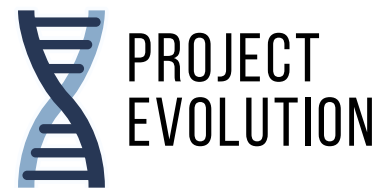




# ABOUT PROJECT EVOLUTION

Introducing Project Evolution, a pioneering full-service talent solution crafted through the collaboration of Berke Executive Search and GTS Scientific. This innovative venture empowers forward-thinking enterprises by efficiently securing top-tier talent, fostering innovation, and ensuring rapid scalability to meet evolving client needs

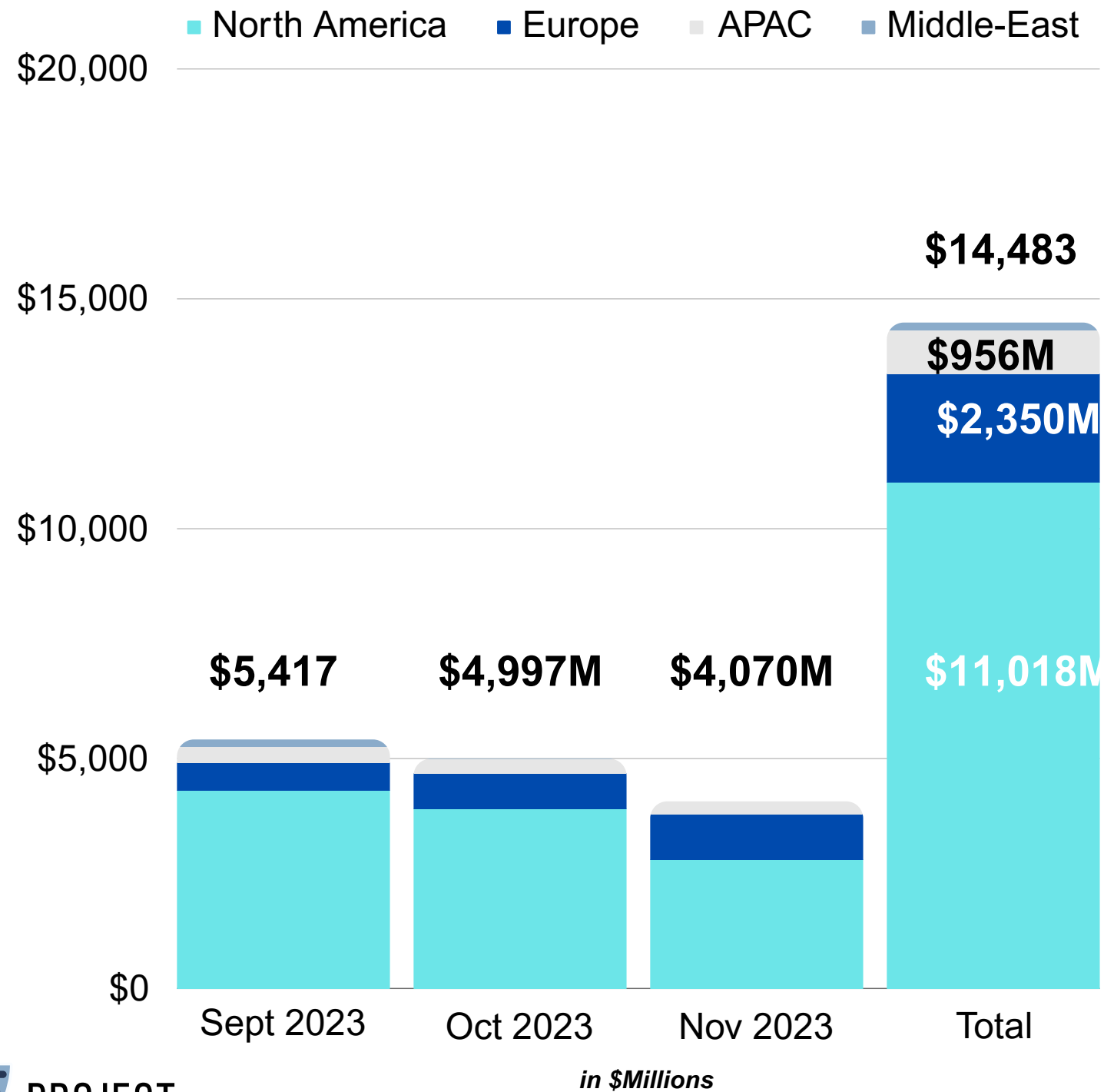


November 2023

## A Joint Venture Designed to Solve the Hardest People Problems



# GLOBAL FINANCINGS REGIONAL OVERVIEW



In November 2023, Life Science and Pharma Fundraising activities globally reached a total of **\$4.07 billion** across **92 transactions**. November's total is 22% lower than October 2023's roughly \$5 billion and 33% lower than September 2023's \$5.4 billion.

The North American Region, particularly the U.S., took the lead in this market, securing \$2.24 billion in financings, constituting approximately 55% of the total deal flow. North America has consistently showcased robust performance, accumulating a substantial **\$11 billion** in financings over the past three months, representing roughly **74%** of all transactions during this period.

Over the trailing three months, the ten top U.S. Life Science clusters (below) accounted for **82%** of the entire North America's Life Science financings, and **62%** of Global financing activities with San Francisco leading the way, closely followed by the Greater Boston region.

## U.S. TOP TEN CLUSTERS BY FINANCINGS

*in \$Millions*

Rank	Region / Cluster	September 2023	October 2023	November 2023	Total
1	San Francisco	\$873	\$1,156	\$853	\$2,883
2	Boston	1,412	876	359	2,647
3	Philadelphia	18	532	99	649
4	New Jersey	0	587	13	599
5	Los Angeles	475	28	23	526
6	Connecticut	0	4	356	360
7	San Diego	0	226	126	352
8	South Carolina	350	0	0	350
9	Washington D.C. / Baltimore	50	74	211	335
10	New York	8	95	197	299
	<b>Total</b>	<b>\$3,186</b>	<b>\$3,577</b>	<b>\$2,236</b>	<b>\$8,999</b>



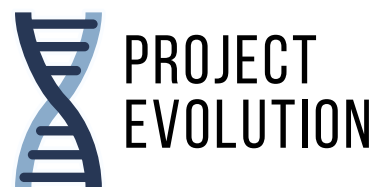
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## GLOBAL TECHNOLOGY OVERVIEW

In November 2023, of the **\$4.07 billion** of Global financing, Biologics maintained its supremacy in financing technology, securing **\$1.3 billion** in funding, constituting **34%** of the total financings recorded. Over the preceding three months, this category exhibited consistent strength by accumulating **\$4.8 billion** in financings, representing approximately **34%** of the total financings tracked. This sustained dominance highlights the enduring impact of Biologics in shaping the financial landscape of Life Science and Pharma Fundraising activities.

Notably, over the last month, the Global Advanced Therapies sector, which encompasses Gene Therapy, Cell Therapy, Microbiome, Exosomes, and RNA Technologies, successfully garnered over **\$1 billion (USD)** through **20 financings**. A significant portion, specifically **\$650 million**, was allocated to Cell therapies, underscoring the substantial investment and focus within this particular facet of advanced therapies. This substantial funding reinforces the sector's prominence and signifies a considerable financial commitment to advancing innovative treatments and technologies in cellular therapies.



November 2023

## TECHNOLOGIES BY TOTAL FINANCINGS

*in \$Millions*

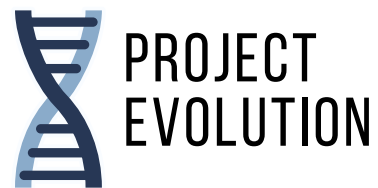
	Sept 2023	Oct 2023	Nov 2023	Total	as a %
Biologic	\$1,025	\$2,517	\$1,328	\$4,870	34%
Small Molecule	855	854	528	2,237	15%
Hybrid	720	0	0	720	5%
AI	584	208	173	965	7%
CDMO	576	83	260	919	6%
Radiopharmaceutical	533	0	105	638	4%
Diagnostic	279	121	285	685	5%
mRna	179	10	95	284	2%
Inhalant	150	0	0	150	1%
Cell Therapy	117	27	649	793	5%
Vaccine	115	127	0	242	2%
Medical Device	100	224	47	371	3%
Instruments & Tools	81	281	87	448	3%
Gene Therapy	44	138	322	504	3%
Transdermal Patch	23	0	0	23	0%
Psychedelic	0	0	33	33	0%
Tissue Engineering	11	0	6	16	0%
Cannabinoid	5	0	10	15	0%
Exsome	0	0	2	2	0%
Microbiome	0	61	5	66	0%
Dermatological	0	88	0	88	1%
Other	22	258	135	415	3%
<b>Total</b>	<b>\$5,417</b>	<b>\$4,996</b>	<b>\$4,070</b>	<b>\$14,483</b>	

## FINANCING TYPE OVERVIEW

In November 2023, Post IPO Equity retained its financing supremacy, securing **\$980 million** through a mix of private placements and public offerings in **17 transactions**.

The continued prevalence of this investment avenue reflects the broader funding challenges, with many companies undergoing such financing experiencing direct hits to their stock prices. In close pursuit, Venture rounds secured a noteworthy **\$837 million** through **13 transactions**, underlining the significant role played by these investment mechanisms.

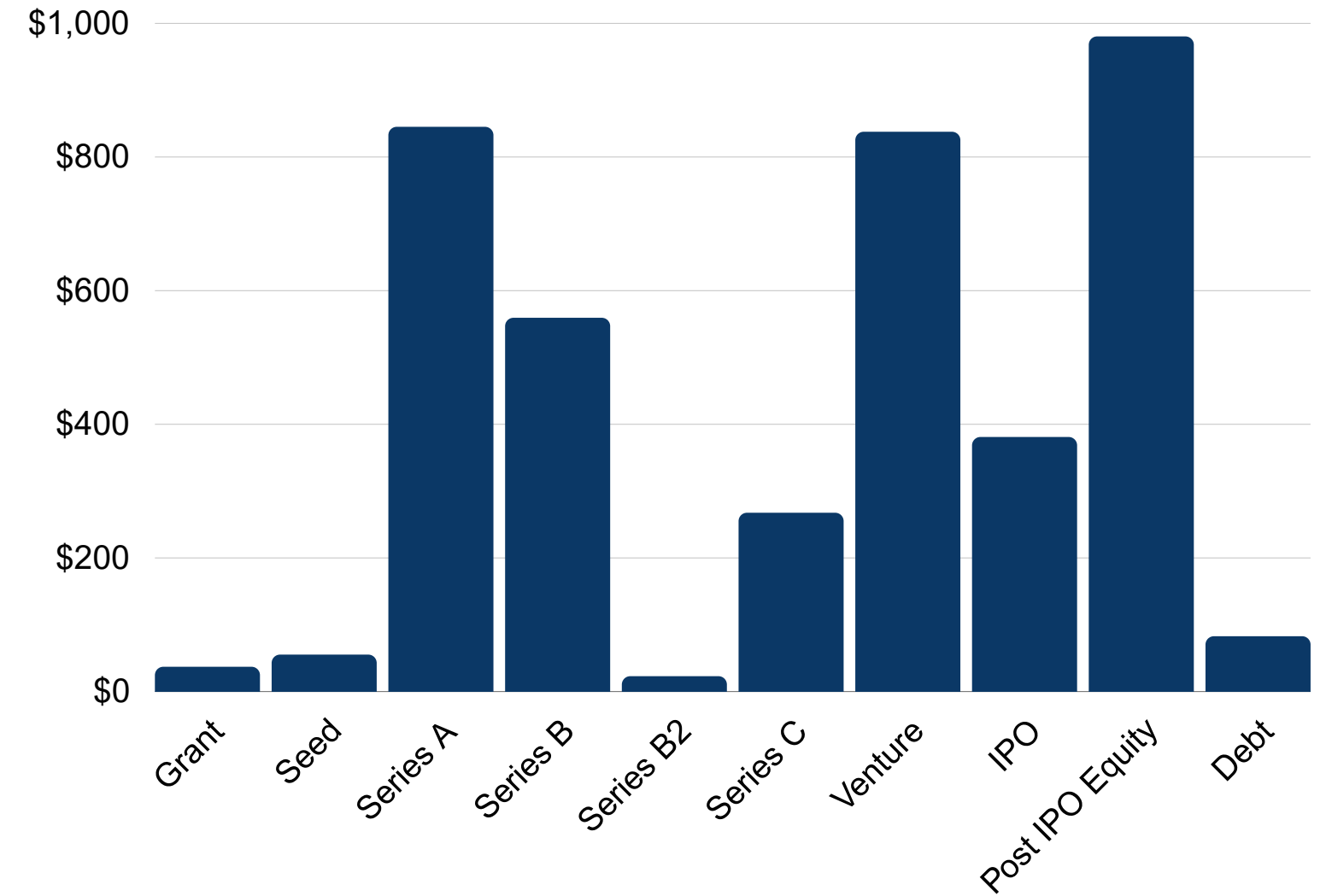
Furthermore, Series A financings contributed significantly to the funding landscape, accumulating **\$845 million** across **26 transactions**. This diverse range of financing activities reflects the dynamism and adaptability of the market, providing a spectrum of options for companies seeking capital infusion at different stages of their growth.



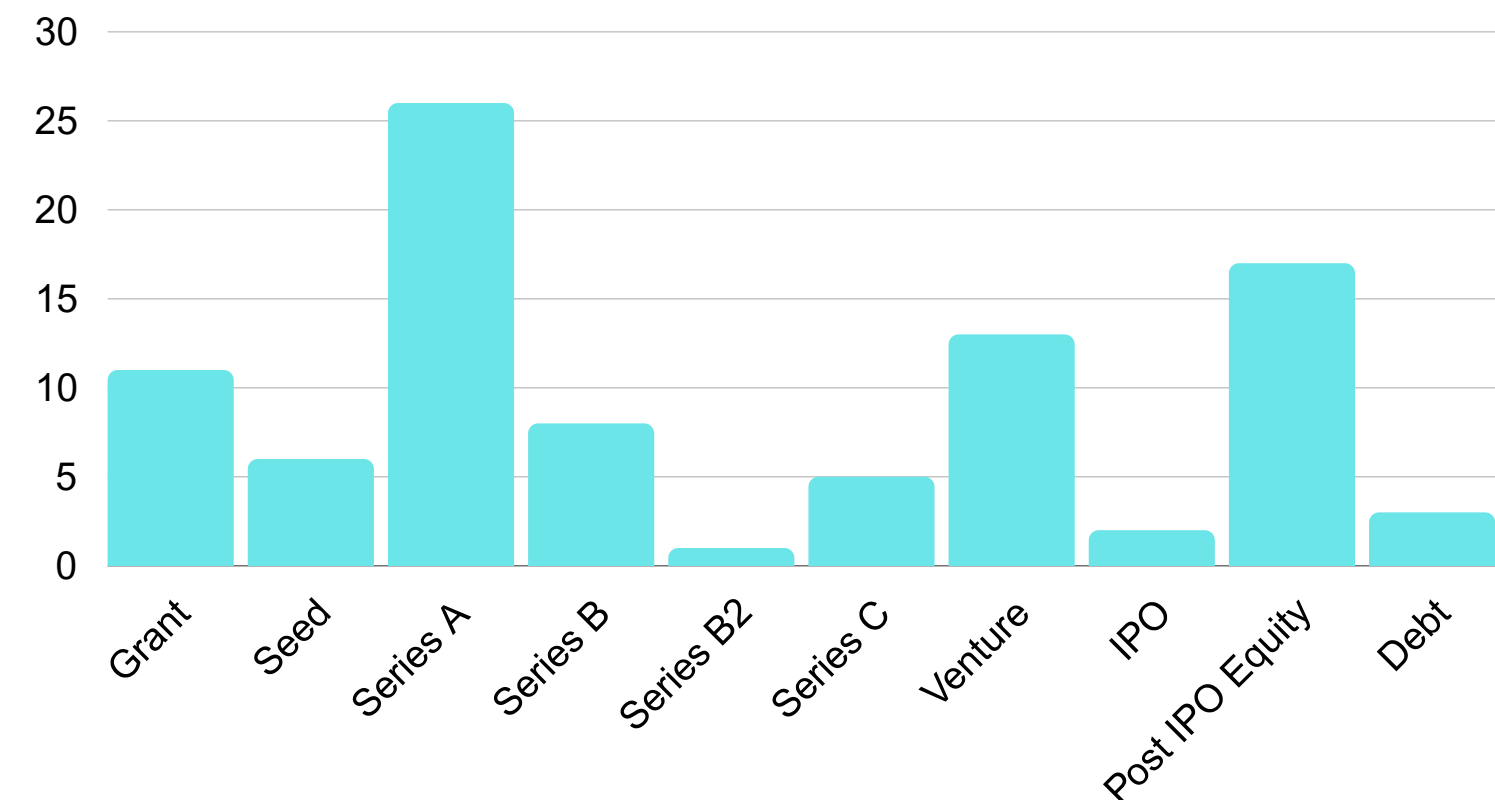
November 2023

## TOTAL BY FINANCING TYPE

in \$Millions



## # OF ROUNDS

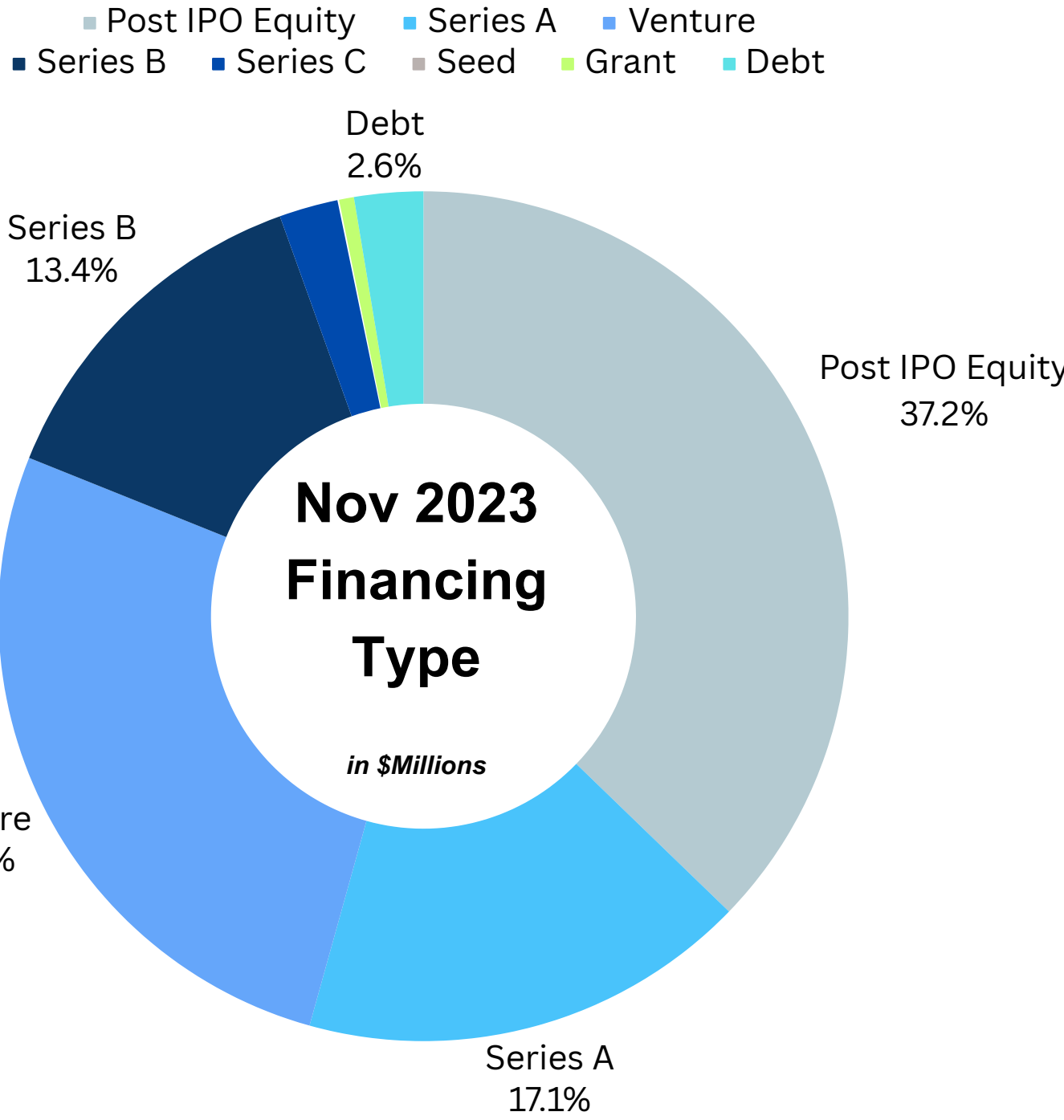
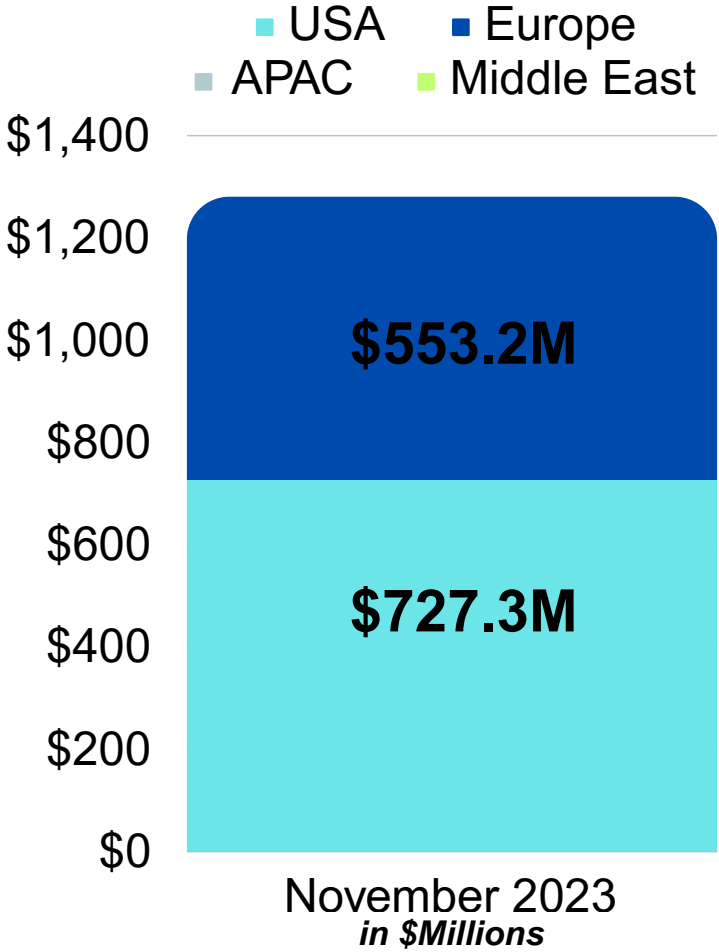


# BIOLOGICS OVEVIEW

The Biologics sector asserted its dominance in global industry-led financings, constituting **31%** of the total deal flow for the month and successfully securing almost **\$1.3 billion** (USD) in funding across **24 financings**.

In the last three months (Sept-Nov) the category had roughly **\$4.9 billion** and accounted for **34%** of Global Life Science and Pharma financings during that same period, highlighting its sustained significance and substantial contribution to the industry's financial landscape.

## Regional Breakdown



## Top Financings

### Arvinas - \$350M - Post IPO Equity

Arvinas, a Connecticut-based biopharmaceutical company focused on protein degradation treatments, has closed its oversubscribed \$350M private placement, led by EcoR1 Capital and RTW Investments. [Story](#)

### Mural Oncology - \$275M - Corporate Venture

Alkermes, the Irish Biopharma company, is spinning out its oncology business with a focus on nemvaleukin alfa. The newly formed entity, named Mural Oncology, has received \$275 million in funding from its corporate parent. Mural Oncology is currently progressing through two potentially registrational trials, with results expected in the first quarter of 2025. [Story](#)

### VectorY Therapeutics - \$138M - Series A

Amsterdam-based Biotech firm VectorY Therapeutics revealed the completion of a €129M (\$138 M) Series A financing round to progress its vectorized antibody programs for neurodegenerative diseases. The funding was jointly led by EQT Life Sciences and the Forbion Growth Opportunities Fund. [Story](#)

### MBrace Therapeutics - \$85M - Series B

MBrace™ Therapeutics, a San Diego-based biopharma company specializing in antibody-drug conjugates for cancer, completed an \$85M Series B financing, totaling \$110 M. TPG led the round, joined by Avidity Partners, Cowen Healthcare Investments, Venrock and Alta Partners. The funds will advance clinical programs, including the first-in-human trial of lead ADC MBRC-101. MBrace aims to bring innovative ADC therapeutics to fruition. [Story](#)

### Nouscom - \$72M - Post IPO Equity

Italian-based Nouscom is a next-generation immunotherapy company developing genetic cancer vaccines and oncolytic viruses. The company intends to use the funds to advance its cancer vaccine clinical pipeline, including a colorectal cancer vaccine. [Story](#)

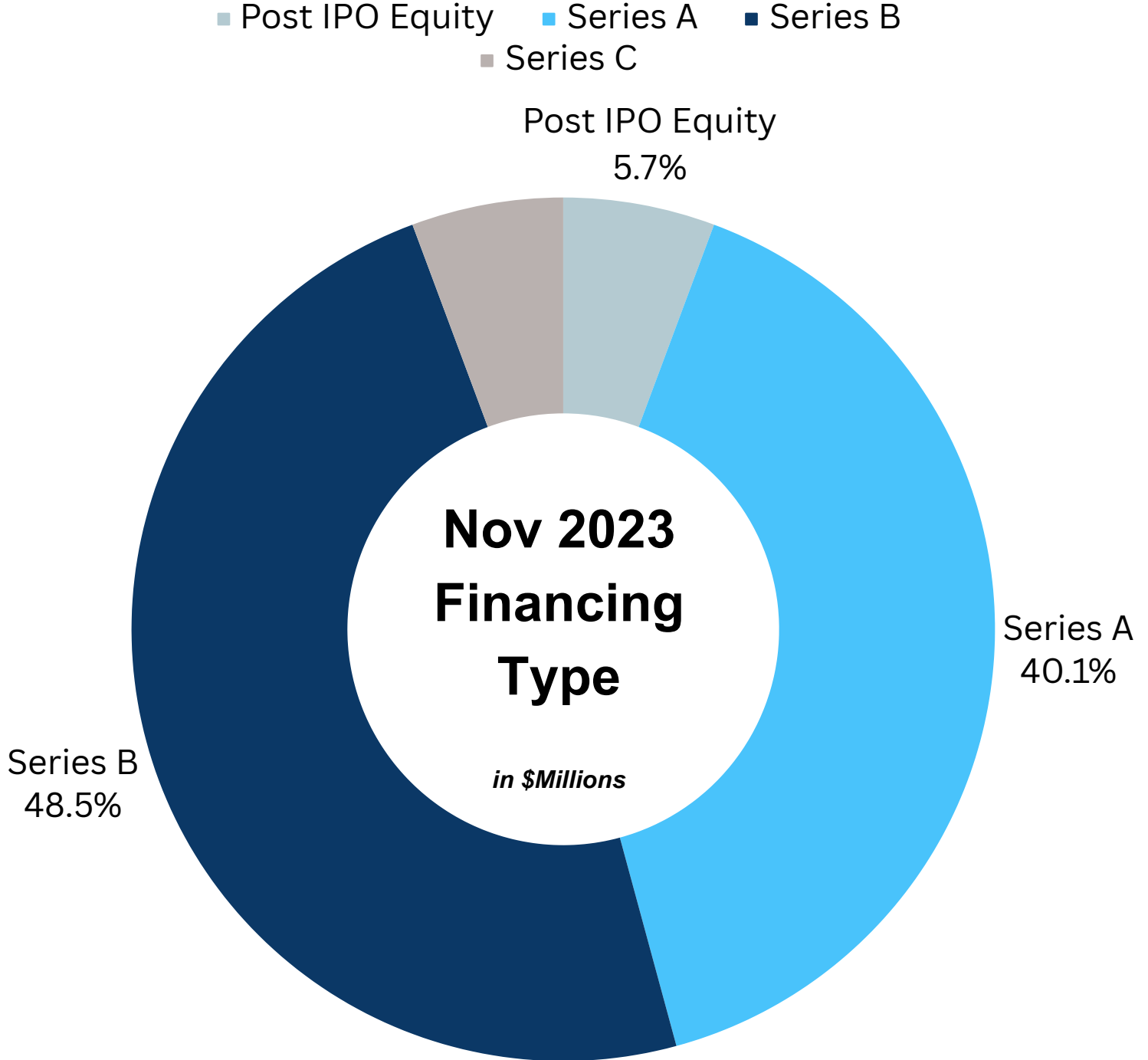
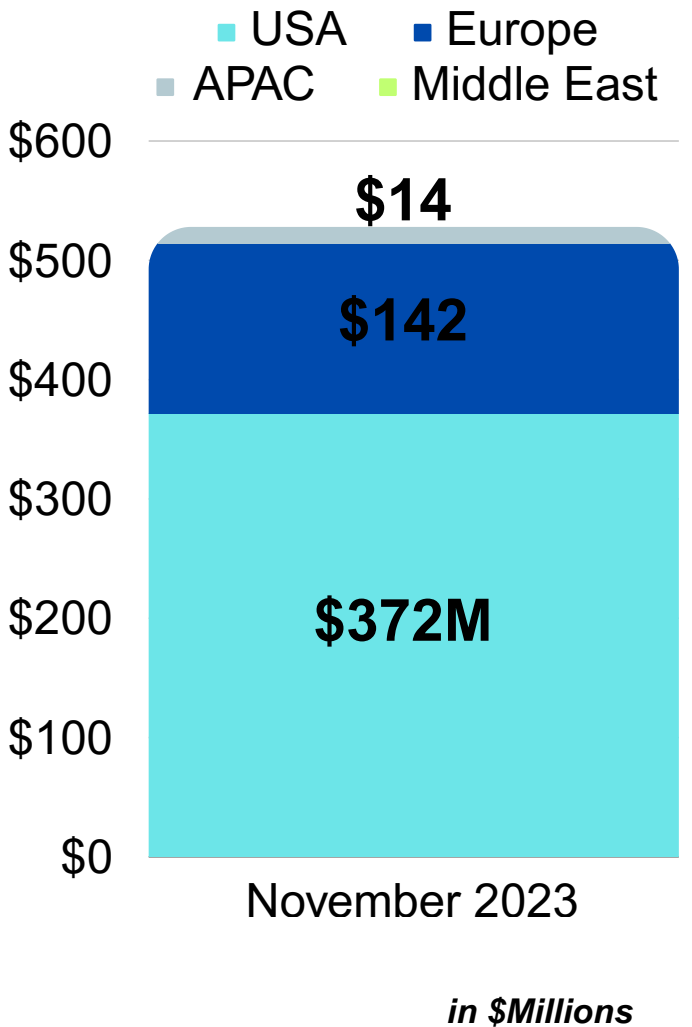


# SMALL MOLECULES

Small molecules continue to wield substantial influence, emerging as a driving force in the industry and securing their position as the third-highest sector, amassing an impressive **\$528 million** (USD) in funding across **10 financings**.

In the last three months (Sept - November) the category has witnessed **\$2.2 billion** in financings representing **15%** of total financings tracked during that same period.

## Regional Breakdown



## Top Financings

### Terremoto Bioscience - \$175M - Series B

San Francisco-based biotech Closed a \$175 million Series B financing round, bringing its total capital to \$250 million. New investors include EcoR1 Capital, Novo Holdings, and Cormorant Capital. The funds will be used to advance the platform and support in-house programs targeting high unmet medical needs. [Story](#)

### NMD Pharma - \$81.4M - Series B

Denmark-based clinical-stage biotechnology company for neuromuscular diseases raised €75M in Series B funding. The round was led by Jeito Capital and included investments from other current investors Novo Holdings, Lundbeckfonden BioCapital, INKEF Capital, and the Roche Venture Fund. [Story](#)

### Kynexis - \$61M - Series A

On November 7, the startup commenced operations with a €57M (\$61M Series A financing round led by Forbion. Its focus is on advancing precision medicines for brain diseases. Kynexis is initiating its efforts with a small molecule inhibitor named KYN-5356, designed to disrupt the production of kynurenic acid (KYNA). Studies indicate that elevated KYNA levels are linked to cognitive impairment in schizophrenia. [Story](#)

### OrsoBio - \$60M - Series A

Menlo Park, CA-based clinical stage company, will use Financing to Advance Metabolic Portfolio for the Treatment of Obesity and Associated Disorders. Co-led by Longitude Capital and Enavate Sciences, with Significant Participation by Existing Investors Samsara BioCapital and NuevaBio. [Story](#)

### Gate Bioscience - \$60M - Series A

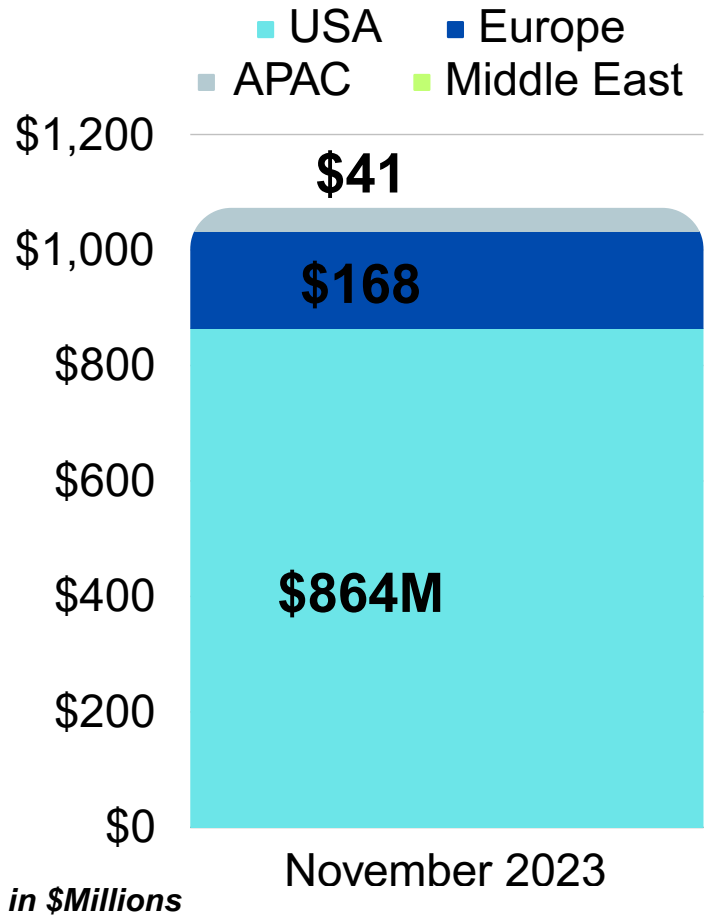
Brisbane-based biotech firm Gate Biosciences secured \$60 million in Series A funding led by Versant Ventures and a16z Bio + Health, with participation from ARCH Venture Partners and GV. The company specializes in developing Molecular Gates, a novel class of medicines. These small molecules target diseases by selectively eliminating harmful extracellular proteins at their cellular source. [Story](#)

[Full List](#) 

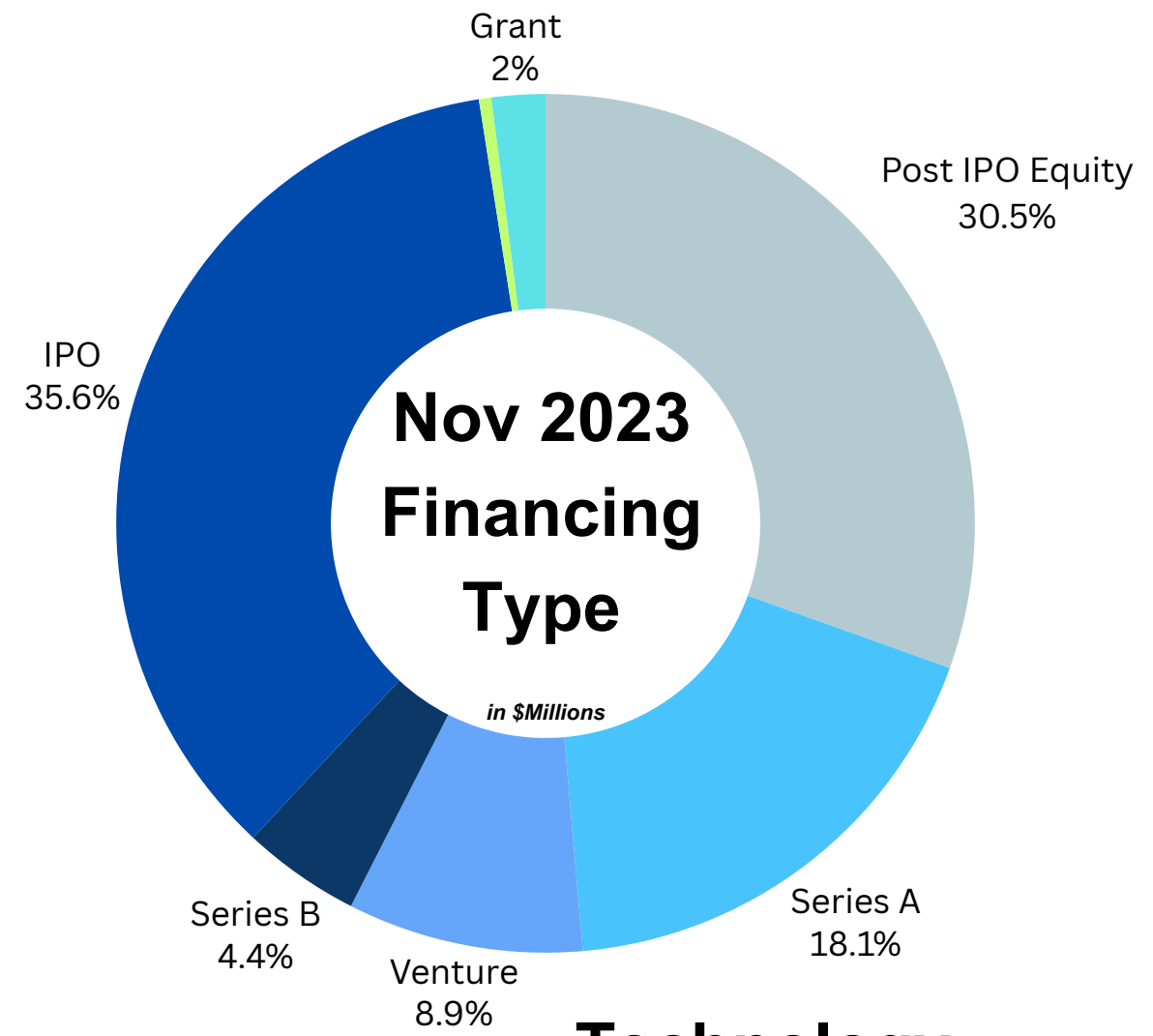
# ADVANCED THERAPIES

Advanced Therapies, encompassing Gene Therapy, Cell Therapy, Microbiome, Exosomes, and RNA Technologies, have secured a noteworthy **\$1 billion** (USD) in funding through **20 deals**.

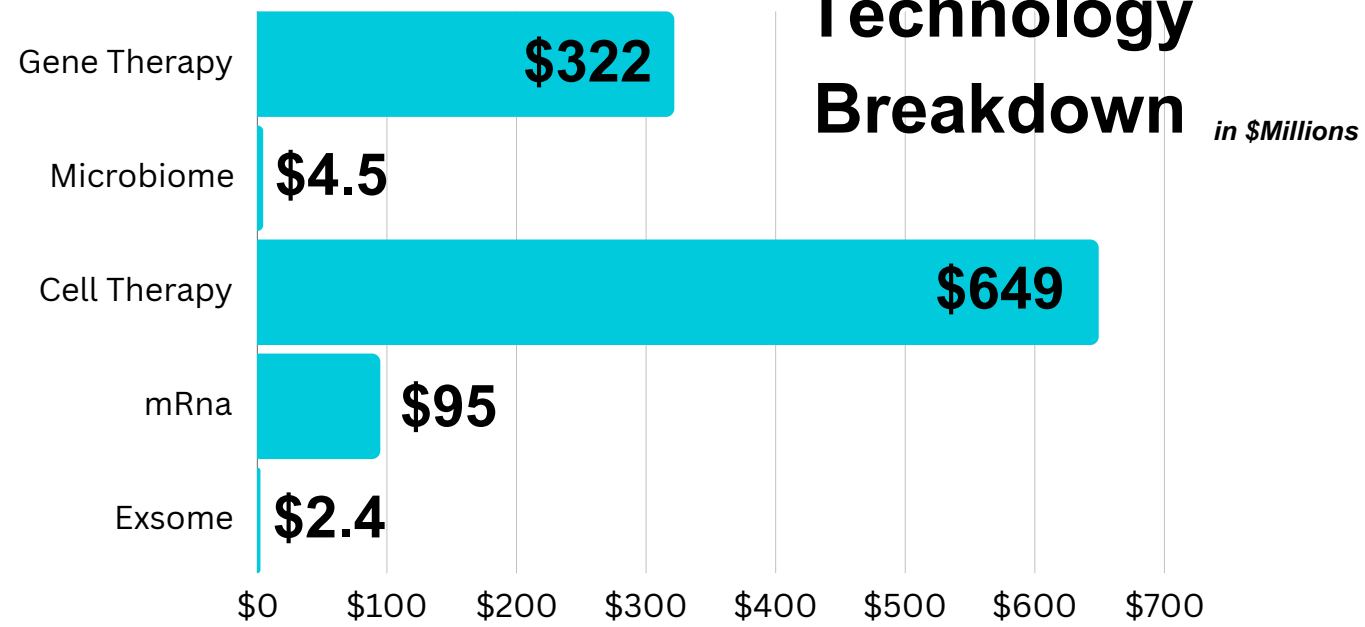
## Regional Breakdown



■ Post IPO Equity
 ■ Series A
 ■ Venture
 ■ Series B
 ■ IPO
 ■ Seed
 ■ Grant



## Technology Breakdown



## Top Financings

### Cargo Therapeutics - \$281M - IPO

Bay Area-based Cargo plans to use IPO funds for a phase 2 trial of lead CAR-T CRG-022, licensed from the National Cancer Institute for large B-cell lymphoma. The company aims to address unmet needs in patients who relapse after CD19 CAR-T therapy, with phase 2 results expected in 2025. [Story](#)

### Arcellx - \$81.4M - Series B

Kite and Arcellx are expanding their strategic partnership to include lymphomas in their CART-ddBCMA collaboration, with Kite exercising its option for Arcellx's ACLX-001 program in multiple myeloma and providing a \$200 million equity investment at \$61.68 per share. [Story](#)

### Verve Therapeutics - \$61M - Series A

Verve Therapeutics, Inc. (Nasdaq: VERV), a clinical-stage biotechnology firm revolutionizing cardiovascular disease care through single-course gene editing medications, concluded a public offering that generated approximately \$143.8 million. [Story](#)

### Lexeo Therapeutics - \$100M - IPO

Lexeo Therapeutics, a genetic medicine biotech, raised around \$100 million in its IPO. Their Alzheimer's gene therapy, LX1001, targeting APOE4 homozygous patients, is in a Phase 1/2 trial with enrollment expected to finish by end-2023 and interim data by the second half of 2024. \$10 million from the IPO funds is allocated to LX1001 development. [Story](#)

### T-Therapeutics - \$60M - Series A

Spin-out from the University of Cambridge disclosed that its Series A venture round has garnered £48 million (\$59 million) to advance the development of innovative T-cell receptor (TCR) therapies aimed at addressing cancer and inflammatory disorders. The funding was spearheaded by Sofinnova Partners, F-Prime Capital, Digitalis Ventures, and Cambridge Innovation Capital, with additional participation from Sanofi Ventures and the University of Cambridge Venture Fund. [Story](#)

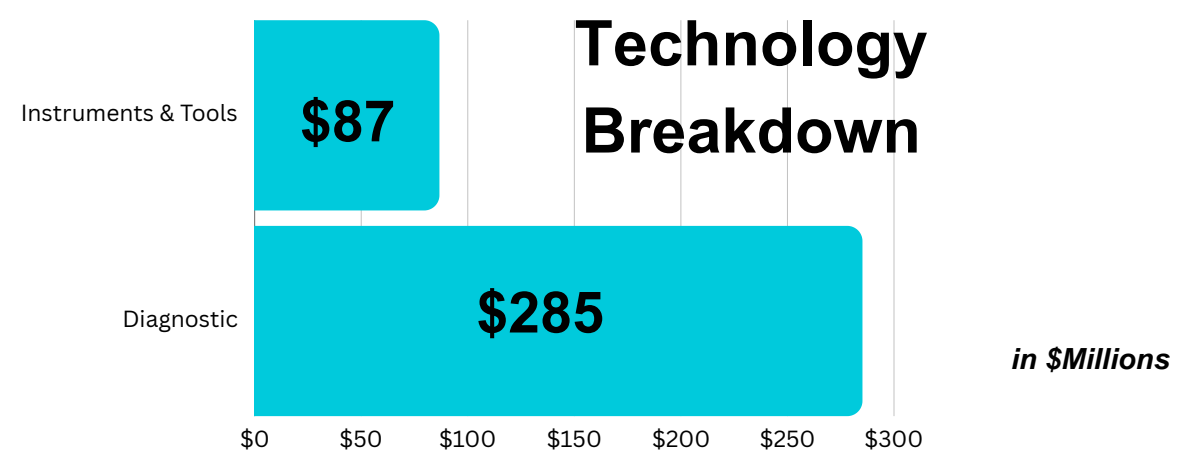
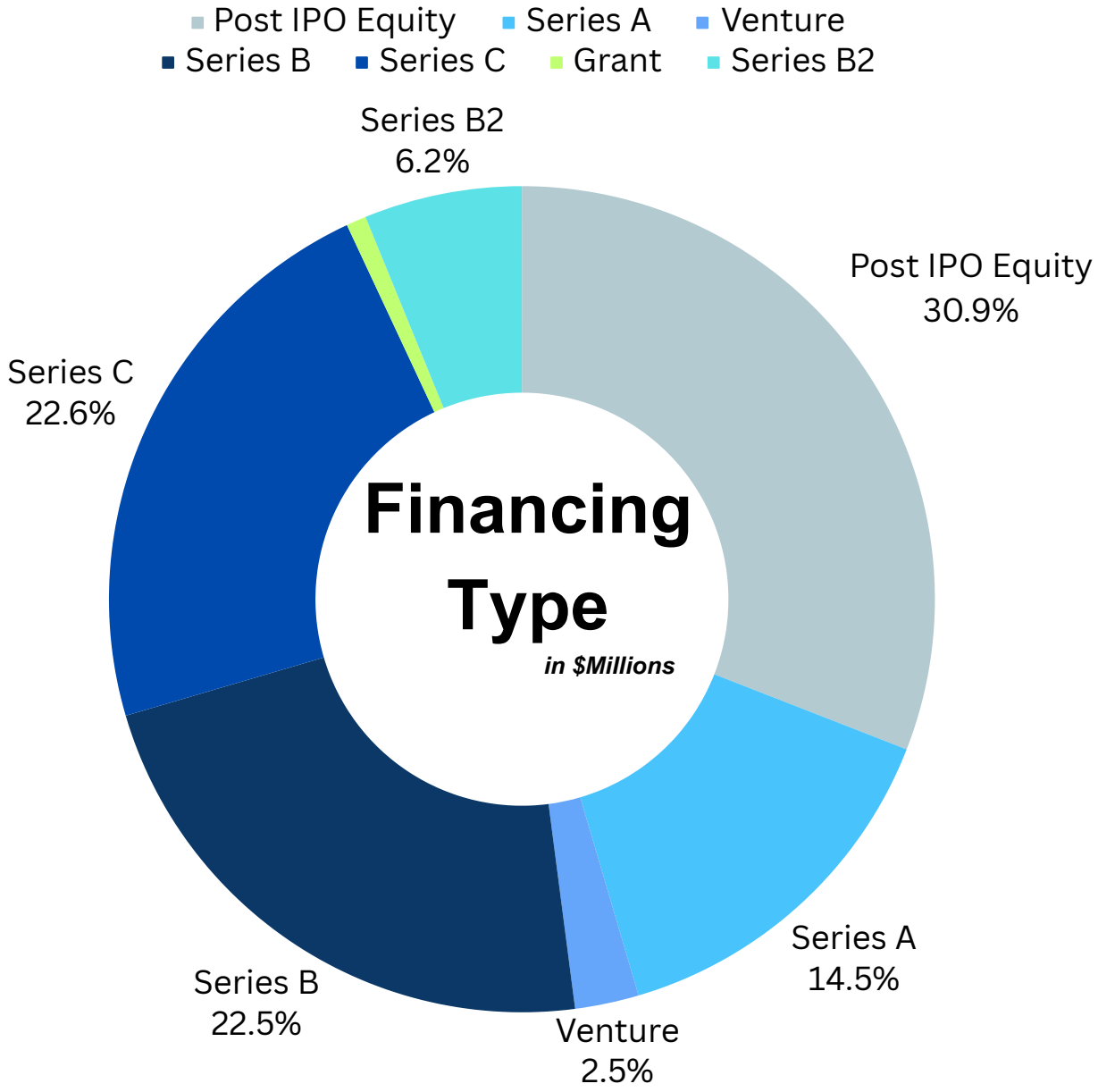
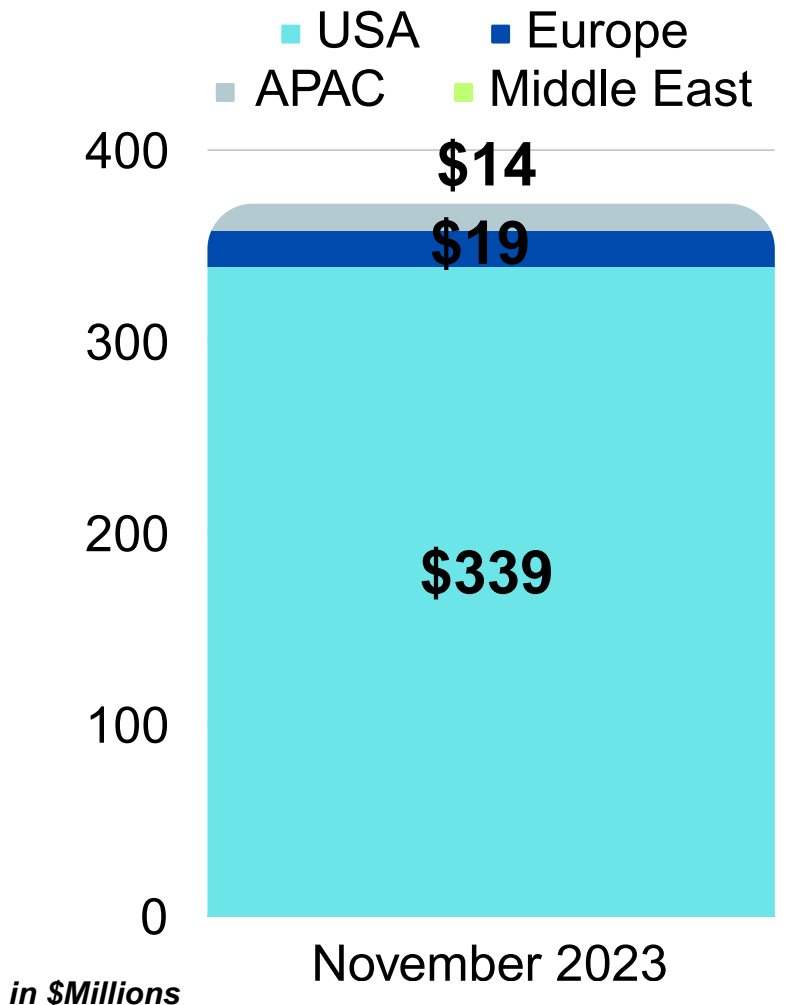




# TOOLS & DIAGNOSTICS

In the Life Science ecosystem, Tools and Diagnostics play a crucial role. In November 2023, the combined efforts of these two segments achieved a significant milestone and secured a noteworthy **\$372 million** (USD) in funding through **19 deals**.

## Regional Breakdown



## Top Financings

### Myriad Genetics - \$110M - Public Offering

Genetic testing and precision medicine company based in Salt Lake City, Utah closed \$110M Public Offering, earlier in the week the company reported third-quarter revenue growth of 23 percent driven by particularly strong sales for its hereditary cancer and prenatal tests. It ended the quarter with \$76 million in cash and cash equivalents and \$10.3 million in marketable investment securities. [Story](#)

### Cytovale - \$84M - Series C

Cytovale®, a medical diagnostics company, has raised \$84 million in Series C funding led by Norwest Venture Partners, with participation from Sands Capital and Global Health Investment Corporation. The funding will be used to expand the reach of its FDA-cleared rapid sepsis diagnosis test, IntelliSep®, addressing the leading cause of death in U.S. hospitals. [Story](#)

### Universal UX - \$70M - Series B

The biotech firm committed to making cancer a curable disease, has revealed a strategic partnership with Quest Diagnostics, the foremost provider of diagnostic information services in the nation. The collaboration aims to enhance colorectal cancer screening in the US. Additionally, UDX has successfully closed the initial round of its Series B financing, securing approximately \$70 million from investors. [Story](#)

### Stellaromics - \$100M - IPO

a leader in spatial multi-omics technology has raised \$25 million in a Series A round. The funding, featuring Plaisance Capital Management and a Silicon Valley family office, will support the development of advanced spatial technology for novel drug treatments in areas like autoimmune diseases, cancer, neuropsychiatric disorders, and infectious diseases. [Story](#)

### Genome Insight - \$23M - Series B2

A precision healthcare solutions company specializing in whole-genome technology for precise cancer and rare disease diagnosis and personalized treatment, has successfully closed a \$23 million Series B-2 funding round. Samsung Venture Investment Corporation, Asan Foundation, SCL Group, and Ignite Innovation participated in this round, alongside existing investors. This funding will bolster Genome Insight's efforts to integrate whole-genome precision diagnostics into routine clinical care. [Story](#)



## Elucid - \$80M - Series C

A leading medical technology company providing physicians with AI-powered imaging analysis software to assess cardiovascular disease, today announced it has raised \$80 million in Series C funding. The round was led by Elevage Medical Technologies, With this funding, Elucid is poised to capitalize on the past year's momentum and expand its commercialization efforts to provide physicians and patients with critical information to combat heart disease. This round brings the company's total funding to \$121 million since inception. [Story](#)

## Vivodyne - \$38M - Seed

Vivodyne is a drug discovery company that uses clinically predictive AI to help identify therapeutic targets and predict a patient's response to a drug by testing it on lab-grown human organ tissues. Utilizing robotic automation, the company can dose, cultivate and analyze more than 10,000 individual tissues at a time, creating a vast number of human datasets for AI training. \$38 million seed funding round led by Khosla Ventures. and included CS Ventures, Kairos Ventures, Bison Ventures and MBX Capital. [Story](#)

## CDMOS

\$260M (6% of total) across 2 Deals

## ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

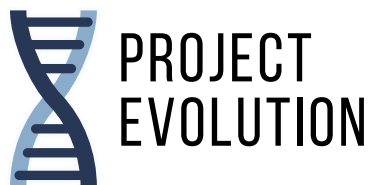
\$173M (4% of total) across 6 Deals

## Myriad Genetics - \$110M - Public Offering

Viva Biotech (01873.HK), a Hong Kong-based provider of services ranging from early-stage structure-based drug R&D to commercial drug delivery, raised approx US\$210M in funding. The round saw participation from Temasek, Highlight Capital (HLC), and True Light. Following this transaction, the Viva Biotech Holdings group obtained financing of nearly US\$150m through the transfer of approximately 24.21% equity in its CRO business entity, Viva Biotech (Shanghai) Limited. Before, the publicly listed company at the group level had already secured approximately US\$ 60m in convertible bond financing, which will be automatically converted into shares at the price of 2.0 HKD/share on the delivery date. [Story](#)

## AmplifyBio - \$50M - Venture

There is little known about the company's most recent financing, but following it being posted on CrunchBase the company announced the launch of its . The Amplify Manufacturing Enablement Center (AMEC), located 30 minutes from their West Jefferson headquarters in New Albany, Ohio, will comprise individual manufacturing suites, central laboratories, and office spaces available to clients in varied contract models. The staffing options range from a hoteling lease of the GMP space, where you bring your manufacturing team, to a highly collaborative and adaptable version of a traditional CDMO relationship. Between those options is a hybrid staffing model that allows clients to have their researchers on-site and hands-on in their process and product development, with the partnership of AmplifyBio technicians and expertise. [Story](#)



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