

Biotechnology English Participant Workbook

Practice pages for realistic field-specific meetings, pushback, documentation, and role-play preparation

Audience: biotech scientists, translational researchers, assay-development teams, platform teams, program managers, alliance managers, business-development staff, and biotech executives

Focus: A high-level biotechnology English curriculum for platform science, assay design, translational evidence, biomarkers, IP, partnerships, investor updates, regulatory-adjacent planning, and scientific-business dialogue.

Designed for advanced ESL learners who already use professional English and need industry-specific terminology, realistic meetings, role-play pressure, careful pushback, and polished workplace outputs.

Teaching stance: this is language and workplace-communication training, not legal, medical, financial, safety, or regulatory advice. Instructors should connect every scenario to the learner's current company policies, local rules, and approved procedures.

How to Use This Workbook

For each module, define the terms, identify the decision pressure, write a careful response, and practice the conversation aloud. Strong answers are specific, calm, evidence-aware, and tied to owner and next step.

Module 1. Platform Technology and Scientific Thesis

Situation

A founder wants to describe the platform as broadly validated.

Stakeholder pressure: Use the strongest possible investor language.

Constraint: The evidence supports specific models and indications, not every future use case.

Terms to use

- platform
- modality
- proof of concept
- translatability

Evidence, owner, or policy boundary

Pushback sentence

Draft the platform evidence statement

Module 2. Assay Development and Reproducibility

Situation

A partner asks whether a biomarker assay is ready for decision-making.

Stakeholder pressure: Say the assay works because the pilot was positive.

Constraint: Precision, sensitivity, specificity, controls, and reproducibility need review.

Terms to use

- assay
- sensitivity
- specificity
- reproducibility

Evidence, owner, or policy boundary

Pushback sentence

Draft the assay readiness note

Module 3. Biomarkers and Translational Strategy

Situation

A team wants to use a biomarker as the main development rationale.

Stakeholder pressure: Make the biomarker the centerpiece of the clinical story.

Constraint: Biological plausibility, patient relevance, and validation status are different.

Terms to use

- biomarker
- patient stratification
- surrogate endpoint

- validation

Evidence, owner, or policy boundary

Pushback sentence

Draft the biomarker caveat memo

Module 4. Preclinical Data Packages

Situation

A board member asks whether animal data prove human efficacy.

Stakeholder pressure: Say the model predicts human response.

Constraint: Model relevance, dose, exposure, safety margin, and limitations must be named.

Terms to use

- in vitro
- in vivo
- toxicity
- safety margin

Evidence, owner, or policy boundary

Pushback sentence

Draft the preclinical evidence summary

Module 5. CMC and Scale-Up in Biotech

Situation

A program lead wants to promise rapid scale-up after financing.

Stakeholder pressure: Assure investors that scale-up will be simple.

Constraint: Yield, process control, comparability, and supply-chain risk are unresolved.

Terms to use

- CMC
- yield
- comparability
- tech transfer

Evidence, owner, or policy boundary

Pushback sentence

Draft the scale-up risk update

Module 6. IP, Freedom to Operate, and Collaboration

Situation

A collaborator requests broad access to unpublished methods.

Stakeholder pressure: Share the materials to keep the relationship warm.

Constraint: Confidentiality, background IP, publication rights, and freedom to operate matter.

Terms to use

- IP
- freedom to operate
- material transfer agreement
- publication rights

Evidence, owner, or policy boundary

Pushback sentence

Draft the collaboration boundary response

Module 7. Investor and Board Updates

Situation

The board wants a clean milestone story before a financing round.

Stakeholder pressure: Remove uncertainties from the update.

Constraint: Credibility requires clear milestones, risks, assumptions, and mitigation.

Terms to use

- milestone
- runway

- inflection point
- risk mitigation

Evidence, owner, or policy boundary

Pushback sentence

Draft the investor-ready milestone update

Module 8. Partnering and Business Development

Situation

A potential partner wants exclusive rights after limited data review.

Stakeholder pressure: Agree quickly before they lose interest.

Constraint: Diligence, territory, field, economics, governance, and data rights need definition.

Terms to use

- term sheet
- option
- exclusivity
- due diligence

Evidence, owner, or policy boundary

Pushback sentence

Draft the partnering negotiation brief

Capstone Simulation

Lead a cross-functional meeting in biotechnology. Choose four modules from this workbook, connect the risks, and prepare a five-minute update with decision, evidence, constraint, owner, and next step.
