

Bioprocessing: THL's Newest Healthcare Sector Focus

Observations from Phacilitate's Advanced Therapies Week, January 2023 THL's Healthcare team was among 2,000 industry leaders in attendance at Advanced Therapies Week (ATW) — one of the largest and most immersive conferences for cell and gene therapy (CGT) — and one thing is clear: the large molecule therapeutics sector remains an exciting place to be.

Valued at \$300 billion, this mark et is rapidly growing, with several players offering unique and innovative ways to treat highly complex diseases. According to a PWC study commissioned by THL, the CGT space is expected to grow at ~60%% annually through 2026. Despite concerns about a biotech funding slowdown, commer cial demand remains strong for large molecule therapeutics. Beyond that, there is a considerable positive outlook from industry leaders, including scientists, inv estors, and solution providers.

Large Molecule Therapeutics: Transforming the Practice & Delivery of Medicine



As we saw at ATW, there is industry-wide momentum, and we belie ve that large-molecule therapeutics ar e core to the future of medicine.

Topics ranged from innovative modalities and commercialization success strategies, to manufacturing and supply chain considerations unique to the market. We heard about groundbreaking treatment approaches for a myriad of conditions across numerous therapeutic areas, including oncology, neurology, and ophthalmology, to name a few. Experts addressed advances in cell separation technology, lab automation tools, more efficient QA/QC processes, cryo logistics, and much more. Discussions also covered demand for novel reimbursement and pricing models to boost patient access and commercial viability.

Still, this is just a fraction of the content co vered over the course of the week-long conf erence. The sector is expansive and holds considerable potential.

"ATW is a great event for us to attend since the advent of novel approaches such as cell and gene therapies represents a new era in our ability to treat and prevent diseases," said Megan Preiner, Managing Director, THL. "We are focused on identifying next-generation companies that are providing the tools, inputs, services, and software that support the research, development, production, and distribution of large molecule therapies."

Short-Term Outlook: Large Molecule Therapeutics by the Numbers

A common theme at ATW centered around overall market sentiment for large molecule therapeutics: although funding and R&D spend declined a bit in 2022, current trends are pointing to a positive long-term outlook.

We believe the industry is maturing and holds long-term promise. But don't just take it from us:

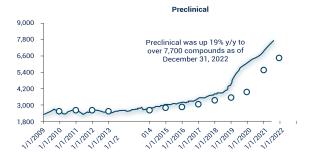
Biologics represented **46%** of FDA approvals in 2022 — the highest proportion of approvals on record.²

There were six **CGT** approvals in 2022³, compared to three in 2021.²

\$31.3 billion in venture/private equity funding last year, materially above pre-pandemic le vels (\$23.7 billion in 2019 and average \$22.6 billion for 2017-2019). 4

Drug pipelines remain strong, with more than **2,000** active clinical trials (and many more in the preclinical stage) just for C> therapies.⁵

Drug Pipeline, 2009 to Present (actuals)





Sources: BioCentury, Inc. and William Blair Equity Research





A Fragmented Sector with High Potential

We believe there's no denying the potential of large molecules as a leading market sector.

On one hand, clinical innovations hold a lot of promise for better patient outcomes.

"It is truly exciting to see these novel approaches, which have the potential to transform and save lives, enter mainstream clinical practice," said Joshua Nelson, Managing Director and Head of THL's Healthcare Vertical.

On the other hand, the supporting ecosystem necessary to streamline various drug development and commercialization processes is relatively nascent. Even with the rise of CDMOs and other solution providers, no one company has assembled all the pieces to support a therapeutic company from conception to distribution across a single modality, much less multiple modalities. This is, of course, an opportunity in itself.

"Anytime you see a large, rapidly growing market with a highly complex and constrained value chain, particularly one where 'the process is the product,' there is an opportunity for growth-oriented PE to lead strategic consolidation and help build a market leader," said Josh Nelson, Managing Director, THL.

Preiner added,

"These large molecule therapies and vaccines are just beginning to reach their potential, and investing in the 'picks and shovels' supporting them is an exciting opportunity to help treat those in need."

Getting Involved in Large Molecule Therapeutics

At the end of the day, we believe large molecule science has moved from "if" to "when", and we expect to see even more interest and innovation over the next 3-5 years.

"THL has a history of proactively identifying innovative, highgrowth sectors and investing behind strong management teams to build market leaders," said Joshua Nelson, Managing Director and Head of THL's Healthcare Vertical.

"After extensive internal and external research over the past year+, we identified our newest sector focus within healthcare: Bioprocessing."

"We're very excited about the ecosystem that supports the large molecule therapeutics sector," **added Preiner**.

"It is tailor-made for the THL approach: we get to know management teams early, act as a strategic thought partner to them in advance of our investment, and ultimately provide access to valuable financial and operational resources that can help accelerate growth."

If you'd like to learn more about THL's activity in Bioprocessing or other healthcare ISOs like Pharma Services, Home-based Care, Healthcare IT, Consumer Healthcare, or MedTech Services, contact THL's healthcare team today.

^{1:} Report Commissioned by THL. PWC. 2022.

^{2:} Life Science Technology - Biologic Transformation Continues - 2023 Outlook. KeyBanc Capital Markets. December 18, 2022.

^{3:} CGT Takeaways from 2023 Phacilitate. Stephens Inc. Januar y 23, 2023.

^{4:} Fourth-Quar ter Update on Biotech Funding, Pipeline Growth, and R&D Spending. William Blair E quity Research. January 18, 2023.

^{5:} Emerging Technologies & Companies in Cell & Gene Therapy Manufacturing. Cell and Gene Therap y Insights. Januar y 9, 2023.