eFinancialModels

FINANCIAL MODEL CASE STUDY

Biotech Financial Model Case Study

How we developed a Financial Model for a development-stage Biotech Company planning its next fundraising



The founder of a development-stage biotech had to decide how much to raise next and when, before investors asked where the money goes. The financial model put those answers, and the runway behind them, in numbers before the first meeting.

KEY TAKEAWAYS

- Situation: the founder who runs a development-stage company with several products in development had to plan the next fundraising and show investors that cash is managed responsibly.
- What mattered: one integrated model answering investors' questions before the first meeting: how much to raise and when, how long cash lasts, what a slipping stage does to runway, the return after dilution and the upside.
- Turning point: realistic chances of success, per programme and stage, became the base of the forecast; the risk this showed in the cash plan called for scenario thinking.
- Outcome: a monthly forecast, a mid- to long-term plan, raise size and date read against cash, returns after dilution, and upside and downside readings.

At a glance

INDUSTRY	Biotech and pharmaceuticals
CLIENT	Development-stage company run by its founder, with several products in development
PURPOSE	Planning the next fundraising: how much to raise, when, and how the funds are used
MODEL SCOPE	Monthly forecast, mid- to long-term plan, programme valuations, financing rounds, investor returns, scenario readings
DELIVERABLES	Financial model with budget, plan and investor summaries

The situation

The founder who runs a development-stage company had several products in development and had to plan the next fundraising. Cash was scarce, so the plan had to show where and how it would be spent, how long it would last and when the next raise had to close. Investors would judge whether funds are managed responsibly and would want to see the upside and the downside. The company needed a monthly forecast and a mid- to long-term financial plan.

What was at stake: What an investor needs to see before funding the next raise

Investors in a development-stage company do not buy current earnings. They judge the expected return, the risk that a programme stalls and the upside if it succeeds. Before committing, they want evidence that the founder knows how much is needed, when, what it pays for and how long it lasts if something slips. The model had to answer these in numbers before the first meeting.

How a development-stage biotech works, and where the model comes in

A development-stage biotech spends before it earns. Raised cash is spent stage by stage on each programme; each stage ends at a gate where a programme advances or stops, and value arrives later through sales, licences or royalties. The founder plans the next raise from that cycle, and the model links every step.

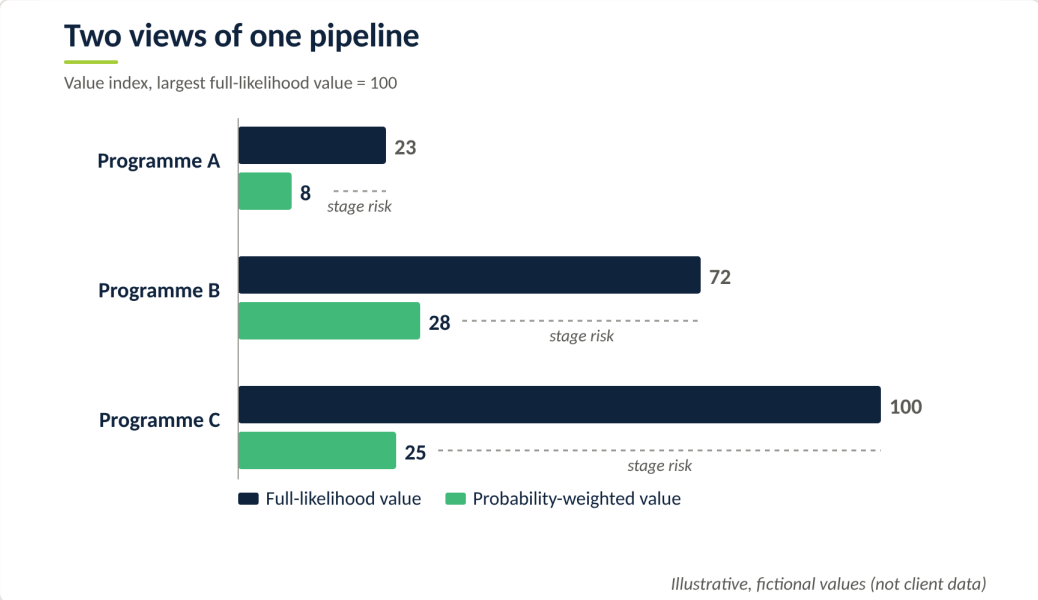
1 Raise
Equity and debt rounds supply the cash, each with a size, a closing date and a price.

2 Spend
Money is spent stage by stage on each programme, plus manufacturing and overheads.

3 Gate
At the end of a stage a programme advances or stops; stage probabilities price that risk.

4 Earn
A successful programme earns through its own sales, licence income or partner royalties.

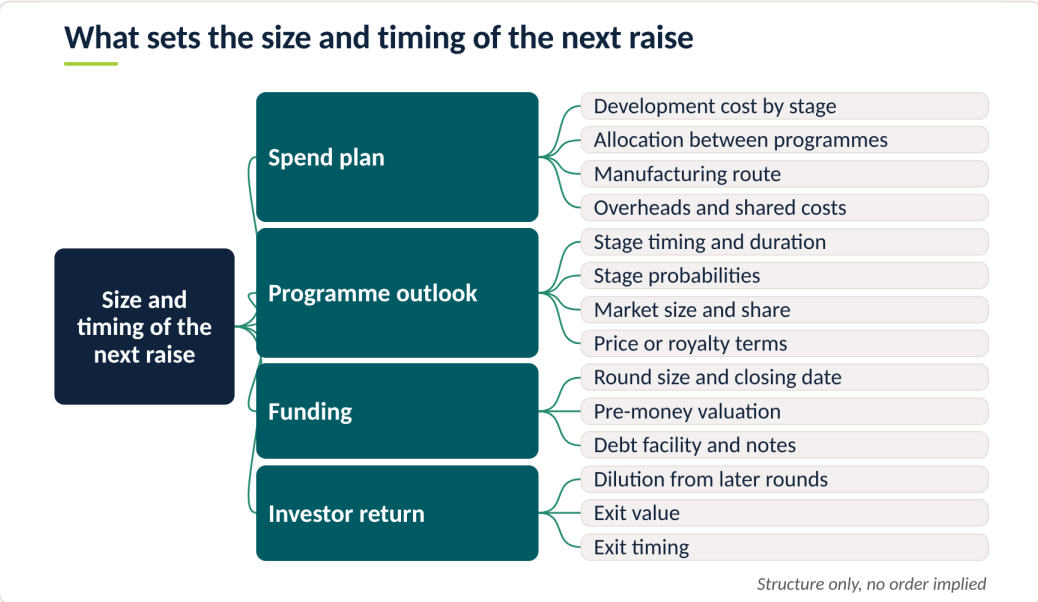
5 Return
Investor returns follow from exit value and timing, after dilution from later rounds.



Illustrative, fictional values (not client data): three programmes in the full-likelihood and the probability-weighted view.

What drives the value?

Spend, programme outlook, funding terms and investor return together set how much the company has to raise and when; the drivers are shown without ranking.



Driver tree: spend, programme outlook, funding and investor return behind the size and timing of the raise (structure only, unranked, no client values).

What made it hard to model?

1 Realistic chances of success per stage

DIFFICULTY A programme can stop at any stage, and cash is spent before the result is known. Cash need and value cannot be trusted without realistic chances per stage.

OUR SOLUTION Each programme carries its own stage chances as visible inputs; revenue, cost and capex are weighted by them, next to the full-likelihood view.

2 Sizing and dating the raise from the cash plan

DIFFICULTY The founder had to decide how much to raise and when. Cash must stay above a minimum buffer until closing, so the date matters as much as the amount.

OUR SOLUTION Closing date and amount are inputs of the monthly forecast, which joins the long-term plan on one timeline; moving a date shows its effect on cash and buffer.

3 Spending scarce cash across several programmes

DIFFICULTY Programmes compete for the same cash. Moving budget between them changes each programme's cash need and value, and investors want to see why.

OUR SOLUTION Every programme runs on an identical sheet and allocation factors redirect spend, so a change flows through to cash and value.

4 Returns for investors after dilution

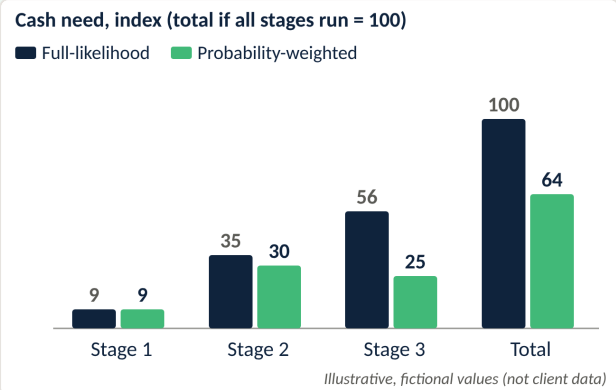
DIFFICULTY Each round dilutes earlier investors, so returns depend on entry price, later rounds and exit, and ownership must reconcile at every step.

OUR SOLUTION A share register rolls stakes forward from pre-money valuation and injection and derives proceeds and IRR per investor class.

THE TURNING POINT

Build on realistic chances of success

The cash plan started with programme costs. What mattered more was how realistic the chance is that each programme clears each stage, because money is spent before the result is known. These chances became the base of the forecast: revenue, cost and capex are weighted by them. Building the cash plan on them also showed how much risk it carries, so the founder had to think in scenarios: upside, base and downside readings.



Illustrative, fictional values (not client data): cash need of one programme with three stages, indexed, in the full-likelihood and the probability-weighted view.

Upside and downside: scenario readings from one model

One switch moves the model between a full-likelihood and a probability-weighted view; levers are changed by hand. The readings show how the plan responds to each setting; they are illustrations, not forecasts.

Downside reading
A stage slips or stops and a round closes later or smaller. Runway shortens, so the raise starts earlier.

Base reading
Probability-weighted view: rounds close on plan and committed spend stays at 100%. It shows whether the buffer holds.

Upside reading
Full-likelihood view: every programme clears each stage on schedule. It shows what success is worth and the spend it needs.

Value after risk is not the cash you need

A responsible cash plan keeps committed spend, spend that can still be redirected between programmes, and the buffer apart. Risk-adjusted value is the pipeline's worth after failure risk, but a committed stage is paid before its result is known, so the cash plan funds it in full.

What we built

INPUTS

- Stages, timing and probabilities
- Market, price and royalty terms
- Development and overhead costs
- Past statements and project costs
- Round size, closing date, valuation

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CALCULATION MODULES

- Identical programme sheets
- Monthly forecast and long-term plan
- Consolidation and three statements
- Rounds, share register, dilution
- Valuation and investor returns

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OUTPUTS

- Runway and buffer around each round
- Uses and sources of funds
- Full-likelihood and weighted views
- Investor IRR and ROI after dilution
- Upside and downside readings

How we worked together

Step 1

Analysis and discussion

We analysed the plan, past spend and programme pipeline, then led the opening discussion with the founder on the next raise and the questions investors would ask.

Step 2

Plan

With the founder and the management team we planned the structure, the programme drivers and how upside and downside would be read.

Step 3

Build

We built the programme sheets, the monthly forecast, the mid- to long-term plan, and the financing-round and investor layers.

Step 4

Review and handover

We reviewed results with the founder, discussed scenarios and funding options, and prepared investor summaries.

What came out of it?

The founder can show investors how much the next raise needs to be, when it has to close, what it pays for, how long the cash lasts under different assumptions and what investors can expect to earn.

- A monthly forecast joined to a mid- to long-term plan on one timeline.
- Budget redirected between programmes, with its effect on cash and value.
- Raise size and closing date read against cash and the buffer.
- Investor returns per class after dilution, with a venture-capital-method cross-check.

Lessons for founders of development-stage biotech companies

1. Estimate the chance of success per programme and stage realistically before sizing the raise: cash need, value and runway rest on it.
2. Because the plan carries risk, think in scenarios: show the full-likelihood and weighted views side by side and fund committed spend in full.
3. Keep every programme on one calculation structure: a reviewer who understands one can check all, and budget moves become levers.

Questions your model must answer

1. What return can investors in the next round expect after dilution?
2. How realistic are the chances of success per programme and stage behind the forecast?
3. How much must be raised, and by which date must the round close?
4. How long does the cash last, and what happens to the runway if a stage slips?
5. How are the funds used across the programmes, and why in that order?
6. What is the upside if the programmes advance as planned, and the downside if they do not?
7. How does the pipeline earn: own sales, licensing or royalties?
8. When, and through which exit, can investors realise their return?

Client details are anonymised to protect confidentiality. Charts, schematics and worked examples are illustrative and contain no client data.

Planning a biotech project?

Explore our Pharma and Biotech Valuation and Financial Model or request a custom financial model.

hello@efinancialmodels.com