



Q3 Practical Cure For-Profit Portfolio Update

2026

A quarterly review of the research progress and financial performance of forty-four companies working toward at least one aspect of a Practical Cure.

Introduction

Welcome to the Q3 update of JDCA's Practical Cure Portfolio, a collection of forty-four tracked companies that are developing one or more aspects of a Practical Cure for type 1 diabetes (T1D). This update will focus on changes to the portfolio during Q3 (from July 1st to September 30th).

It will address:

- I. Pathways and Progress: Stage of Development Status**
- II. Q3 2026 Stock Performance Highlights**
- III. Public Company Highlights**
- IV. Private Company Highlights**
- V. Q3 T1D Committed Milestones: Achieved vs. Missed**
- VI. Upcoming Milestones**

We hope that this report provides the T1D community, donors, advocates, and interested investors with a clear-eyed view of the for-profit research landscape. The portfolio reflects the broader ecosystem of companies working in T1D and includes large-cap, small-cap, public, and private entities. See appendix A for an infographic of portfolio companies by market capitalization and public/private status.

The portfolio also reflects different approaches to supporting T1D research, which are summarized in the Pathways and Progress section of the report.

We evaluated each company and organized them into one of six strategic segments (see appendix B). This segmentation clarifies the range of roles companies occupy within the T1D research ecosystem and illustrates where organizations compete. The strategic segmentation results from a multifactor analysis whose criteria are presented in appendix C.

This report is meant to showcase companies working toward T1D solutions and does not intend to be an investor letter. The goal here is to provide readers with an understanding of the different types of companies working toward a Practical Cure for T1D and the approaches taken.



I. Pathways and Progress: Stage of Development Status

All for-profit companies in the Practical Cure Portfolio are developing one or more components of a solution to end the burden of T1D. Twenty-five of the forty-four companies are validating their products in clinical trials, while those remaining are in the latter stages of preclinical testing (see figure 1).

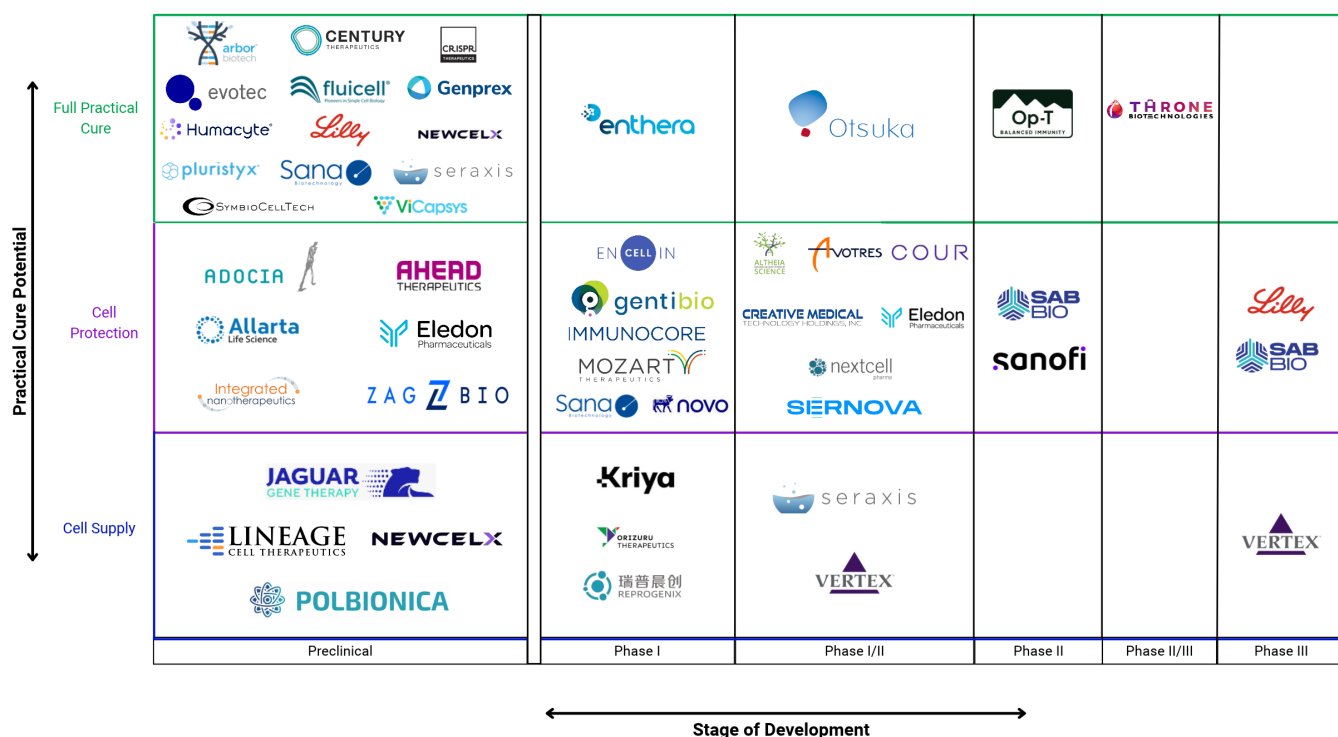
Each company's approach is unique, but all aim to deliver at least one of three solutions:

- **Supply:** Sustainably regenerate or replace insulin-producing cells lost in the autoimmune attack. Nine companies are focused on this research.
- **Protection:** Protect beta cells by stopping, retraining, suppressing, or evading the autoimmune responses that destroy them. Twenty-one companies are focused on this research.
- **Full Practical Cure:** Combination methods delivering both supply and protection solutions; and/or another novel strategy for insulin independence. Eighteen companies focus on this research.

Some companies are exploring protection solutions targeting earlier stages of the disease, but indicate their therapies could become essential cure components for long-standing T1D in the future. Figure 1 has been updated to reflect companies with more than one project in different stages of development.



Figure 1. T1D Practical Cure Landscape by Development Stage and Cure Pathway



Changes in Stage of Development

Since the last portfolio review published in July, three companies have progressed their T1D cure research projects into a more advanced development stage, while a fourth receded.

SAB Biotherapeutics progressed SAB-142 from phase II to phase III by initiating a new study testing in recently diagnosed and 'honeymoon' T1D populations. The study will examine if SAB-142 can preserve beta cell function, which they hope to later test in fully established T1D.

Kriya Therapeutics moved KRIYA.288 (formerly KRIYA-839) into two phase I/II clinical trials. KRIYA.288 is a gene therapy that enables skeletal muscles to sense glucose and secrete insulin, and will be administered to established T1D patients.

Vertex Pharmaceuticals advanced new pipeline asset, VX-017, into phase I/II clinical testing. VX-017 is a stem cell-derived beta cell line from a universal blood type. This is distinct from VX-880 (Zimislecel), which restricts application to patients with type A/AB blood.

CRISPR Therapeutics backtracked down the pipeline from phase I/II clinical trials to preclinical testing. After terminating CTX211, previously in human trials, the company restarted its T1D pipeline with preclinical CTX213, gene-edited islets without the encapsulation device used in the prior iteration.



II. Q3 2026 Stock Performance Highlights

The Practical Cure Portfolio's twenty-one public companies underperformed the biotechnology sector and the broader stock market in the third quarter of 2026.

The portfolio had a -19% total return in the third quarter of 2026, compared to +11% for the sector benchmark ('IBB' - iShares Biotechnology ETF) and +2% for the S&P 500.

The IBB had a strong third quarter, driven primarily by notable gains in its large-cap companies. Amgen, Gilead, Moderna, and Natera all posted material gains. By comparison, the Practical Cure Portfolio, which had outperformed the IBB through the 1st half of the year, posted a weak quarter. As of 9/30/26, all but four names in the Practical Cure Portfolio were trading below their 50-day and 100-day moving averages. Figure 2 and figure 3 illustrate QTD and YTD total returns by company.

The Practical Cure Portfolio includes both emerging start-up firms and well-established companies that are pursuing creative, cutting-edge ideas for a T1D solution. Despite expected divergence from a large, diversified benchmark, the Practical Cure Portfolio accomplishes its goal of supporting companies that are committed to delivering one or more components of a Practical Cure.

The following section of this report provides T1D news and financial updates by company. Financial summary details of the portfolio companies are in appendix D.

Figure 2. Public Companies - Q3 Total Return

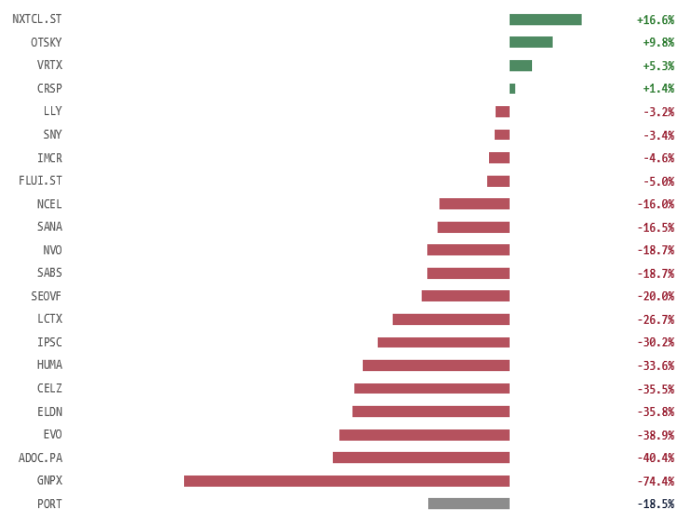
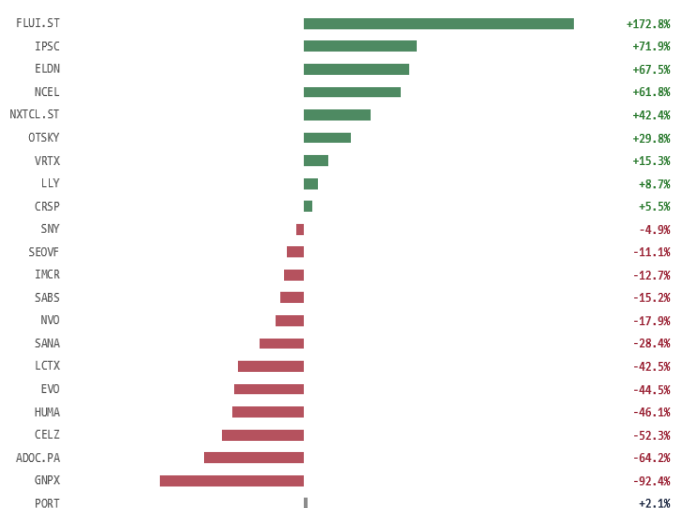


Figure 3. Public Companies - YTD Total Return



III. Public Company Highlights

This section conveys news highlights shared by public companies during the quarter, depicted in figure 4. Companies that did not share key T1D news are not included.

Figure 4. Q3 Public Company T1D Highlights

Company	Q3 Stock Change	YTD Stock Change	T1D Research News	Financial News
 ADOCIA	-40.4%	-64.2%	Presented preclinical data at EASD with early results that emphasized GMP-compliant materials.	Revenue dropped to €43K in the first six months of 2026, down from €1M over the same period of 2025.
 CENTURY THERAPEUTICS	-30.2%	+71.9%	(8/12/26): Century completed a pre-IND meeting with the US FDA for CNTY-813, including research design and manufacturing strategy.	Strong cash position reported: \$197M, largely due to an 'oversubscribed' private placement earlier in the year.
 CREATIVE MEDICAL TECHNOLOGY HOLDINGS, INC.	-35.5%	-52.3%	(8/6/26): Received US patent office notice of allowance for its MyeloCelz exosome platform, an additional T1D program.	No material financial news.
 Eledon Pharmaceuticals	-35.8%	+67.5%	(9/3/26): IND submitted to FDA for company-sponsored trial of tegoprubart in cadaveric cell transplant.	- Phase III kidney trial "contingent on" financing. - Net loss of \$32M in Q2; cash fell to \$89M, down from \$133M on Dec 31st. - Substantial 'put' activity noted in financial press.
 evotec	-38.9%	-44.5%	(9/30/26): Chief Scientific Officer Dr. Cord Dohrmann stepped down. The search for a replacement is ongoing.	(7/13/26): Full year revenue guidance dropped from €700M – €780M to €570M – €610M. - Sustained strong liquidity with €466M.
 Genprex®	-74.4%	-92.4%	(8/18/26): Genprex entered an agreement with an undisclosed US CDMO to scale manufacturing.	(7/16/26): Executed a 1-for-22 reverse stock split to meet a NASDAQ price deficiency notice.
IMMUNOCORE	-4.6%	-12.7%	(8/6/26): The first clinical trial sites for T1D therapy IMC-S118AI opened.	(8/6/26): Strong liquidity with \$880M of cash and securities against operating losses ranging from \$45.4M to \$70.5M over the last three years.

Figure 4. Q3 Public Company T1D Highlights - Continuation

Company	Q3 Stock Change	YTD Stock Change	T1D Research News	Financial News
	-18.7%	-15.2%	(8/30/26): Presented phase I data at EASD, demonstrating early signs of efficacy.	(7/7/26): Announced a Breakthrough T1D grant for SAB-142. (8/6/26): Q2 Net loss of \$22.5M, versus \$10.1M in 2025, with \$208M in cash and investments at 6/30/26. Runway extends through 2028.
	-16.5%	-28.4%	(7/10/26): <i>NEJM</i> follow-on publication highlighting data on UP421.	(8/10/26): H1 non-GAAP net loss of \$78.5M. \$160.5M of cash liquidity is expected to support operations into mid-2027.
	-20.0%	-11.1%	(9/8/26): Announced merger with Seraxis to become BetaNova Biotherapeutics, effective Nov. 2026.	(10/5/26): Seraxis closed \$11.2M financing related to the merger.
	+5.3%	+15.3%	(8/3/26): Announced IND application for VX-017 cleared by the FDA.	(8/3/26): Revenue of \$3.33B (+12%), with full-year guidance raised from \$13.1B to \$13.2B. (9/1/26): Completed \$10B acquisition of Crinetics, a company specializing in rare endocrine disorders.

IV. Private Company Highlights

This section depicts news highlights shared by private companies during the quarter. Companies that did not share key T1D news are not included.

Figure 5. Q3 Private Company T1D Highlights

Company	Research News	Financial News
	• (7/2/26): Began recruitment for phase I/II trial of Immunostem in Italy.	• No material financial news.
	• (7/8/26): Interim results shared for T1D product, displaying non-fibrotic engraftment in all seven phase I trial participants.	• No material financial news.
	• (8/27/26): Published research article demonstrating an approach to protect allogeneic cells from immune rejection.	• No material financial news.
	• (8/28/26): Detailed mixed results at EASD for phase I trial testing MTX-101.	• No material financial news.
	• (7/16/26): Japanese Patent Office issued a Notice of Allowance for Patent covering synthetic mRNA constructs.	• No material financial news.
	• (9/8/26): Announced merger with Sernova to form BetaNova Biotherapeutics.	• (9/8/26): \$10M convertible note financing from insiders of both companies. The merger is expected to close Nov. 2026, with a Nasdaq listing planned for Q1 2027.

V. Q3 T1D Committed Milestones: Achieved vs. Missed

This section reviews the achievement of T1D research milestones the portfolio companies committed to delivering during Q3. The milestones included here are essential external deliverables, such as initiating or completing a trial, submitting an IND, sharing interim data, and publishing preclinical results.

Only companies with stated Q3 deliverables are shown here.

Figure 6. Q3 Committed Quarterly Milestones

Company	Product	Milestone from 1H Report	Accomplished?	Comment
 ALTHEIA towards curative medicine SCIENCE	Immunostem	Initiate phase I patient dosing.	 Yes	One patient dosed, still recruiting.
IMMUNOCORE	IMC-S118AI	Initiate phase I patient dosing.	 Yes	Stated on 8/26 that they expected to dose first patients “in the coming weeks.”
 nextcell pharma	NXTCL-T1D (formerly ‘ProTrans’)	Release 1 year trial follow up data.	 No	No news.

VI. Upcoming Milestones

Figure 7. Milestones Committed for Q4 of 2026

Q4 2026		10 Milestones
Century Therapeutics <i>CNTY-813</i> Submit IND	Eledon Pharmaceuticals <i>Tegoprubart</i> Start company-sponsored trial	Encellin <i>ENC-201-CED</i> Complete phase I trial
Op-T LLC <i>OPT101</i> Complete phase II recruitment	Orizuru Therapeutics <i>OZTx-410</i> Publish interim phase I results	Reprogenix <i>RGB-5088</i> Present phase I data
SAB Biotherapeutics <i>SAB-142</i> Complete phase II recruitment	Sana Biotechnology <i>SC451</i> Submit IND, Start phase I trial	Seraxis <i>SR-02</i> Start phase I/II recruitment
Zag Bio <i>Zag-101</i> Start phase I clinical trial		

Appendix A: Portfolio Snapshot by Market Capitalization

Large Cap (5)	Mid-Cap (1)	Small Cap (3)	Micro Cap (12)	Private (23)		
    		  	      	    	           	          

Capitalization Key

Large Cap: > \$10B

Mid-Cap: \$2B – \$10B

Small-Cap: \$300M – \$2B

Micro-Cap: <\$300M

Appendix B : T1D Cure Landscape Segmentation

T1D CURE LANDSCAPE



A Strategic View of the Companies Shaping a Practical Cure



CORE PRACTICAL CURE LEADERS

Defining the field with integrated science, strong development, and high T1D impact potential.

- CRISPR Therapeutics
- Sana Biotechnology
- Vertex Pharmaceuticals



HIGH-IMPACT CHALLENGERS

Late-stage or differentiated companies with meaningful upside and inflection potential.

- Altheia Science
- Avotres
- Eledon Pharmaceuticals
- Immunocore Holdings
- Otsuka Holdings
- Reprogenix
- SAB Biotherapeutics
- Sanofi
- Throne Biotechnologies



MISSION-ALIGNED SPECIALISTS

Deeply focused on T1D and cure-oriented solutions, with commitment and specific expertise.

- Ahead Therapeutics
- Century Therapeutics
- Encellin
- Entera
- GentiBio
- Humacyte Global
- Mozart Therapeutics
- NextCell Pharma
- Orizuru Therapeutics
- Seraxis
- Sernova Biotherapeutics
- SymbioCellTech
- NewcelX



ENABLING INFRASTRUCTURE & PLATFORM PROVIDERS

Essential technologies, manufacturing, and enabling solutions that power cures across the ecosystem.

- Arbor Biotechnologies
- Fluicell
- Kriya Therapeutics
- Lineage Cell Therapeutics
- Pluristyx
- Polbionica S/A



STRATEGIC SCALE PLAYERS

Large-cap companies with the capital, manufacturing, and commercial power to industrialize and scale solutions.

- Eli Lilly
- Novo Nordisk
- Otsuka Holdings
- Sanofi



CATALYST-DEPENDENT WATCHLIST

Early-stage or less validated companies that could move meaningfully with the right catalysts.

- Adocia
- Allarta Life Science
- Cour Pharmaceuticals
- Creative Medical Technology Holdings
- Evotec
- Genprex
- Integrated Nanotherapeutics
- Jaguar Gene Therapy
- OP-T LLC
- ViCapsys
- Zag Bio

Appendix C: T1D Impact Scoring Rubric

Unique / Novel 'First Prover'	3x weight
Point System (3) First meaningful success of its kind in clinical trials; on the path to insulin independence (2) N/A (1) All else	
Stage of Development	3x weight
Point System (3) Phase III (2) Phase I, II (1) Preclinical, animal model	
Complete Practical Cure Solution	2x weight
Point System (3) All requirements of a Practical Cure are met (2) One Practical Cure component (e.g., supply or protection) (1) No Practical Cure component; speculative development	
T1D Commitment	2x weight
Point System (3) T1D is the company's sole focus (2) T1D is 50%+ of research expenses/pipeline; long history of T1D work (1) T1D is <50% of research expense or pipeline	
Ability to Self-Sustain	1x weight
Point System (3) Company generates internal capital; has access capital markets (2) Present resources are sufficient for the medium term (1) Capital is required over the next 12 months	
Route-to-Market Capability	1x weight
Point System (3) Company has an established sales and manufacturing capability (2) Some sales or manufacturing capability; agreements in place (1) No sales force or manufacturing capability	

Appendix D: Public Company Financial Ratios / Key Information

Valuation:																		Liquidity:				Leverage:	
Ticker	Company Name	9/30/26 Stock Price	Shares Outstanding	Market Cap	Total Return YTD 9/30/26	P/E	P/B	P/S	TTM Free Cash Flow	TTM R&D Spend	Cash & Equiv.	Short Term Securities	Available Credit Facility	Total Liquidity	Net Debt	Debt/ EBIT-DA	Debt/ CFO						
ADOC.PA	ADOCIA	€ 2.47	20	44	(64.2)	NA	12.7	119.5	(5)	11	8	0	0	8	(0)	NA	NA						
IPSC	Century Therapeutics, Inc.	\$1.71	181	310	71.9	NA	1.3	NA	(88)	79	50	70	0	120	(15)	NA	NA						
CELZ	Creative Medical Technology Holdings, Inc.	\$0.93	7	6	(52.3)	NA	0.7	2,053.8	(6)	2	9	0	0	9	(9)	NA	NA						
CRSP	CRISPR Therapeutics AG	\$55.32	97	5,349	5.5	NA	3.1	392.0	(374)	281	291	2,073	0	2,364	474	NA	NA						
ELDN	Eledon Pharmaceuticals, Inc.	\$2.53	81	206	67.5	NA	6.2	NA	(74)	68	7	82	0	89	(7)	NA	NA						
ILLY	Eli Lilly and Company	\$1,157.08	892	1,031,816	8.7	38.8	30.5	13.0	13,560	14,596	8,950	60	10,100	19,110	45,958	1.1	1.6						
EVO	Evotec SE	\$1.71	355	608	(44.5)	NA	1.0	1.0	(149)	33	305	118	0	424	58	NA	NA						
FLU1.ST	Fluicell AB	29.30 kr	1	4	172.3	14.4	23.7	20.4	(1)	NA	0	0	0	0	0	0.6	NA						
GNPX	Genprex, Inc.	\$2.92	1	2	(92.4)	0.1	0.2	NA	(16)	10	15	0	0	15	(15)	NA	NA						
HUMA	Humacyte, Inc.	\$0.52	278	144	(46.1)	NA	4.6	67.8	(98)	69	80	0	0	80	(15)	NA	NA						
IMCR	Immunocore Holdings plc	\$30.29	51	1,560	(12.7)	NA	3.7	3.6	(41)	284	485	395	0	880	(52)	NA	NA						
LCTX	Lineage Cell Therapeutics, Inc.	\$0.96	253	243	(42.5)	NA	4.1	18.6	(24)	21	37	13	0	51	(36)	NA	NA						
NCEL	NewcelX Ltd.	\$3.08	6	18	61.8	NA	2.9	NA	(5)	1	1	0	0	1	(0)	NA	NA						
NXTCL.ST	NextCell Pharma AB	1.12 kr	111	13	41.1	NA	25.7	107.4	(4)	NA	2	NA	0	2	(2)	NA	NA						
NVO	Novo Nordisk A/S	\$37.91	3,344	126,773	(17.9)	9.3	3.8	2.5	7,639	9,075	6,796	76	3,728	10,600	14,612	0.5	0.7						
OTSKY	Otsuka Holdings Co. Ltd.	\$36.76	1,051	38,627	29.8	14.7	1.9	2.3	9,623	2,345	3,111	224	NA	3,335	(1,487)	NA	NA						
SABS	SAB Biotherapeutics, Inc.	\$3.17	91	288	(15.2)	13.2	1.3	NA	(57)	49	8	94	0	103	(4)	NA	NA						
SANA	Sana Biotechnology, Inc.	\$2.91	299	873	(28.4)	NA	5.6	NA	(135)	174	57	103	0	160	2	NA	NA						
SNY	Sanofi	\$41.23	2,396	98,793	(4.9)	21.8	1.6	2.4	10,153	6,952	5,561	NA	6,874	12,435	14,886	1.4	1.5						
SEOVF	Sernova Biotherapeutics Inc.	\$0.08	378	30	(11.1)	NA	NA	NA	(3)	1	0	0	0	0	2	NA	NA						
VRTX	Vertex Pharmaceuticals Incorporated	\$522.81	253	132,512	15.3	30.5	6.5	10.5	3,796	4,040	6,144	1,709	500	8,352	(4,166)	NA	NA						

Numbers in \$ millions, except ratios and per share data
Note, contingent liabilities are not included in debt
Financial Data as of June 2026