SECTION 4

Current and Recent Investments

ABZENA

Abzena is a leading contract development and manufacturing organization (CDMO) delivering integrated drug discovery, development, and manufacturing services for biologics, antibody drug conjugates (ADCs), and other advanced therapies. These drugs are uniquely able to improve — and in some cases cure — cancers, arthritis, and other highly prevalent diseases. Abzena serves customers from global biopharma to startup biotech companies. Abzena operates three centers in the U.S. and U.K., with most of its operations in the U.S. The centers offer integrated capabilities. Abzena helps customers bring drugs to market faster than they could do internally or with other CDMO partners. The structure of Abzena's site network allows it to scale with customers from early research and development up through clinical-stage drug manufacturing, which further reduces the time and overall cost to bring new therapies to market.

"They (Abzena employees) listen to the customers, especially about manpower. If someone with a particular expertise is missing, they hire immediately."

– Early-stage biotech customer

After WCAS's investment in 2018, the company focused on better leveraging its integrated capabilities to serve customers throughout the drug development lifecycle. Abzena significantly built out a state-of-the-art manufacturing facility in California and added later-stage manufacturing capabilities at its ADC-focused site in Pennsylvania. The company also funded a large-scale manufacturing facility in North Carolina that was eventually sold to Pfizer. WCAS has invested more than $300 million to add capabilities and capacity.

Abzena delivers:

1. **Reduced regulatory and operational risk:** Abzena's state-of-the-art facilities, significant experience in new project starts, and robust quality assurance practices deliver vital medicines quickly and safely to patients.
2. **Accelerated development timelines:** Beginning with early-stage "top of the funnel" drug discovery services, projects can start earlier and be optimized throughout their lifecycles. Interdependent workstreams and unified supplier management help to avoid pitfalls that can slow drug development. In addition, the deep scientific talent embedded across Abzena's network accelerates the process through stronger partnership with customers.
3. **Reduced costs:** Abzena's ability to shepherd a drug candidate through development milestones limits the friction associated with timeline extensions, transfers to other CDMOs, and supplier management, all of which can contribute to ballooning costs.
4. **Increased operational efficiencies:** The company's end-to-end capabilities streamline the development process and help customers focus on scientific innovation.
5. **Improved patient outcomes:** Abzena's capabilities accelerate research and development cycles to bring lifesaving drugs to patients.

Measures of Quality

"Their (Abzena's) expertise and flexibility bring us back to them each time.... They feel more like a partner, trying their hardest for you."

– Commercial biotech customer

Access and Cost Benefits:

The drug development lifecycle is long, expensive, and highly complex. On average, it takes 10 to 15 years and costs $1.5 billion to develop a commercialized treatment including the cost of failures. Funding for early- and late-stage pharmaceutical research and development has grown consistently, driven in large part by complex therapies that face challenging clinical, regulatory, and commercialization paths. Life sciences companies, especially smaller pharmaceutical and biotech companies that contribute an outsized number of drugs, do not have the capacity or funding to manufacture drugs in-house.

Outsourcing to CDMOs allows therapeutic companies to focus on their core competencies of scientific innovation while manufacturing drugs in a safe, cost-effective, and efficient manner with CDMO partners.

Annual biopharma research and development spending is about $200 billion a year. The cost of developing a pharmaceutical manufacturing facility can reach several hundred million dollars and take years to complete. Small and large biopharma customers use the savings that CDMOs generate to invest in the research and development in drugs that improve patient outcomes.