Mabqi

ABZENA

Integrated Antibody Discovery Through Development

Move from target to clinic, without the disconnect

Developing an antibody therapeutic requires more than a strong discovery platform or manufacturing capacity alone. The transition between discovery, optimization, and development is where programs often slow down, lose data continuity, or incur additional risk.

The strategic partnership between Abzena and Mabqi is designed to remove that friction.

Together, we provide a seamless pathway from antibody discovery through lead optimization, developability assessment, cell line development, process development, and GMP manufacturing.

For you, that means fewer handoffs, aligned scientific decision-making, and a clearer route to IND/CTA.

Discovery Connects to Development

In many antibody programs, discovery and development are managed as discrete activities and the handoff between different organizations can introduce delay, knowledge loss, repeated characterization work, and unnecessary risk.

This partnership changes that process. Instead of transferring a lead antibody from one vendor (discovery) | to another (development), you can now:

- Discover and optimize leads with Mabqi
- Progress directly via Abzena's extensive developability capabilities into cell line development, process development, and GMP manufacturing

Because the workflow is coordinated from the outset, discovery decisions are made with development requirements in mind.

Mabqi

Precision Antibody Discovery Driven by Scientific Excellence

Mabqi specializes in identifying fully human monoclonal antibodies and immunotherapies (including ADCs, T-cell engagers and CAR-T therapies) with defined functional characteristics, including antagonistic activity, internalization capability, and tumor-targeted or pH-sensitive binding strategies.

What this means for you

- Access to fully human synthetic libraries offering true diversity of 10^{11} antibody clones, driven solely by variation in the CDRs
- Universal and tumor-selective platforms
- Expertise in challenging targets such as membrane proteins, GPCRs, ion channels, and oncology antigens Plug and play scFv formats
- Functional scFv/Fab hits delivered in under 3 months
- Discovery or maturation programs and precisely designed antibodies (binding profile, inhibition/ activation mode, production requirements)

The LiteMab© Antibody Discovery Studio allows for rapid identification and characterization of fully human functional hits aligned to defined target product profiles, delivering binders alongside functionally characterized sequences aligned to your development strategy. Mabqi's LiteMab© Sense platform enables tumor microenvironment targeting or antibody recycling strategies to support improved tumor specificity and pharmacokinetic profiles.

LiteMab© Neo unleashes the full potential of your existing hits, leads or preclinical candidates. The tailored approach enhances affinity, specificity, and developability, transforming parental antibodies into optimized, next-generation therapeutic leads ready for clinical advancement.

Backed by over 100 years of collective scientific expertise in the field of antibody discovery, Mabqi has a proven track record of 40+ discovery programs targeting across diverse and novel targets in a broad range of therapeutic indications, and over 10 programs exploring pH-sensitive mechanisms.

Over 5 partnered / out-licensed programs with biotech and major pharmaceutical companies, multiple leads advancing toward clinical trials, and more than 25 scientific publications since its incorporation.

Abzena

Optimization, Development, and Manufacturing Under One Organization

Abzena is a biologics and bioconjugate-focused CDMO and CRO supporting programs from early discovery through commercial manufacturing. With facilities in Cambridge (UK), Bristol (PA), and San Diego (CA), Abzena provides integrated capabilities across:

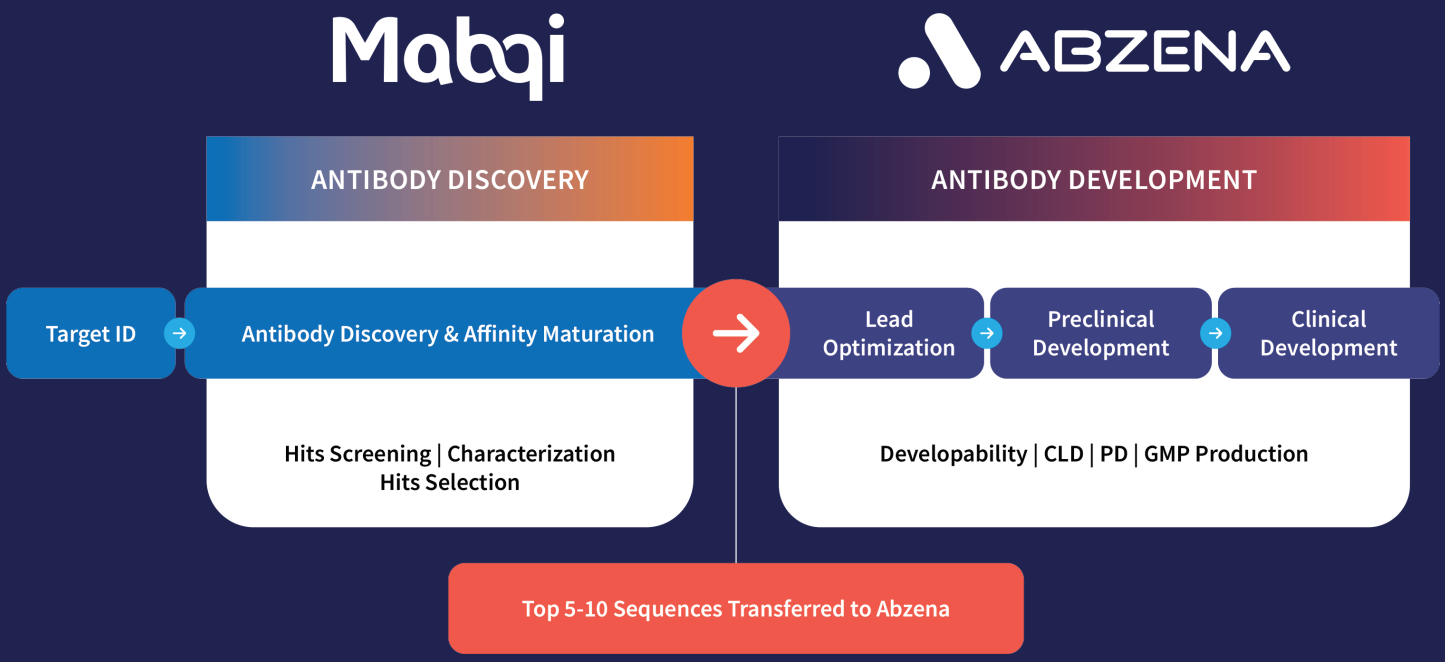
- Antibody engineering and expression
- Manufacturability and Immunogenicity assessments
- Robust analytics and bioassay capabilities
- Bioconjugation and linker-payload chemistry
- ABZelectPro Mammalian cell line development
- Process development and cGMP manufacturing up to 2,000L

Abzena has supported more than 500 customers globally and brings over 20 years of experience in complex biologics and bioconjugates.

What this means for you

- Early identification and removal of potential manufacturability and immunogenicity risks
- Efficient Cell line Development and platform process development
- Capability to scale from bench through clinical and commercial production
- Integrated CMC planning aligned with your target product profile (TPP)

Abzena's experience across monoclonal antibodies, bispecifics, antibody-drug conjugates (ADCs), antibody-oligonucleotide conjugates (AOCs), radioconjugates, and other advanced formats reduces the need to fragment your program across multiple vendors.



What Changes in Practice

1. Lead Selection Informed by Early Developability Insight

Typical approach

Discovery often focuses primarily on affinity and biological activity. Developability risks—such as manufacturability, stability, or immunogenicity—may only be evaluated later, sometimes after transfer into preclinical development.

Integrated approach

Working alongside Mabqi during the identification and optimization of fully human antibodies using LiteMab® platforms, Abzena's development teams can provide early insight into key downstream considerations, including:

- Expression characteristics
- Stability and aggregation risk
- Manufacturability and scalability
- Immunogenicity and safety screening
- Formulation considerations can inform construct design
- Conjugation strategy (for ADCs) can be discussed before final sequence selection

Benefit to you

Lead candidates are selected with downstream development requirements already in view, reducing technical risk and minimizing the likelihood of redesign or rework later in development.

2. Removal of Redundant Re-Characterization

Typical model

When transferring between vendors, the receiving CDMO often has to repeat analytical characterization and confirm sequence integrity, functionality, and stability before development begins.

Integrated model

The top optimized sequences transition directly from Mabqi into Abzena's development pipeline with shared technical documentation and aligned analytical expectations.

Benefit to you

Reduced duplicated work, shorter onboarding timelines, and clear data continuity

3. Coordinated Strategy for Complex Modalities

The partnership supports a wide range of modalities, from monoclonal antibodies, bi- and multi-specifics, bioconjugates and ADCs.

For ADC programs in particular, this coordination changes decision-making.

Instead of

- Discovering an antibody
- Later evaluating whether it conjugates efficiently
- Redesigning if payload compatibility is suboptimal

You can

- Select antibodies with conjugation strategy in mind
- Align linker/payload considerations early
- Transition directly into Abzena's bioconjugation and manufacturing capabilities

Benefit to you

- Unique scaffolds compatible with identical conjugation strategies when required.
- Reduced iteration cycles and improved construct suitability from the start.

4. Governance and Communication

The partnership allows for coordinated scientific oversight across discovery and development stages, reducing the need for independent vendor governance structures.

Instead of managing

- Separate project teams
- Separate timelines
- Separate technical interpretations

You work within a unified framework where discovery, development, and manufacturing teams share visibility.

Benefit to you

Clear accountability & streamlined communication.

The Result: A More Predictable Path to IND/CTA

Early-stage companies face multiple recurring risks. Broadly, these can be grouped into:

1. Selecting a lead that cannot scale
2. Discovering manufacturability issues late
3. Losing time in vendor transitions

This partnership and integrated approach address those risks directly by aligning antibody discovery with CMC reality from day one.

You retain flexibility—integrated end-to-end support or modular engagement—while gaining continuity across your program's most critical inflection points. We connect antibody discovery directly to development infrastructure, so your program progresses as a single continuous process rather than a series of discrete contracts.

ABZENA + Mabqi

Summary

The Abzena-Mabqi partnership offers:

- Fully human antibody discovery with functional precision
- Early-stage developability and immunogenicity assessment
- Integrated CMC and GMP manufacturing capability
- Coordinated scientific governance
- A streamlined path from target to clinic

For you, this means fewer technical surprises, fewer handoffs, and a clearer, more predictable development trajectory.

From discovery to IND, your program sidesteps transition friction and moves forward with alignment.

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