

Synapse

Pharma Earnings Call Red Flag Detector – MVP Scope

1. Overview

Synapse compares two consecutive pharma earnings calls to automatically surface red flags—pipeline omissions, milestone delays, guidance cuts, and sentiment shifts. The goal is to reduce analyst review time from hours to minutes while ensuring no material change goes unnoticed.

2. Inputs

- Call A transcript (prior quarter)
- Call B transcript (current quarter)
- Company identifier (ticker)

3. Outputs

Output	Description
Live Table View	Interactive UI with sortable/filterable red flags, expandable evidence, tier highlighting
Client Document	Formatted report in client template with executive summary, flag tables, and supporting quotes

Flag Record Schema

Field	Description
tier	Severity (1-4)
category	Pipeline, Milestones, Clinical, Guidance, Commercial, etc.
flag_type	Specific detection (e.g., "Asset Omission")
entity	Drug, program, or metric affected
call_a_evidence	Quote from Call A
call_b_evidence	Quote from Call B (or "Not mentioned")
delta	Plain-language description of change
confidence	High / Medium / Low

4. Red Flag Detection Rules

All flags compare Call A (prior) to Call B (current).

Tier 1: Critical

Category	Flag	Detection Logic
Pipeline	Asset omission	Drug in A → absent in B
Pipeline	De-prioritization	"Priority" in A → buried mention in B
Pipeline	Indication dropped	Indication in A → not mentioned in B
Milestones	Explicit delay	Timeline in A → later in B
Milestones	Timeline vagueness	"Q2 2025" in A → "2025" in B
Milestones	Timeline removal	Date in A → absent in B
Milestones	"On track" dropped	Progress language in A → absent in B
Clinical	Safety language	No safety in A → mentioned in B
Clinical	Hold/pause	Progressing in A → hold in B
Clinical	CRL/setback	Approval expected in A → rejected in B
Clinical	Protocol change	Original design in A → amendment in B
Clinical	Enrollment concern	On track in A → slowdown in B

Guidance	Revenue cut	Higher guidance in A → lower in B
Guidance	Product forecast reduced	Product guidance in A → reduced in B
Guidance	R&D cut	Higher R&D in A → reduced in B
Guidance	Guidance withdrawn	Guidance in A → removed in B

Tier 2: High Priority

Category	Flag	Detection Logic
Commercial	Launch tone shift	Optimistic in A → "slower than expected" in B
Commercial	Pricing pressure	No concern in A → GTN pressure in B
Commercial	Payer pushback	No issues in A → coverage challenges in B
Commercial	Competitive pressure	Dismissed in A → acknowledged in B
Financial	Restructuring	None in A → charges in B
Financial	Impairment	Asset at value in A → write-down in B
Financial	Liquidity concern	No concern in A → runway issue in B
Partnership	Partner uncertainty	Committed in A → "evaluating" in B
Partnership	Milestone missed	Expected in A → not triggered in B
Partnership	Rights returned	Active in A → returned in B
Organization	Executive departure	Present in A → departure in B
Organization	Workforce reduction	No cuts in A → layoffs in B

Tier 3: Sentiment & Language

Category	Flag	Detection Logic
Confidence	Qualifier increase	Fewer hedges in A → more "we believe" in B
Confidence	Active → passive	"We will" in A → "is expected" in B
Tone	Defensive responses	Open Q&A in A → pushback in B
Q&A	New concern raised	Not questioned in A → probed in B
Q&A	Question deflected	Direct answers in A → deferrals in B
Competitive	Competitor acknowledged	No mention in A → threat in B

Tier 4: Disclosure Changes

Category	Flag	Detection Logic
Metrics	KPI omission	Metric in A → absent in B
Metrics	Granularity reduction	Segment detail in A → aggregated in B
Disclosure	Detail removed	Regional/product breakdown in A → rolled up in B
Disclosure	Deferral language	Updates in A → "more at investor day" in B

5. MVP Scope

In Scope

- Two-call comparison (consecutive quarters)
- All Tier 1-2 flags, basic Tier 3-4
- Live table view + client document export
- English transcripts only

6. Success Metrics

Metric	Target	How Measured
Detection accuracy	≥85% precision on Tier 1	Manual validation
False negative rate	<10% for critical events	Known events vs. detections
Processing time	<60 seconds per pair	End-to-end latency
Analyst time saved	≥70% reduction	User feedback