Master Regulatory CMC & Stability Audit Checklist

A rapid-reference review aid for junior analysts, quality reviewers, and regulatory specialists preparing for internal audits or stability-data compilation.

1. Stability study protocol design

- Do protocol conditions match the registration application and approved commitments?
- Are marketed or scientifically justified representative container-closure configurations used?
- Does the schedule provide enough data to establish the stability profile? For a shelf life of at least 12 months, ICH Q1A(R2) normally recommends every 3 months in year 1, every 6 months in year 2, then annually.
- Are chamber qualification, continuous monitoring, alarms, access, and excursion evaluations documented?
- Does the protocol cover the attributes likely to change and affect quality, safety, or efficacy?

2. Initial laboratory OOS assessment

- Was the OOS result reported promptly and were stable preparations preserved where practicable?
- Were calculations, dilution factors, raw data, audit trails, standards, reagents, sample preparation, system suitability, and instrument status reviewed?
- Does any proposed invalidation identify a specific laboratory root cause supported by clear evidence?
- If laboratory error was not established, did the quality unit expand the investigation to manufacturing, sampling, materials, packaging, stability trends, related batches, and distributed product?
- Do retesting and resampling follow a written, scientifically justified plan with a predefined scope and stopping rule?

3. CTD Module 3 consistency check

- Does 3.2.S reconcile drug-substance nomenclature, manufacture, characterization, controls, reference standards, container closure, and stability?
- Does 3.2.P reconcile composition, pharmaceutical development, manufacture, excipient and drug-product controls, container closure, and stability?
- Are analytical procedures and validation summaries aligned with the intended purpose and applicable ICH Q2(R2) performance characteristics?
- Are specifications, batch analyses, process descriptions, validation information, and stability summaries internally consistent?
- Are product-specific, regional, and lifecycle requirements addressed beyond this high-level CTD map?

4. Data integrity and review readiness

- Are original data, metadata, audit trails, integrations, calculations, and review actions retained and attributable?
- Are deviations, atypical results, OOT signals, and OOS results handled under the correct approved procedure?
- Are decisions traceable to evidence, with unresolved uncertainty and limitations stated clearly?
- Have reviewers confirmed that public guidance, application commitments, internal procedures, and current regional requirements are not being treated as interchangeable?

Primary references: ICH Q1A(R2), ICH M4Q, ICH Q2(R2), FDA Investigating OOS Test Results (May 2022), 21 CFR 211.166 and 211.192.

Use note: Educational reference only. Adapt to the approved application, product, quality system, and current regional requirements. This checklist does not replace an SOP, regulatory assessment, or quality-unit decision.