); `formulary_listing` (a named formulary's or list's own listing, within its own stated scope).

Trials and appraised evidence: `trial_registry_record`; `trial_protocol`; `trial_results_posting`; `trial_publication_of_record` (the publication of record of any study, observational studies included); `conference_abstract`; `systematic_review`; `clinical_guideline`; `head_to_head_trial`; `appraised_indirect_comparison`.

Market and manufacturer: `supply_record`; `launch_statement`; `manufacturer_statement`.

Observations of AI answers: `longitudinal_observation`; `single_observation`.

Other: `secondary_commentary`; `case_report_or_forum`.

Annex B. Classifying the claims in an answer

This annex says how an answer is divided into propositions and which proposition each makes. It precedes the first of the three questions of section 2: it decides neither authority nor interpretation nor adjudication. Its market step (M1 to M7) and its date rules (T1 to T7) fix the claim's market and date, on which a verdict depends; its other rules decide which proposition a sentence makes. Where a case is not decided, the annex says so and section 10 lists it. Rule identifiers are stable across versions; a gap in a series is a rule held for a later version.

B1. The classification record

Each unit records: its span (the words of the answer that make the claim); its proposition (P1 to P10 with the sub-propositions P3a to P3d, P6a to P6c and P8a to P8c, the answer change, or none); for P3, its P3d part, its per-market part (P2 where a use is named, P1 where none is) and the use; its polarity (affirmative or negative); whether it is hedged (E5); its product (the name as written, whether a brand, a molecule, a class or a development code, and the form, if one is named); its qualifiers (the use, condition or population; the term of supply, dose, route or form for P2; the endpoint and comparator; the claim form of P5 or P6a, and for the named-channel form the channel and whether it is a regulatory access route or a supplier; the guideline, the formulary or the assessment body, or that the sentence names none; the HTA rating for P6b; the payer); the claim's market and the step that fixed it (M1 to M5), for every unit, including those whose market does not govern (M7); the claim's date, and whether it dates a state, an event or an undated event (T6); for P10, the units it rests on; and the rules of this annex applied. A unit whose proposition is none is not assessable (X1).

B2. Procedure

Split the answer into units (U1 to U9). Set aside what makes no claim (E10, E12) and record each hedged claim as hedged (E5). Classify each remaining unit (C1 to C18, E1 to E14), applying the order of precedence in B4.1 where two rules could apply to one clause. Fix the product (E8, E9, E11), the claim's market (M1 to M7) and the claim's date and whether it dates a state or an event (T1 to T7). Link each P10 unit to its grounds (C17).

B3. Units

U1 (NORMATIVE). A proposition is one checkable statement (section 2). A unit is one proposition about one product, with one polarity, one market and one claim's date. A unit also has one use, one adverse effect, one endpoint or one study: coordinated uses or conditions under one predicate ("approved for weight management and cardiovascular risk reduction"), coordinated adverse effects ("anaphylaxis and angioedema have been reported"), coordinated endpoints and coordinated studies are one unit each. A use is the condition the medicine treats, prevents or diagnoses, or the outcome it is given for ("weight management", "cardiovascular risk reduction"). A population is who receives it for that use, including the conditions that define eligibility ("adults with obesity, or with overweight and a weight-related condition"). Coordinated populations or qualifiers of one use ("in adults and adolescents", "after inadequate response or intolerance to conventional therapy") stay one unit. A number of markets the sentence does not name ("approved in 48 countries") makes no unit; each market it names does.

U2 (NORMATIVE). Coordinated predicates are separate units: "not approved and not available" is P1 and P5. A predicate coordinated under one negation gives two negative units: "not approved or sold in the UAE" is P1 negative and P5 negative.

U3 (NORMATIVE). Coordinated subjects are separate units: "Neither Wegovy nor Mounjaro is approved in the UAE" is two P1 units. A list of products after one predicate gives one unit per product.

U4 (NORMATIVE). Clauses joined by a causal or inferential connective ("so", "therefore", "because", "since", "as", "given that") are separate units, and a clause introduced by one is asserted: "Given that Wegovy is not approved for use in the UAE" makes a P1 claim. "Since" is causal only where "because" can replace it; "since" followed by a time, or by a noun phrase naming an event, is temporal (T6, U5). A clause that recommends is P10 and records the other clauses as its grounds (C17), as the P10 example of section 4 judges "the stated reason for recommending the competitor".

U5 (NORMATIVE). A unit is what the sentence states as a predicate. A proposition the statement only entails is not added: an affirmative P2 claim does not add a P1 unit, and "no longer authorised" does not add a unit saying the medicine was once authorised. A status or event named only in a noun phrase that identifies the product or the subject of another predicate ("since its FDA approval", "the approved form is easier to use", "ongoing studies show") is taken for granted, not stated, and is not a unit, except an event that "since" dates (T6). Three noun phrases are stated: a noun phrase in apposition to the product, or used as its predicate, that applies a status word to it ("Retatrutide, an experimental treatment for weight loss," "is a prescription-only medicine"), which C5 and C2 classify; a noun phrase that is the object of a causal or inferential connective ("given its lack of UAE approval", "because of its unavailability"), which U4 asserts; and a device of a label named as carried by the medicine ("despite its boxed warning"), which C14 classifies. A reference back to a claim already made ("this decision", "these results") makes no unit for that claim. A date it gives for the event ("This decision, announced in September 2026") makes an event claim dated as it states (T6), a unit beside the earlier one, which keeps its own date; U6 does not merge them. A new predicate it states ("this approval covers adolescents") makes its own unit. A noun phrase naming an authorised term whose value the predicate states ("the approved dose is 2.4 mg once weekly", "the licensed indication is obesity") states that term: P2 (C2).

U6 (NORMATIVE). The same proposition about the same product, market and date, stated more than once in one answer, is one unit, whose span lists every place it is stated.

U7 (NORMATIVE). A list item, table cell or heading entry is read with the lead-in or heading that governs it, where that lead-in or heading is in the text classified; an entry with no predicate whose governing text is not given makes no claim (E10). A lead-in that introduces a list ("Key findings include:", "In the EU, it is authorised for:", "Here are the trials running in the United States:") makes no unit of its own: its

predicate is read with each entry, and the entries make the units. A heading that is a device of a label ("Indications", "Boxed warning", "Contraindications", "Warnings and precautions") supplies the predicate "the label states": its entries are P2 for indications and P8a for the others (C2, C14). A heading of risks that is not such a device ("Side effects", "Possible side effects", "Adverse effects", "Undesirable effects", "Warnings", "Serious side effects to watch for") supplies the predicate of C14 in the answer's own voice: its entries are P8b, one unit for each effect (U1), unless the heading or its lead-in names the label ("Side effects listed in the label"), when they are P8a. An entry under a heading that supplies "the label states" is read as what the label states, P2 or P8a, even where it is worded as advice ("Do not use if ..."); B4.1 (2) does not apply to it. A dosage heading ("Dosage", "How it is given") supplies "the label states" only where it names the label, and its entries are then P2. A heading or lead-in that names its entries as options, alternatives or choices ("Options", "Treatment options", "Alternatives to consider", "What to consider") makes each product entered under it a P10 unit, whatever else it names; a class entered under it is one P10 unit for the class, and a member named only as an example of it gets no unit (E11); a status word in it ("Approved options in the UAE") also supplies its predicate to each entry, which makes that unit as well, recorded as a ground of the P10 unit (C17). A heading that only names a topic or a class ("GLP-1 medicines", "Treatments") supplies no predicate.

U8 (NORMATIVE). Abstention is per unit (section 6): a unit that is not assessable leaves the other units of the answer assessable.

U9 (NORMATIVE). A bare "Yes" or "No" that answers a closed question asserts or denies the question's proposition: it is that unit, or, where the question coordinates predicates, each of its units (U2), with the question's product and qualifiers, and its market fixed by the market step.

B4. Decision rules

B4.1 Precedence

Where a clause matches more than one rule, the first that fits applies: (1) a claim about AI answers (C18); (2) a recommendation by the answer itself (C16, C17), except a contraindication or warning stated as a property of the medicine (C2, C14); a recommendation the sentence attributes to a body, guideline or document is classified at (3); (3) a recommendation attributed to a body that assesses medicines (C9: P6b or P4), then a named guideline (C12); (4) a statement about a list (E2); (5) lawful supply with no channel or category named (C7), then a scope phrase (C3), then a use or population (C2, C4, C5), then status with no use (C1); (6) investigational status and the trial sub-propositions (C10, C11); (7) supply (C6, C8), then coverage (C9); (8) a comparison on an endpoint (C15), then an effect on an endpoint (C13); (9) safety (C14); (10) otherwise, no proposition (X1).

Registration and indication

C1 (NORMATIVE). A status predicate ("approved", "authorised", "registered", "licensed", "has a marketing authorisation") about a medicine in a market, with no condition, population or use named, is P1, whatever its tense; its claim's date, and whether it dates a state or an event, are fixed by T1 to T6.

C2 (NORMATIVE). A status predicate qualified by a condition, a population, an age band, a line of therapy or a clinical use is P2: "approved for weight management", "registered for obesity pharmacotherapy", "approved in adolescents aged 12 and over", "approved for type 1". So is label language that names one: "indicated for", "not indicated for use in type 1 diabetes mellitus". So is a statement of the authorised terms of supply or use made as the predicate: the legal category of supply ("prescription-only", "not available over the counter", "hospital-only"); a dose, route or form stated as what the authorisation permits ("approved at 2.4 mg once weekly", "authorised only for subcutaneous use", "approved only as an injection"); and a restricted programme the authorisation requires for every

supply ("available only through the [name] REMS Program"). A sentence that states one term in two wordings ("a prescription-only medication and not available over the counter") makes one unit. A form or strength that names the product ("oral Wegovy", "the Wegovy tablet", "Wegovy 7.2 mg") is part of the product (E9), and a status predicate about it with no use is P1 (C1), as the P1 example of section 4 reads the EDE's approval of the oral form. A statement of who may receive the medicine, made as a property of the medicine ("may be given to people aged 8 and over", "can be administered from birth", "can be used in children aged 10 and older"), is label language and P2. A statement that a group must not or should not receive it ("is contraindicated in pregnancy", "should not be used during pregnancy", "is not for use in pregnant individuals", "may not be given to children under 8") states a contraindication or warning: P8a (C14), not P2 and not P10.

C3 (NORMATIVE). Phrases that name the scope of an authorisation are not uses: "for use", "for public use", "for medical use", "for sale", "for marketing", "for distribution", "for prescription", "for purchase". A status predicate qualified only by such a phrase is P1: "not authorized for use in the UAE", "not approved for use or distribution in the UAE".

C4 (NORMATIVE). P2 requires authorisation or label language: a status word ("approved", "authorised", "licensed", "registered", "indicated", "the label says"); a statement of who may receive the medicine (C2); or eligibility criteria or a population that continue an authorisation stated in the same sentence or the one before ("The eligibility criteria include at least one non-Class I mutation" after "approved in the UK for cystic fibrosis"). A statement that a group must not, should not or may not receive the medicine is P8a (C2, C14), not P2. Criteria that continue a coverage clause are P6a, and criteria of a study are P3b. "Can be used in", "may be used in" and "is suitable for" a population, with no word of practice, state who may receive the medicine: P2 (C2). "Is a treatment for", "is used for", "is used in" and "is often given" describe use in practice and make no P2 claim (X1).

C5 (NORMATIVE). A use stated in a description of the product ("a weight-loss injection") qualifies only the predicate it belongs to and does not turn a status predicate with no use into P2. Where the description is itself a status predicate with a use ("an experimental injectable treatment for weight loss"), it makes that claim (C10).

Supply and coverage

C6 (NORMATIVE). A supply predicate is P5: "available", "on sale", "sold", "supplied", "stocked", "dispensed", "launched", "can be bought", "can be obtained", "the UAE has [the product]". Its claim form is one of four: not available anywhere, or available, in the market (the first); available across the market (the second); a named channel (the third); stock (the fourth). A claim that the medicine is not available anywhere in the market, and a claim that it is available in the market without a word of breadth ("available in the UAE", "sold in UAE pharmacies"), take the first form. A claim that it is available across the market takes the second only with a word of breadth: "widely", "across", "throughout", "everywhere", "in all pharmacies", "readily", "routinely", "generally". A claim that it is not available across the market ("not widely available", "not routinely marketed") is the negation of the second form. A claim that the medicine can or cannot be obtained through one channel the sentence names takes the third form, named channel, which records the channel and its kind: a regulatory access route (a named-patient, special-access or personal-use import route, compassionate use, a restricted programme the sentence does not say is the only way the medicine is supplied) or a named supplier (a named pharmacy, distributor or hospital). A restricted programme the authorisation requires for every supply ("available only through the [name] REMS Program") is a condition of the authorisation, P2 (C2). A claim about stock ("out of stock", "in short supply"), including stock at a named supplier, takes the fourth form, stock. A channel the law fixes for every supply of the medicine (prescription only, over the counter) is its legal category of supply, P2 (C2), not P5. A channel named only by kind ("pharmacy-

dispensed", "in hospitals", "online") is not a named channel: an affirmative claim through it takes the first form ("sold in UAE pharmacies"), and a negative one ("not dispensed by pharmacies") is P5 with the channel recorded and no form, which is not determinable. "Hard to find" and "difficult to obtain" are words of ease (C8). "Only" with a channel the law fixes ("only on prescription", "only in hospitals") states the legal category, P2 (C2). "Only in clinical trials" and "only through research studies" state that a study is ongoing, P3d (C11), and make no P5 unit.

C7 (NORMATIVE). Lawful-supply phrases with no channel or category named are P1, not P5: "legally available", "legally sold", "legally prescribed", "not legally available for prescription or purchase". They concern whether the product may lawfully be supplied in the market at all, which an authorisation decides. A lawful-supply phrase that names a legal category or a channel the law fixes for every supply ("not legally available over the counter", "can legally be obtained only with a prescription") is the legal category of supply, P2 (C2). One that names a regulatory access route ("can legally be obtained through a named-patient import route") is P5, named channel (C6).

C8 (NORMATIVE). Vague words of standing or ease make no P5 claim: "established", "ordinary", "mainstream", "common", "accessible", "more accessible", "easier to get" (X1).

C9 (NORMATIVE). A coverage predicate is P6a: "covered", "reimbursed", "subsidised", "insurance pays for", "[payer] does not cover". It takes the named-payer form where the sentence names the payer or plan, and the market form otherwise. A payer the sentence identifies only by a description that fits one payer in the market ("the national insurer") is named. A statement that a health technology assessment body recommends, or does not recommend, the medicine, or rates its added benefit, therapeutic value or cost-effectiveness ("recommended by the national health technology assessment body", "the HTA body did not recommend it", "the G-BA found no proven added benefit"), is P6b. A recommendation claim is affirmative where the body recommends, including with restrictions, and negative where it does not recommend. A NICE recommendation that is optimised, or for use with managed access (including the Cancer Drugs Fund), and SMC acceptance for restricted use, are affirmative; "only in research", "not recommended" and a terminated appraisal, which recommends nothing, are negative, with the outcome recorded. A rating claim is affirmative, with the rating recorded as the body states it (for the G-BA: major, considerable, minor or non-quantifiable added benefit, added benefit not proven, or lesser benefit; for the HAS: SMR important, moderate, low or insufficient, and ASMR I to V), and negative only where the sentence denies a rating ("did not find a considerable added benefit"). A recommendation attributed to an HTA body's assessment of the medicine (a NICE technology appraisal, SMC advice, a HAS Transparency Committee opinion) is P6b, even where the sentence calls it guidance ("NICE guidance does not recommend it"). A recommendation attributed to a clinical guideline issued by a body that also assesses medicines ("NICE guideline NG28 recommends metformin first") is P4 (C12). Where the sentence does not say which, it is P4 if it names a class or places the medicine in an order of treatment ("first-line", "second-line", "add-on", "after metformin"), as a guideline does, and P6b otherwise. A recommendation attributed to a body's draft or final draft guidance ("NICE's final draft guidance recommends") is P6b about that draft: the draft, as the body published it, settles it, and it only supports a claim about the body's recommendation that names no draft. A statement that the medicine is on a formulary or list the sentence names ("on the WHO Model List of Essential Medicines", "on [a named hospital]'s formulary") is P6c. A formulary or list the sentence does not name ("on the formulary") makes a P6c unit with the formulary recorded as unnamed, which no source can be matched to: it is not determinable (section 6). Price, cost and out-of-pocket statements are not coverage and map to no proposition (X1), and nor is a price, a reimbursement amount or a price agreement, even one agreed with or set by a payer ("the reimbursement amount was agreed with the statutory insurers' association").

Investigational status and trials

C10 (NORMATIVE). "Investigational" and "experimental" state a status and are P3, recorded with its P3d part and its P2 part and judged as section 4 sets out. "In trials", "being studied", "under study", "under clinical investigation" and "in the clinical trial stage" are P3 where they name a use, and P3d alone where they name none (C11): with no use named they state that a study is ongoing, not that the medicine is unauthorised. A sentence that also says the medicine is not approved makes a separate P1 or P2 unit (U2): "not yet approved and in trials", with no use named, is P1 negative and P3d. Where "investigational" or "experimental" names no use, the unit records the use as unspecified, and its second part is read through P1: the claim is that the medicine is being studied and holds no marketing authorisation in the market (section 4). Because a register read that finds nothing settles nothing (Rule 3), that part is settled only by a record of an authorisation in force, which contradicts it, or by a refusal or withdrawal that leaves none. A verb of continuation states the present as well as the future: "will continue testing it in coeliac disease" is P3 now. A statement that development for a use has stopped ("discontinued development in atopic dermatitis") is P3 negative for that use. Words that suggest development but state neither a study nor a status ("next-generation", "new", "pipeline", "research material", "research compound") make no P3 claim.

C11 (NORMATIVE). A sentence about a trial's registration is P3a; about its design or planned endpoints, P3b; about a reported result of a study, interventional or observational ("results were presented", "a trial showed", "early trials have shown promising results", "a real-world cohort found"), P3c; about whether it is ongoing ("still recruiting", "has finished"), P3d. Such a sentence makes the sub-proposition alone, and is P3 only if it also says the medicine is investigational.

Guidelines

C12 (NORMATIVE). A sentence that attributes to a guideline a recommendation of the medicine or its class for a use is P4. The guideline is the one the sentence names. Where the sentence names only the issuer ("the ADA recommends", "the ERS guidelines") or refers back to a guideline named earlier ("these guidelines"), it is the issuer's guideline for that use in the version in force on the claim's date. Where the issuer has more than one guideline in force for that use on the claim's date, the claim is about each of them: each settles, and whether each agrees with the claim is adjudication (section 8). Where it names neither ("guidelines recommend", "newer European guidance"), the guideline is recorded as unnamed, and no source can be matched to it: the unit is not determinable (section 6). A document the sentence presents as recommending the medicine is classified by what the sentence claims, whatever the document is. A recommendation attributed to a body that assesses medicines is classified by C9, which assigns it to P6b or P4. A recommendation attributed to experts or doctors ("experts recommend") and a statement of prescribing practice ("is often chosen as a first-line treatment") map to no proposition (X1).

Effects, safety and comparison

C13 (NORMATIVE). A stated effect on a stated endpoint, a measure or a clinical outcome, other than an adverse effect or risk (C14), is P7. A result attributed to a study makes two units: that the result was reported (P3c) and that it holds (P7), as the P7 example of section 4 reads it. A study's results on two endpoints make two results: one P3c unit and one P7 unit for each (U1). "Works well", "is effective" and "shows efficacy" name no endpoint (X1).

C14 (NORMATIVE). A statement that the market's label, or its regulator in a safety communication, states a risk, warning, contraindication or adverse effect is P8a; words that name a device of a label ("contraindicated", "boxed warning") make a P8a claim even where the label is not mentioned. A statement that the medicine is associated with a stated adverse effect ("can cause", "may cause", "side

effects include", "is associated with") is P8b. A statement that a regulator or pharmacovigilance body has identified a signal, or is assessing one ("the EMA is reviewing reports of", "regulators are investigating", "a safety signal has been raised"), is P8c, and never P8b. A statement that a regulator or pharmacovigilance body, or a review it made, identified no new safety signal, or closed an assessment without finding a causal association ("the assessment identified no new safety concerns", "the EMA found no link"), is P8c negative, also where no body is named ("no new safety issues have been identified"). A statement that a study observed no new safety signal ("no new safety signals were observed in the trials") is a reported result of that study (P3c), not P8c. Where the absence of a signal is placed in a study's results ("in recent clinical trials", "in the extension study"), the unit is P3c, even where a regulator is named as the source of the information (E7). A statement that a regulator has warned of a risk ("the regulator has warned that it can cause") is that regulator's safety communication, P8a, for the regulator's market; the risk it reports is not also a P8b unit unless the sentence states it in the answer's own voice. "Safe", "well tolerated" and "lacks an established safety profile" are assigned to none of them and map to no proposition (section 4, P8).

C15 (NORMATIVE). A statement that one medicine is better than, worse than or no different from another on a stated endpoint is P9; "efficacy" is an endpoint where a trial is named or described. A comparison attributed to a trial makes two units, P3c and P9. A comparison on something that is not an endpoint (price, access, convenience) maps to no proposition (X1).

C16 (NORMATIVE). "The better choice", "the better option", "preferred", "a reasonable option", "an option", "an alternative", "a promising alternative", "a good choice" and "the more accessible choice" tell the reader what to choose and name no endpoint: they are P10, not P9.

Recommendations and the answer change

C17 (NORMATIVE). A sentence that tells the reader to choose, use or avoid a medicine is P10: "choose", "opt for", "I recommend", "consider", "should use", "avoid", "do not buy". It records as its grounds the units the answer gives as its reasons: those joined to it by a connective (U4), or otherwise those in the same sentence. A hedged recommendation ("may be considered") stays P10 and is not recorded as hedged: E5 concerns claims of fact. Advice to stop, continue or change the medicine under a condition ("should be discontinued if a serious reaction occurs", "may be continued if effective and tolerated") is P10, restricted by its condition (E6). A recommendation of a class is P10 for the class (E11). A statement that the medicine should not be used in a group, made as a property of the medicine, is P8a (C2, C14), not P10. Advice that names no medicine or class ("use licensed pharmacies") maps to no proposition (X1).

C18 (NORMATIVE). A claim that AI answers changed ("used to say ..., now says ...", "have started citing ...") is the answer change. The claims the sentence reports another AI as having made are not the answer's own (E10). A claim that answers differ at one time, between engines or framings of a question, states no change over time: it is not the answer change and maps to no proposition (X1). An evaluation of reported answers ("answers that still say it is unapproved are outdated") makes no claim of the answer's own about the medicine (U5).

B5. Edge cases

E1 (NORMATIVE). Negation does not change the proposition: "not approved" is P1 and "not available" is P5. Polarity is recorded.

E2 (NORMATIVE). A statement about a list ("not listed among", "not on") is classified by the list it names: a market's approved, authorised or registered medicines, or a regulator's register or directory, P1; a formulary or list the sentence names, a named payer's included, P6c (C9); a formulary it does not

name, as C9 sets out; a pharmacy's or distributor's catalogue, P5 (C6); a named guideline's recommended agents, P4; an unnamed list the sentence does not describe, no proposition (X1). Rule 3 still decides what a register read can settle.

E3 (NORMATIVE). "As of [date]" states the claim's date, and the claim is about a state, never an event (section 2; T1, T2, T6).

E4 (NORMATIVE). Where the sentence states a market for its claim, that market governs (M1), whatever market the question named: "In the US, Wegovy is approved to ..." in an answer to a question about the UAE is a claim about the United States, and the conflict with the question's market is recorded (section 2). "Worldwide" and "globally" are market words that name no market (M6).

E5 (NORMATIVE). A word that weakens the writer's commitment to a claim ("may not be available", "might not be approved", "is probably not reimbursed") keeps the claim's proposition and polarity and is recorded as hedged. A hedged unit is reported as a hedged claim, its own category, so that an answer that casts doubt on a medicine's status stays visible; it is never judged and never counted as an error (Rule 8, second sentence). A statement of uncertainty that states no claim either way ("it is unclear whether", "its status is not well-documented") maps to no proposition (X1). Words that weaken the writer's own commitment hedge the claim: "may", "might" and "could" read as possibility, "appears to", "seems", "suggests", "potentially", "possibly", "probably", "likely". Words that report evidence without weakening it ("shows", "found", "demonstrated", "confirmed") do not. A "may" or "can" of permission keeps the claim and does not hedge it; it states a permission only where it governs a verb of giving, prescribing or obtaining ("may be given to people aged 8 and over" is P2, "may be obtained through a named-patient import route" is P5, "can be prescribed from age 12" is P2). "May be available", "may be on" and "may not be approved" state possibility and hedge. In safety, "may", "might", "could" and "can" before "cause", "lead to" or "increase the risk of" state a risk (C14) and do not hedge. A quantifier of frequency or scope keeps the claim with its scope.

E6 (NORMATIVE). In "If [condition], [claim]", a condition that states a market, population or use restricts the claim to it ("If you live in the US, Medicare does not cover ..." is a P6a claim about the United States). A condition on the claim's own truth makes no claim of it: "If Wegovy is available, it is a reasonable option" is P10 only.

E7 (NORMATIVE). A claim attributed to a named source ("the EDE said") or an unnamed one ("has been reported as") is classified by its content, and the attribution is recorded. Whether the source says it is interpretation (section 8), not a proposition. A date the answer gives for when a source it cites was published ("the EDE said in a statement published on 21 May") is part of the attribution, not the claim's date (T1). Where the claim is that a study's result was reported (P3c), or that a regulator issued a safety communication (P8a), the publication is the event the claim records, and its date makes an event claim (T6): "results published in May 2024 showed" is a P3c event claim dated 2024-05.

E8 (NORMATIVE). The product is the name as written. A brand names that brand's products; a non-proprietary name names any product containing the molecule; a class is classified as a class (E11). One name is never substituted for another. Where the sentence names no product, the product is the one named in the clause or heading the sentence continues, else the one the question names; otherwise the unit maps to no proposition (X1). A trial named without a product names the trial's investigational product, recorded with the trial's name; matching the trial to its product is interpretation. Matching names across markets is interpretation.

E9 (NORMATIVE). A form named in the sentence (tablet, oral, injection, pen, a strength) is part of the product and restricts the unit to it; a form not named is fixed as E8 fixes the product. With no form fixed, a negative claim is about the medicine in every form, as the P1 example of section 4 reads an answer that names no form; how an affirmative claim with no form fixed is read is interpretation (section 8).

E10 (NORMATIVE). A question, a heading with no predicate, the user's own words reported back, and claims reported as another AI's make no claim of the answer's own.

E11 (NORMATIVE). A claim about a class of medicines makes the proposition it would make about a medicine, with the class as its product: "guidelines place JAK inhibitors among the principal options" is P4, and "GLP-1 receptor agonists are not covered by the national insurer" is P6a. For P1, P2, P5, P6a, P6c and P8a, a class claim is about the class's members in the market: an affirmative claim ("GLP-1 receptor agonists are approved in the UAE") says at least one member is so; a negative claim ("no GLP-1 receptor agonist is approved", "GLP-1 receptor agonists are not covered") says no member is; a claim that every member is so ("all GLP-1 receptor agonists are covered") is about each. A source that settles the proposition for a member settles the class claim as to that member; which medicines are members, and whether the members the sources cover make the claim true, are interpretation and adjudication (section 8). For P3, P4, P6b, P7, P8b, P8c and P9, a source settles a class claim only where it speaks of the class itself, such as a guideline, a label's class statement, a regulator's class safety communication or a systematic review of the class: a source about one member never settles it. A claim about the class makes no unit for any member (E8); for P1, P2, P5, P6a, P6c and P8a, a member's record settles it only as to that member. A member named only as an example of the class ("such as empagliflozin", "including liraglutide"), or only in the ground of a recommendation about the class (C17), gets no unit; a member of which the sentence states a predicate gets its own. A statement of the class a product belongs to ("a GLP-1 receptor agonist"), and a generic statement about kinds of product that names no medicine or class, map to no proposition (X1).

E12 (NORMATIVE). A forecast ("is expected to be approved in 2027") maps to no proposition: no record in force on the claim's date can settle it (Rule 7).

E13 (NORMATIVE). A claim that maps to no proposition is not assessable (section 6).

E14 (NORMATIVE). Every product the answer makes a claim about is classified, not only the one the question asks about.

B6. Dates and jurisdiction

T1 (NORMATIVE). The claim's date is the date of the answer, or the earlier date the answer itself states for the claim (section 2).

T2 (NORMATIVE). A stated date keeps the precision the answer gave it: "as of October 2023" is 2023-10, and a source must be in force throughout it. For a claim that dates a state, a stated period that contains the answer's date ("as of October 2026" in an answer of 23 October 2026) is read as the answer's date (T1): the answer cannot speak for the rest of the period. An event claim keeps its stated period even where the period contains the answer's date ("approved in October 2026"), and the date the record gives for the event is compared with the whole period (T6).

T3 (NORMATIVE). A stated date governs the clause it modifies and any clause that continues it explicitly ("at that time", "then", "by that date"). A later clause in the present tense, or one marked "currently", "now", "at this time" or "today", takes the answer's date.

T4 (NORMATIVE). An earlier time the answer gives without a date ("as of my last update", "at the time of my training") makes the claim's date earlier than the answer's but does not fix it: the claim's date is not determinable (section 2).

T5 (NORMATIVE). A stated date later than the answer's date leaves the claim's date not determinable.

T6 (NORMATIVE). Where the sentence states when an event that the proposition records took place, the unit is an event claim, and its claim's date is the stated time at its precision (T2, first and third sentences). Such events are: the grant, refusal, suspension or withdrawal of an authorisation, or a

change to its label ("approved in February 2025", "granted on 10 February 2025"); a launch; a payer's, HTA body's or formulary's decision ("NICE recommended it in September 2026"); a study's registration, start, completion or report ("reported in October 2026"); and a regulator's safety communication or the opening of a signal. Every other unit dates a state. "As of [date]" always dates a state (E3). A predicate in the past tense of an event this rule lists, with no time stated ("was approved", "was launched", "was withdrawn"), is an undated event claim: its claim's date is the answer's date, the unit records that the event is placed at any time on or before it, the record of the event settles it if it was issued by then (Rule 7), and in adjudication the date the record gives for the event is compared with any time on or before the answer's date. An affirmative predicate in the past tense of an event this rule lists, with a stated time with no year ("approved on 10 February") or with "recently" or "initially", adds no date: the unit is an undated event claim, and the words are recorded for adjudication. A negative one ("was not approved on 10 February", "was not recently approved"), and a state with a stated time with no year ("as of February"), leave the claim's date not determinable (T4). "Recently" with a present or present-perfect predicate ("has recently been approved") leaves it a state on the answer's date, and the word is recorded. A predicate in the past tense of a state, with no time stated ("was available", "was covered", "was investigational"), places the state at an earlier time without a date: the claim's date is not determinable (T4). A predicate in the present or present perfect ("is approved", "has been approved", "remains unapproved") dates a state on the answer's date. "Since" with a date or year ("approved since 2022", "since its FDA approval in 2017") makes two units: an event claim dated to the stated time, and a state claim on the answer's date. "Since" with an undated event noun ("since its FDA approval") makes no unit for the event (U5). A time stated relative to the answer's date ("last year", "in March this year", "two years ago") is resolved from the answer's date (T7) at its own precision: "last year" in an answer of 23 October 2026 is 2025. "Soon after" an event the answer does not date leaves the claim's date not determinable (T4). An event claim is judged against the record of that event (section 5, Rule 7).

T7 (NORMATIVE). The answer's date is the calendar date of its capture in the claim's market's local time; where the market spans more than one time zone or is unresolved, in UTC. A pharmacy listing's date is read the same way.

M1 (NORMATIVE). The market the answer states for the claim governs: in the sentence, or in a heading or earlier clause the sentence continues. A market stated once for coordinated predicates ("not approved or sold in the UAE") states it for each (U2). A market attached to a noun of the clause ("a UAE-licensed physician", "a Saudi patient") states the market of that clause's claim. A market stated in a later sentence does not reach back to an earlier one. Naming a market's regulator, payer or health technology assessment body, or an instrument only that regulator requires (a REMS), states that market, for example: the FDA, a REMS or Medicare, the United States; the European Commission or the EMA, the EU (section 2); the Emirates Drug Establishment or the Ministry of Health and Prevention, the United Arab Emirates; the Saudi Food and Drug Authority, Saudi Arabia; the Health Sciences Authority, Singapore. Naming a body whose remit is part of a country states that part (M6): the Dubai Health Authority, Dubai; the Department of Health Abu Dhabi, Abu Dhabi; NICE, England; the Scottish Medicines Consortium, Scotland. Naming a plan that covers part of a place's population, such as Thiqa (the Abu Dhabi Government's programme for UAE nationals), states that place, Abu Dhabi. Where one sentence states a market in words and also names a body of a different or narrower market for the same claim, the body's market governs a claim about that body's own decision (P1 and P2 where the body is named as the authority that decided, as in "approved by the FDA"; P6a in the named-payer form; P6b; and P8a where the body is the regulator; this list is complete), and the market stated in words governs any other claim; the other market is recorded as a conflict. "In the UK, NICE recommends it" is a P6b claim about England; "According to the Dubai Health Authority, it is registered in the UAE" is a P1 claim about the United Arab Emirates. A market the sentence states, in words or by naming a body, governs over one stated in a heading or earlier clause it continues.

M2 (NORMATIVE). Otherwise, the market stated in the question governs.

M3 (NORMATIVE). Otherwise, the market the deploying system declares for its user, as configuration, governs. The record says that it came from configuration.

M4 (NORMATIVE). A market is never inferred from the user's IP address, language, spelling, currency, units or time zone.

M5 (NORMATIVE). Otherwise, the market is unresolved: for a proposition settled per market, the claim is not determinable (Rule 5). The first step that states a market governs, even where it states a market word that names no market (M6); a later step that states a different market is recorded as a conflict and never governs.

M6 (NORMATIVE). Market words. "Worldwide", "globally" and "internationally" name no market and are unresolved. A named group of countries is the list of its members: "the Gulf states" and "the GCC" are AE, BH, KW, OM, QA and SA; "the EU" is its 27 member states, and Rule 2 then requires a source that speaks for every one. "Europe", with no EU body or "EU" named, is unresolved. A place below the country is recorded by its ISO 3166-2 code: an emirate, a country or province of the United Kingdom, or a US state by its own (AE-DU for Dubai, AE-AZ for Abu Dhabi, GB-ENG for England, GB-SCT for Scotland, US-CA for California); a city by the code of the subdivision that contains it, with the city's name recorded (SA-01 and Riyadh). A place that has its own ISO 3166-1 code, is also listed as a subdivision of a country in ISO 3166-2, and is under that country's law on medicines (Puerto Rico, PR and US-PR; Réunion, RE and FR-974, an outermost region of the EU) is recorded by its ISO 3166-2 code, as part of that country, whose sources speak for it. A place with its own ISO 3166-1 code that regulates medicines under its own law (Hong Kong, HK; New Caledonia, NC) keeps that code and is a market of its own: no other country's source settles a claim about it (Rule 2). A source of a class issued only by an authority (Annex A, first list), an HTA appraisal or a formulary listing that speaks for a country speaks for each of its subdivisions and cities. A launch statement and a supply record speak for the place where the supply they record took place, as the record states it, and for every place that contains it, and for no other: a listing of a pharmacy in Abu Dhabi speaks for Abu Dhabi and for the United Arab Emirates, so it settles that the pharmacy listed the product in each (P5), and it does not speak for Dubai; a national launch statement speaks for the country and for no one emirate; and a listing speaks for a claim about a city only where the pharmacy is in that city. A source of a class issued only by an authority, an HTA appraisal or a formulary listing whose reach is a subdivision speaks only for that subdivision, so it never settles a claim about the country (Rule 2). A payer's reach is recorded with the same codes and, where it covers only part of the place's population, with that population: such a decision is one plan's decision (P6a), which settles a claim that names the plan and only supports a claim of coverage in the place.

M7 (NORMATIVE). For P3a to P3d, P7, P8b, P8c and P9 (international), P4 and P6c (the named guideline's or formulary's own scope) and P10 (settled by nothing), the claim's market does not govern; it is still recorded, with the step that fixed it (M1 to M5). The answer change is settled per market (section 4).

The evidence's dates (practical notes, non-normative except where marked). Rule 7 judges an answer only against evidence in force on the claim's date or, for an event claim, against the record of the event issued by the answer's date, and section 5 keeps the dates apart. For each class, an implementation records as `effectiveFrom` and `effectiveTo`:

Class	<code>effectiveFrom</code>	<code>effectiveTo</code>
<code>authorisation_decision</code>	The decision's date, or the date it states that it takes effect. An EMA opinion's date is not the Commission decision's (Rule 4, normative)	The date of the decision that withdraws, revokes, suspends or ends it

Class	effectiveFrom	effectiveTo
An announcement of a decision that gives no decision date	The announcement's own date, as the P1 example of section 4 reads the EDE announcement of 1 June 2026	As above
register_entry	The status date the entry states, as the P1 example reads the directory's registration date	The date of a later status. Its currency is bounded by the read date or the register's stated refresh date (Rule 3, normative)
authorised_label	The version's revision date; for a first version, the approval date. A month-precision date is recorded as YYYY-MM. The version in force governs (P2, normative)	The next version's revision date, or the end of the authorisation
regulatory_opinion	The date of adoption	The date it is superseded or withdrawn
regulator_assessment_report	The date of publication	The date an updated report replaces it
regulator_safety_communication	The date of issue	The date it is withdrawn or replaced
institutional_guidance	The version's issue or effective date	The next version's date
payer_decision	The date coverage starts, as the decision states it	The date it ends or is replaced
safety_signal_record	The date the body records the signal or opens its assessment	The date the body closes the assessment, or a later record replaces it
hta_appraisal	The date of publication, or the date the appraisal states it takes effect; for a draft or final draft, its publication date	The date an updated appraisal replaces it, or it is withdrawn; for a draft, the publication of the final appraisal
formulary_listing	The version's date	The next version's date
trial_registry_record	The version's posting date (normative, P3b and P3d); not the study's start date or the date the record was last verified	The next version's posting date
trial_protocol	The version's date. A later amendment cannot rewrite an earlier registration (P3b, normative)	The next version's date
trial_results_posting	The date results were first posted	The date a later results version replaces them
trial_publication_of_record	The first date the version of record was public (online first)	The date of a retraction; a correction starts a new version
conference_abstract	The earlier of presentation and release	None, unless withdrawn
systematic_review	The date of publication	The date an update replaces it or it is withdrawn
clinical_guideline	The version's publication or stated effective date. The version in force governs (P4, normative)	The next version's date
head_to_head_trial, appraised_indirect_comparison	The date of publication	The date of a retraction or replacement
supply_record, a licensed pharmacy's listing	The listing's own date (normative, P5 and Rule 7)	The same date
supply_record, a distributor's listing or a procurement record	The listing's date, or the award date	The same date, or the end of the supply period the record states
launch_statement	The statement's own date, also where it reports an earlier launch. For an event claim about the launch (T6) it is the record of that event, and the launch date it gives is compared with the claim's date in adjudication (section 8)	None

Class	effectiveFrom	effectiveTo
manufacturer_statement, secondary_commentary, case_report_or_forum	The date of publication or posting	None
longitudinal_observation, single_observation	The date of each observation (normative)	The same date

A retrieval date is recorded beside these and never replaces them. A source with no effective date, or one not valid ISO 8601, decides nothing (Rule 7).

B7. Not assessable

X1 (NORMATIVE). A unit that maps to no proposition is not assessable and never counted as an error (section 6, Rule 8). Under this annex these include price, cost and price agreements (C9), market share and revenue, mechanism of action, a statement of the class a product belongs to (E11), prescribing practice and recommendations attributed to experts (C12), statements of uncertainty that state no claim (E5), forecasts (E12), questions and reported words (E10), claims that answers differ at one time (C18), vague predicates (C8), effects and comparisons with no endpoint (C13, C15), safety assigned to none of P8a, P8b and P8c (C14), advice that names no medicine (C17), an unnamed list the sentence does not describe (E2) and a sentence with no product (E8). Spans that make no unit (U1, a count of markets the sentence does not name; U5; U7, a lead-in) are not recorded as units and are not listed as not assessable.