Metabolic

Effect-Size Predictions

Using Data-free Virtual Clinical Trials

100% accuracy across 106 Metabolic trials

Overall: 96% across all 604 validated trials

BioinvestGPT

Evidence Dossier

April 8, 2026

Platform Credentials at a Glance

100% **Prospective Prediction Accuracy**

Across 106 validated trials (of 604 total) | Two-sided p < 0.0001

EA **100% Ex-Ante**
Every prediction certified and sent to clients before trial results were known

RG **Industrial Rigor**
Validated against real FDA/EMA clinical readouts

EP **Empirical Certainty**
Statistically significant with two-sided p < 0.0001

Data-Free	White-Box	Head-to-Head	106 of 604
Zero-Patient Input	Root Cause Explained	vs. Standard of Care	Two-Sided p < 0.0001 ● LIVE

STRATEGIC VALUE PILLARS

Zero-Data Advantage

NO DATA SHARING
Predictions require **zero proprietary patient data**, eliminating **IP liability** and privacy friction.

2M VIRTUAL PATIENTS
Pre-built, **clinically validated** virtual cohorts delivering rigorous **effect-size predictions** across all major indications.

Eliminating Blind Spots

SURROGATE DETECTION
Simultaneously predicts early surrogates (**ORR/PFS**) and final efficacy (**OS**) to expose **hidden discordances**.

FUTURE-PROOFING
Benchmarks against **competitor** pipeline drugs to ensure **superiority at launch**, not just at trial start.

Identify Biological Root Cause

BEYOND BLACK-BOX
Every prediction is backed by **biological root cause identification**, not opaque probability scores.

ACTIONABLE DRIVERS
Pinpoints specific **failure/success drivers: target selection, drug design, delivery method, or patient stratification.**

Effect-Size Portfolio Gating Spectrum

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106 of 604 validated trials

HAZARD RATIO GO/NO-GO THRESHOLD SPECTRUM

GO	**Strongly Superior**	HR < 0.3	*Transformative clinical benefit — megablockbuster potential*
GO	**Moderately Superior**	HR 0.3–0.6	*Commercially sufficient — blockbuster potential*
	HR = 0.6 THRESHOLD		
NO-GO	**Weakly Superior**	HR 0.6–0.8	*Marginal benefit — likely insufficient for market differentiation*
NO-GO	**Non-Superior**	HR 0.8–1.0	*No meaningful advantage over current standard of care*
NO-GO	**Inferior to SoC**	HR 1.0–1.2	*Patient harm risk — trial likely to fail primary endpoint*

Configurable Threshold

Clients may select any HR value as the GO/NO-GO boundary based on their commercial case. We use HR = 0.6 as the default threshold for effect-size GO/NO-GO prospective predictions. GO = commercially sufficient effect size; NO-GO = commercially insufficient. See Trial Detail pages for each ex-ante validated prediction.

EX-ANTE PREDICTION ACCURACY

SCALE

78 Drug Assets

74.5% First-in-Class ratio

COVERAGE

54 Sponsors

Public biopharma footprint

LEAD TIME

202 Days

Average advance prediction window

Full dataset: 96.0% (604 trials) | Filtered: 100.0% (106 trials) | Delta: +4.0pp

Predictive Performance Intelligence

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106 prospectively validated GO/NO-GO predictions

++RELIABILITY GO/NO-GO correct rate

Accuracy

100%

106/106 validated prospective predictions
`(TP + TN) / (TP + TN + FP + FN)`

100% of BioinvestGPT GO/NO-GO predictions are correct for any-stage FIC/BIC assets, **nearly 10 times higher** than the industry's current best level (5–10%). BioinvestGPT prospectively predicts both drug successes and failures with **near-perfect reliability**.

++REVENUE GO correct rate

Positive Predictive Value (PPV)

100%

56/56 GO predictions validated
`TP / (TP + FP)`

100% of BioinvestGPT GO predictions are prospectively independently validated as commercially sufficient drugs. A GO signal identifies **blockbuster FIC/BIC assets** with high reliability, enabling **revenue-maximizing** portfolio predictions.

– –IMPAIRMENT NO-GO correct rate

Negative Predictive Value (NPV)

100%

50/50 NO-GO predictions validated
`TN / (TN + FN)`

100% of BioinvestGPT NO-GO predictions are prospectively independently validated, signaling **cost savings** from lackluster drugs. A NO-GO signal reliably identifies commercially insufficient FIC/BIC assets before Phase III spend, **preventing impairment write-downs**.

++RELIABILITY GO/NO-GO bias-free rate

F1-Score

100%

Harmonic mean of Precision and Recall
`2×TP / (2×TP + FP + FN)`

Both GO and NO-GO predictions are almost **equally likely to be correct**, even though **blockbuster drugs are much rarer**. The model does not simply guess "failure" — it **makes the right call on both sides**.

++RELIABILITY GO/NO-GO reliability rate

Diagnostic Odds Ratio (DOR)

971×

971× more likely correct than incorrect
`(TP × TN) / (FP × FN)`

BioinvestGPT GO/NO-GO predictions is **971 times more likely** to **correctly identify blockbuster assets** (true positives) and **rule out commercially insufficient assets** (true negatives), compared with the chance of making an incorrect prediction.

* The F1-Score and DOR for current drug GO/NO-GO prospective prediction approach is estimated based on the industry 10% nomination rate (boehringer-ingelheim.com/science-innovation/human-health-innovation/drug-discovery).

Therapeutic Area Breakdown

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Exhibit 1

Prediction accuracy remains consistently high across all therapeutic domains

BioinvestGPT's validation dataset spans 1 major therapeutic area, demonstrating that predictive accuracy is not an artifact of concentration in any single domain.

1. Source: BioinvestGPT validated prediction database. Classification based on clinical readout outcomes.
2. Therapeutic area mapping uses standardized groupings across 1 domain. Accuracy = (TP + TN) / Total.

Sponsors Coverage Breakdown

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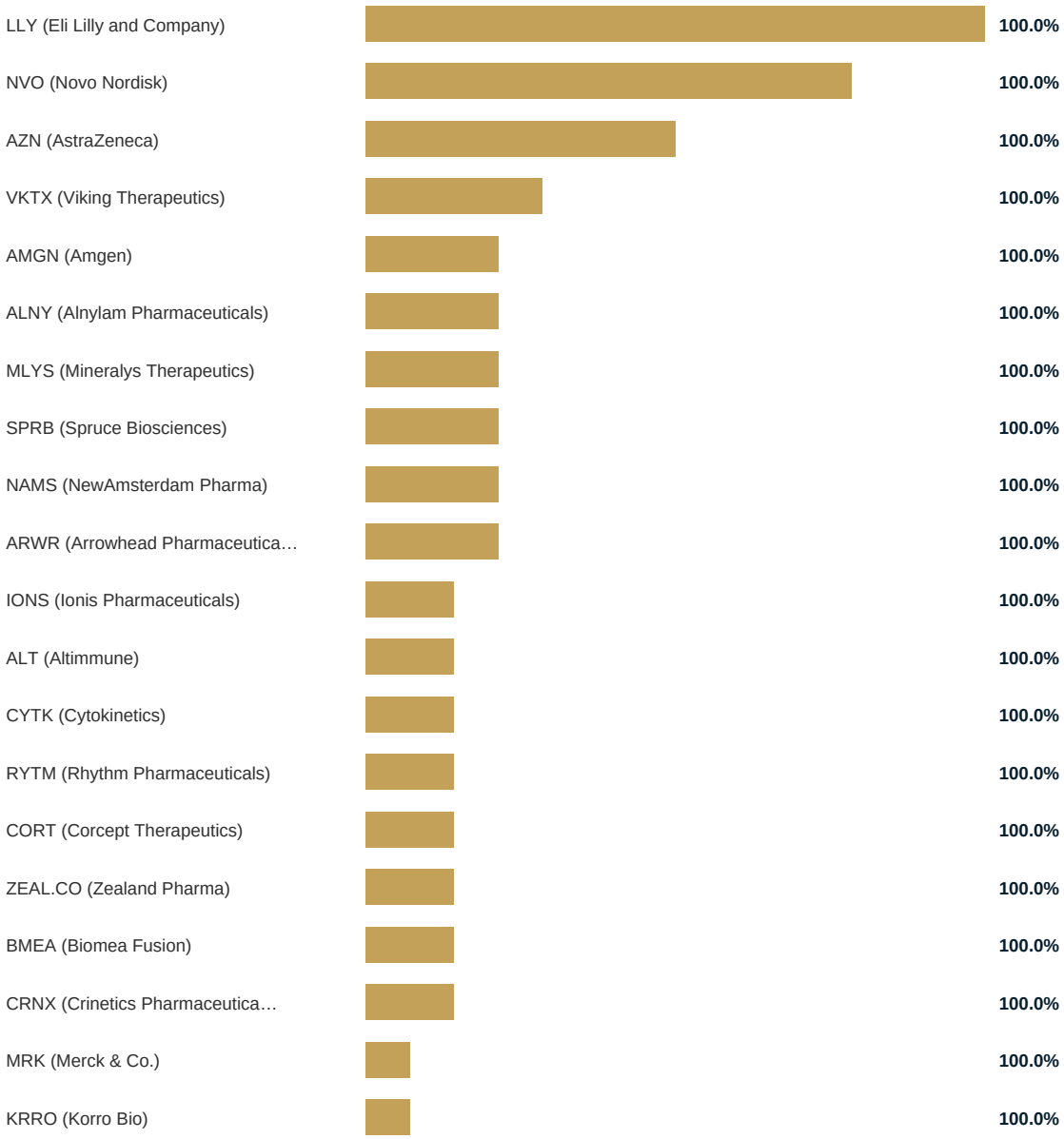
Exhibit 2

Validation spans 54 public biopharma sponsors across all market capitalizations

Coverage spans large-cap through small-cap sponsors, confirming model generalizability is not concentrated in any single company cohort.



Total unique sponsors: 54 | Average accuracy across top sponsors: 100.0%

1. Search sponsor name on data.bioinvestgpt.com to access the company-specific audited timestamped ex-ante predictions and readout validations.

Drug Innovation & Modality Coverage Breakdown

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Exhibit 3

Validated across 78 distinct drug assets spanning 8 modalities

DRUG CLASSIFICATION

FIRST-IN-CLASS

79

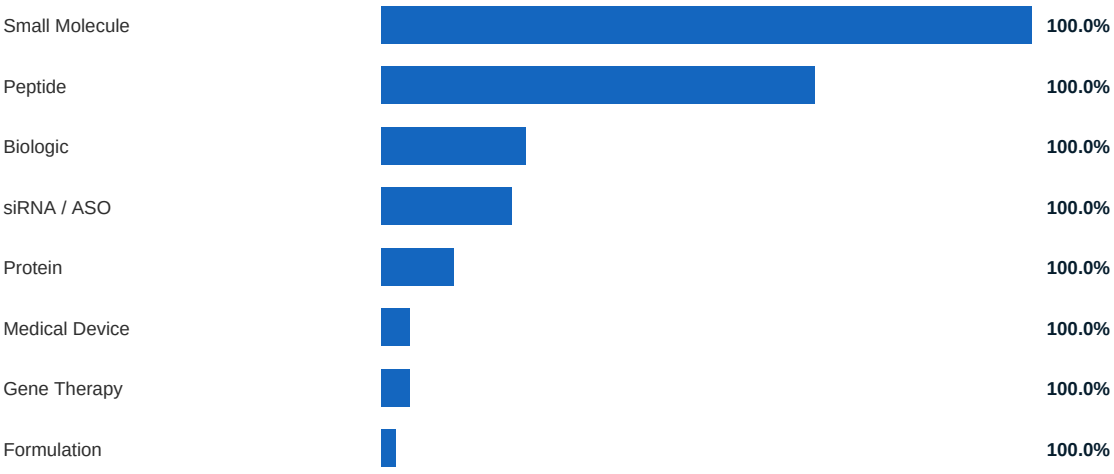
100.0% accuracy

BEST-IN-CLASS

27

100.0% accuracy

DRUG MODALITY DISTRIBUTION

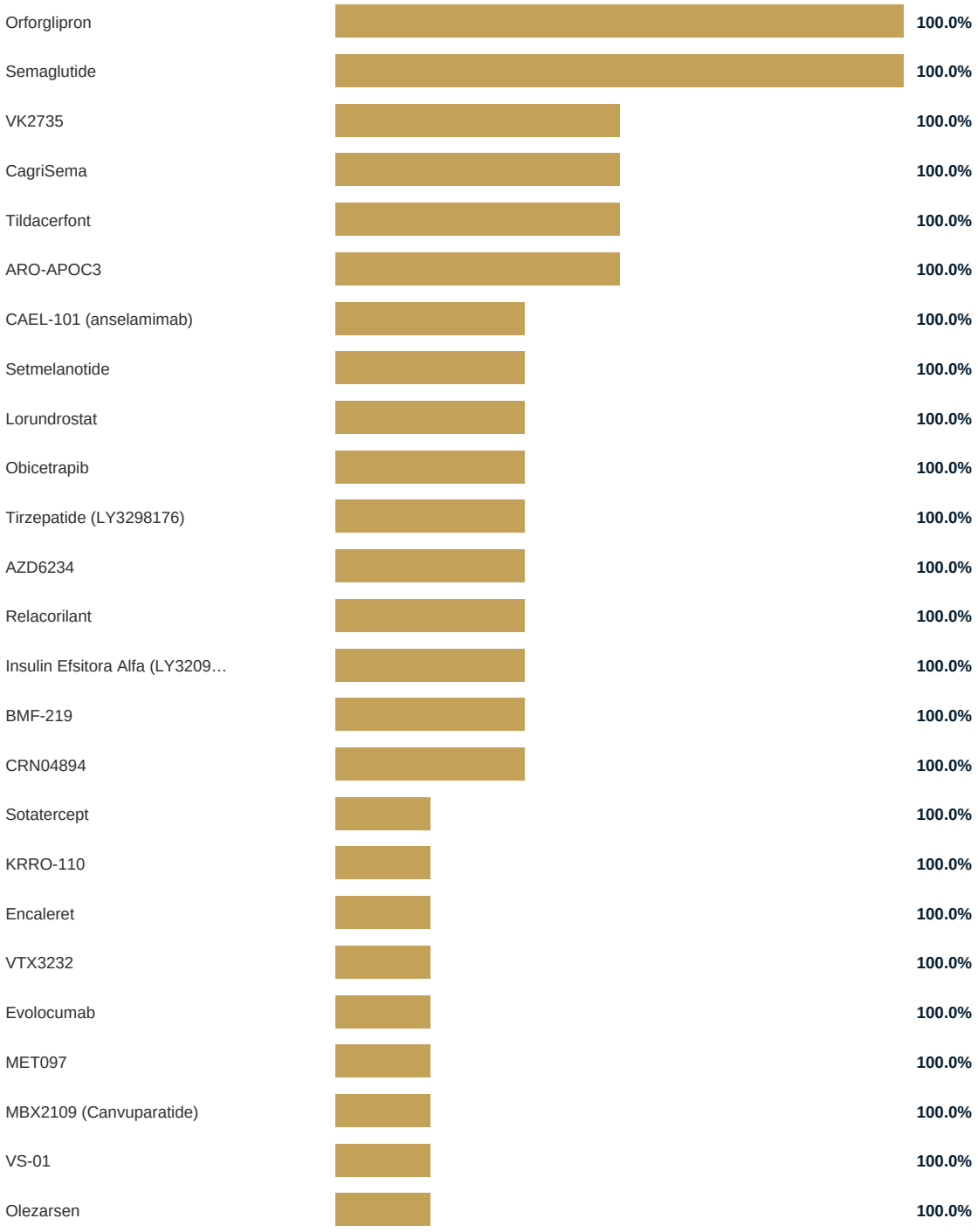


Drug Assets Coverage Breakdown

Metabolic

Exhibit 4

Validated across 78 distinct drug assets with consistently high prediction accuracy



Total unique drug assets: 78 | Average accuracy across top drugs: 100.0%

1. Search drug name on data.bioinvestgpt.com to access the drug-specific audited timestamped ex-ante predictions and readout validations.

Temporal Integrity: Prospective Proof

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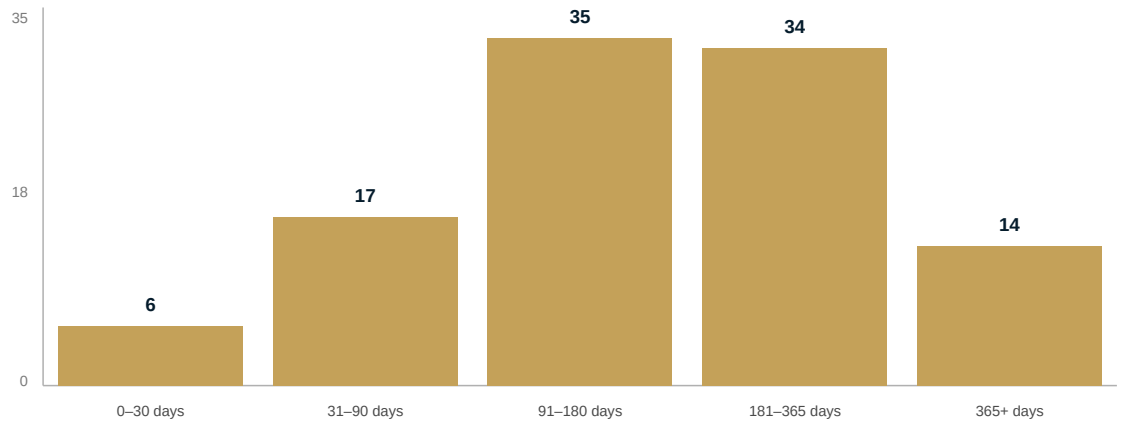
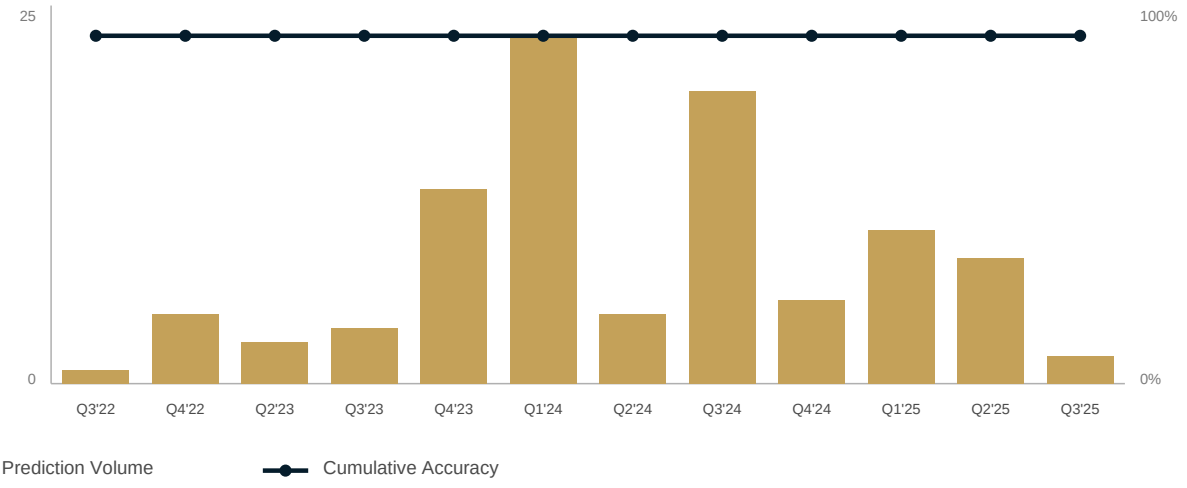
Exhibit 5

100% of predictions issued before clinical readout with median lead time of 202 days

LEAD TIME DISTRIBUTION



QUARTERLY PREDICTION VOLUME & CUMULATIVE ACCURACY



All 106 predictions were certified ex-ante, with an average lead time of 202 days before clinical readout. This temporal integrity is cryptographically verifiable and eliminates any possibility of post-hoc fitting.

Competitive Benchmark Analysis

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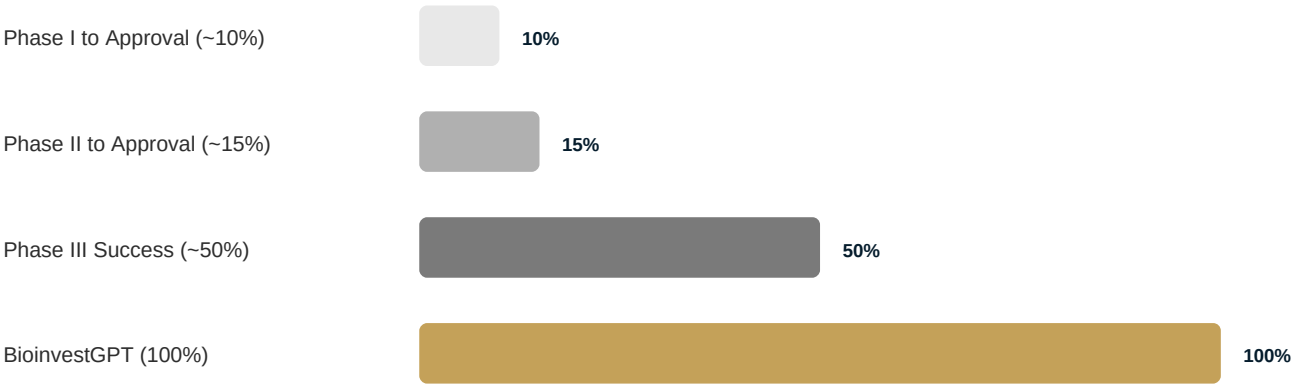
Exhibit 6

BioinvestGPT demonstrates multi-order-of-magnitude improvement over industry baselines

CLINICAL DEVELOPMENT SUCCESS RATES



QUANTITATIVE BENCHMARK

Metric	BioinvestGPT	Industry Avg	Context
Accuracy	100.0%	~10-15%	Phase I-to-approval historical rate
Precision (PPV)	100.0%	~11%	Avg drug approval probability
NPV	100.0%	~60%	Combined Phase I–III attrition detection
F1-Score	100.0%	12%	Based on industry 10% nomination rate
DOR	971.3x	0.06x	Based on industry 10% nomination rate
Lead Time	202 days	0 days	Post-hoc industry standard

Note: Industry success rates measure population-level probability of a drug advancing through clinical development phases. BioinvestGPT predicts phase-agnostic effect-size-based clinical benefit using HR = 0.6 as the GO/NO-GO threshold to classify commercially sufficient vs. insufficient drugs, with all predictions certified ex-ante. The comparison illustrates the magnitude of predictive alpha, not a direct methodological equivalence.

REDIRECTABLE R&D CAPITAL

$15.0B

50 of 50 NO-GO predictions validated × $300M avg trial cost

CAPTURED PORTFOLIO VALUE

$56.0B

56 of 56 GO predictions validated × $1B avg revenue

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
1957	**Sotatercept** **NCTID: NCT04945460** **Phase: Phase 2** **Class: First-In-Class** **Modality: fusion protein biologic** **MoA: ActRIIA/ACVR2A ligand trap** **Area: Cardiovascular Diseases** **Indication: combined post- and precapillary pulmonary hypertension (CpcPH) due to heart failure with preserved ejection fraction (HFpEF)** **Human Patients: 164** **Sponsor: Merck & Co. (MRK)**	Date: 1 Apr 2025 Quarter: Q2'25 Batch 14a Technical: partial FAILURE (statistically maybe significant yet very weak additive clinical benefit in PVR/6MWD/LVEF compared with placebo as an adjunctive therapy) Commercial: FAILURE (commercially insufficient additive clinical benefit in PVR/6MWD/LVEF inferior to semaglutide as an adjunctive therapy)	Readout: 18 Nov 2025 **Lead Time: 231 days in advance** Interpretation: sotatercept achieved statistical significance in PVR compared with placebo at week 24 (no detailed data and no p-value); yet sotatercept probably didn't achieve statistical significance in 6MWD (not mentioned; no detailed data and no p-value)	Correct Prediction Conclusion: statistically partially significant (weak efficacy in PVR but not 6MWD) and commercially probably insufficient Classification: **True Negative (TN)**
2023	**KRRO-110** **NCTID: NCT06677307** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: oligonucleotide** **MoA: LNP-encapsulated ADAR-dependent mRNA single-base modifier** **Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases** **Indication: Alpha-1 Antitrypsin Deficiency (AATD)** **Human Patients: 64** **Sponsor: Korro Bio (KRRO)**	Date: 14 May 2025 Quarter: Q3'25 Batch 8 Technical: SUCCESS (statistically significant clinical benefit in lung AAT/NE concentration compared with placebo) Commercial: FAILURE (commercially insufficient clinical benefit in FEV1 moderately inferior to WVE006)	Readout: 12 Nov 2025 **Lead Time: 182 days in advance** Interpretation: KRRO110 produced functional protein that hasn't reached the projected level; so further development has been discontinued for low efficacy	Correct Prediction Conclusion: statistically probably significant and commercially insufficient Classification: **True Negative (TN)**
1150	**Encaleret** **NCTID: NCT05680818** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: CaSR antagonist** **Area: Endocrine System Diseases** **Indication: Autosomal Dominant Hypocalcemia Type 1 (ADH1)** **Human Patients: 67** **Sponsor: BridgeBio Pharma (BBIO)**	Date: 26 Jan 2025 Quarter: Q2'25 Batch 6 Technical: partial SUCCESS (statistically significant clinical benefit in cCa/24-hr UCa at most numerically superior to SoC yet with a negative dose-response relationship) Commercial: partial FAILURE (commercially maybe sufficient yet very weak clinical benefit in QTcF/SF36 non-superior to SoC)	Readout: 29 Oct 2025 **Lead Time: 276 days in advance** Interpretation: encaleret achieved superiority in the primary endpoint of the proportion of participants achieving both normal cCa and normal 24-hr UCa at week 24 compared with standard-of-care treatments (76% vs 4% p<0.0001); yet encaleret failed to achieve superiority in key efficacy endpoints such as QTcF or SF-36 (data not disclosed)	Correct Prediction Conclusion: statistically significant and commercially probably insufficient Classification: **True Negative (TN)**
1906	**VTX3232** **NCTID: NCT06771115** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: CNS-penetrant NLRP3 inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity without type 2 diabetes** **Human Patients: 176** **Sponsor: Ventyx Biosciences (VTYX)**	Date: 8 Feb 2025 Quarter: Q2'25 Batch 9 Technical: FAILURE (statistically insignificant (additive) clinical benefit in weight loss compared with placebo despite moderate toxicity) Commercial: FAILURE (commercially insufficient (additive) clinical benefit in weight loss/tolerability inferior to semaglutide monotherapy)	Readout: 22 Oct 2025 **Lead Time: 256 days in advance** Interpretation: VTX3232 failed to achieve statistical significance in weight reduction either as monotherapy or as add-on treatment to semaglutide	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1952	**Orforglipron** **NCTID: NCT06109311** **Phase: Phase 3** **Class: Best-In-Class** **Modality: small molecule** **MoA: oral GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Type 2 diabetes**	Date: 30 Mar 2025 Quarter: Q3'25 Batch 1 Technical: SUCCESS (statistically significant clinical benefit in HbA1c and weight reduction compared with placebo) Commercial: SUCCESS (commercially sufficient clinical	Readout: 15 Oct 2025 **Lead Time: 199 days in advance** Interpretation: orforglipron 36mg achieved 1.1% placebo-adjusted A1C reduction at week 40	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	inadequately controlled with titrated insulin glargine; with or without metformin and/or SGLT-2 inhibitors **Human Patients: 546** **Sponsor: Eli Lilly and Company (LLY)**	benefit as an oral therapy in HbA1c and weight reduction non-superior-non-inferior to semaglutide/GSBR1290 with numerically-inferior-to-semaglutide tolerability)		
1949	**Orforglipron** **NCTID: NCT06192108** **Phase: Phase 3** **Class: Best-In-Class** **Modality: small molecule** **MoA: oral GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Type 2 diabetes inadequately controlled on metformin** **Human Patients: 962** **Sponsor: Eli Lilly and Company (LLY)**	Date: 30 Mar 2025 Quarter: Q3'25 Batch 1 Technical: SUCCESS (statistically significant clinical benefit in HbA1c and weight reduction compared with placebo) Commercial: SUCCESS (commercially sufficient clinical benefit as an oral therapy in HbA1c and weight reduction moderately superior to dapagliflozin)	Readout: 15 Oct 2025 **Lead Time: 199 days in advance** Interpretation: orforglipron 36mg achieved 1.7% A1C reduction at week 40; superior to 0.8% A1C reduction at week 40 achieved by dapagliflozin	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
2053	**Evolocumab** **NCTID: NCT03872401** **Phase: Phase 3** **Class: First-In-Class** **Modality: monoclonal antibody (mAb)** **MoA: anti-PCSK9 inhibitor** **Area: Cardiovascular Diseases** **Indication: Patients with cardiovascular risk** **Human Patients: 12301** **Sponsor: Amgen (AMGN)**	Date: 31 Jul 2025 Quarter: Q4'25 Batch 6 Technical: SUCCESS (statistically significant clinical benefit in MACE compared with placebo) Commercial: partial SUCCESS (commercially sufficient yet moderate clinical benefit in MACE slightly superior to semaglutide yet moderately inferior to retatrutide)	Readout: 2 Oct 2025 **Lead Time: 63 days in advance** Interpretation: evolocumab + SoC met its primary endpoint in MACE reduction compared with SoC alone (detailed data undisclosed)	Correct Prediction Conclusion: statistically significant and commercially TBD Classification: **True Positive (TP)**
2055	**MET097** **NCTID: NCT06712836** **Phase: Phase 2** **Class: Best-In-Class** **Modality: peptide** **MoA: long-acting GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity without type 2 diabetes** **Human Patients: 225** **Sponsor: Metsera (MTSR)**	Date: 1 Aug 2025 Quarter: Q4'25 Batch 6 Technical: SUCCESS (statistically significant clinical benefit in weight reduction compared with placebo) Commercial: partial SUCCESS (commercially sufficient yet moderate clinical benefit in weight reduction slightly superior to tirzepatide yet slightly inferior to retatrutide)	Readout: 29 Sep 2025 **Lead Time: 59 days in advance** Interpretation: MET097i 1.2mg achieved 14.1% placebo-adjusted weight reduction at week 28 and 18.9%/3.8%/17.0% placebo-adjusted nausea/diarrhea/vomiting at week 12 in VESPER-3; slightly superior to 13% placebo-adjusted weight reduction at week 28 and non-inferior to 21.5%/16.7%/10.5% placebo-adjusted nausea/diarrhea/vomiting at week 72 achieved by tirzepatide 15mg (see add'l link below)	Correct Prediction Conclusion: statistically significant and commercially sufficient (slightly superior to tirzepatide) Classification: **True Positive (TP)**
2029	**MBX2109 (Canvuparatide)** **NCTID: NCT06465108** **Phase: Phase 2** **Class: First-In-Class** **Modality: peptide** **MoA: long-acting PTH prodrug** **Area: Endocrine System Diseases** **Indication: Hypoparathyroidism** **Human Patients: 64** **Sponsor: MBX Biosciences (MBX)**	Date: 1 Jun 2025 Quarter: Q3'25 Batch 12 Technical: FAILURE (statistically insignificant additive clinical benefit to SoC in the composite endpoint compared with placebo) Commercial: FAILURE (commercially insufficient additive clinical benefit to SoC in the composite endpoint moderately inferior to eneboparatide)	Readout: 22 Sep 2025 **Lead Time: 113 days in advance** Interpretation: Canvuparatide achieved 63% response rate at week 12 (32% placebo-adjusted response rate p=0.042) in the composite primary endpoint (normal-ranged ADsCa maintenance and independence from conventional therapy); moderately inferior to eneboparatide that achieved 88% response rate at week 12 in the same composite primary endpoint (see add'l link below)	Correct Prediction Conclusion: statistically borderline significant and commercially probably insufficient (inferior to eneboparatide) Classification: **True Negative (TN)**
1468	**VS-01** **NCTID: NCT05900050** **Phase: Phase 2**	Date: 14 Feb 2024 Quarter: Q2'24 Batch 4 Technical: FAILURE (statistically	Readout: 19 Sep 2025 **Lead Time: 583 days in advance** Interpretation: VS-01's further	Correct Prediction Conclusion: statistically insignificant and commercially

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Class: First-In-Class **Modality: fluid** **MoA: liposomal-based intro-peritoneal fluid** **Area: Digestive System Diseases** **Indication: Acute-on-Chronic Liver Failure and Ascites** **Human Patients: 15** **Sponsor: Genfit (GNFT)**	insignificant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit)	development has been discontinued for insufficient benefit/risk profile	insufficient Classification: **True Negative (TN)**
1950	**Orforglipron** **NCTID: NCT06045221** **Phase: Phase 3** **Class: Best-In-Class** **Modality: small molecule** **MoA: oral GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Type 2 Diabetes Inadequately Controlled With Metformin** **Human Patients: 1698** **Sponsor: Eli Lilly and Company (LLY)**	Date: 30 Mar 2025 Quarter: Q3'25 Batch 1 Technical: SUCCESS (statistically significant clinical benefit in HbA1c and weight reduction compared with placebo) Commercial: SUCCESS (commercially sufficient clinical benefit as an oral therapy in HbA1c and weight reduction non-superior-non-inferior to semaglutide with numerically-inferior-to-semaglutide tolerability)	Readout: 17 Sep 2025 **Lead Time: 171 days in advance** Interpretation: orforglipron 36mg achieved 9.2% weight reduction; 2.2% A1C reduction; and 9.8% discontinuation rate at week 52; non-superior-non-inferior to 9.2% weight reduction; 2.0% A1C reduction; and est. 10% discontinuation rate at week 52 achieved by semaglutide oral 50mg (see add'l link below)	Correct Prediction Conclusion: statistically significant and commercially sufficient (comparable efficacy and tolerability of orforglipron 36mg vs. oral semaglutide 50mg) Classification: **True Positive (TP)**
1406	**Olezarsen** **NCTID: NCT05552326** **Phase: Phase 3** **Class: Best-In-Class** **Modality: antisense oligonucleotide (ASO)** **MoA: GalNAc3-conjugated anti-APOC3** **Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases** **Indication: Severe Hypertriglyceridemia** **Human Patients: 446** **Sponsor: Ionis Pharmaceuticals (IONS)**	Date: 3 Jan 2024 Quarter: - Batch - Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit non-superior non-inferior to plozasiran)	Readout: 2 Sep 2025 **Lead Time: 608 days in advance** Interpretation: Olezarsen achieved 55-73% placebo-adjusted reduction in fasting triglycerides ($p<0.0001$) and 85% placebo-adjusted reduction in acute pancreatitis attacks ($p<0.0001$); non-superior-non-inferior to plozasiran that achieved 61-63% placebo-adjusted reduction in fasting triglycerides ($p<0.001$) and 83% placebo-adjusted reduction in acute pancreatitis attacks ($p=0.03$)(see add'l link below)	Correct Prediction Conclusion: statistically significant and commercially sufficient (non-superior-non-inferior to plozasiran) Classification: **True Positive (TP)**
1965	**Baxdrostat** **NCTID: NCT06034743** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: selective aldosterone synthase inhibitor** **Area: Cardiovascular Diseases** **Indication: Uncontrolled or resistant hypertension** **Human Patients: 796** **Sponsor: AstraZeneca (AZN)**	Date: 11 Apr 2025 Quarter: Q2'25 Batch 14d Technical: partial SUCCESS (statistically maybe significant yet very weak additive clinical benefit in seated SBP with a negative dose-response relationship) Commercial: FAILURE (commercially insufficient additive clinical benefit in seated SBP for the mixed uncontrolled/resistant hypertension patients without further resistance/biomarker-based stratifications; as baxdrostat; which is non-inferior non-superior to lorundrostat; could deliver commercially sufficient additive clinical benefit only for either resistant hypertension patients or uncontrolled hypertension patients featuring aberrant plasma aldosterone level/aldosterone-to-renin ratio)	Readout: 30 Aug 2025 **Lead Time: 141 days in advance** Interpretation: baxdrostat 2mg + SoC achieved 9.8 mmHg placebo-adjusted reduction in seated SBP at week 12 for uncontrolled or resistant hypertension ($p<0.001$); and 10.3 mmHg seated SBP at week 12 for resistant hypertension ($p<0.0001$ in Bax24 trial); which are non-superior to 6-12 mmHg placebo-adjusted 24hr ABPM reduction achieved by adding a third therapy to two standard anti-hypertension medications (see add'l link below and DOI-10.1016/j.ejim.2023.04.021)	Correct Prediction Conclusion: statistically significant (weak additive efficacy) and commercially maybe sufficient (more benefit for resistant hypertension than for uncontrolled hypertension) Classification: **True Positive (TP)**
2008	**Zilebesiran** **NCTID: NCT06272487** **Phase: Phase 2** **Class: First-In-Class** **Modality: siRNA** **MoA: GalNAc-conjugated siRNA**	Date: 06 May 2025 Quarter: Q3'25 Batch 5 Technical: partial FAILURE (statistically maybe significant yet very weak additive clinical benefit to SoC in seated SBP compared with	Readout: 30 Aug 2025 **Lead Time: 116 days in advance** Interpretation: zilebesiran didn't achieve statistical significance with 5.0 mmHg placebo-adjusted reduction in seated SBP at week 12	Correct Prediction Conclusion: statistically insignificant and commercially insufficient (inferior to baxdrostat) Classification: **True Negative (TN)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	against liver-expressed AGT **Area: Cardiovascular Diseases** **Indication: Uncontrolled hypertension** **Human Patients: 375** **Sponsor: Alnylam Pharmaceuticals / Roche (ALNY/RHHBY)**	placebo) Commercial: partial FAILURE (commercially maybe sufficient yet very weak additive clinical benefit to SoC in seated SBP moderately inferior to low-dose baxdrostat/lorundrostat + SoC)	for uncontrolled hypertension (p=0.0431); moderately inferior to baxdrostat that achieved 9.8 mmHg placebo-adjusted reduction in seated SBP at week 12 for uncontrolled or resistant hypertension (p<0.001) (see add'l link below and DOI-10.1016/j.ejim.2023.04.021)	
2015	**VK2735** **NCTID: NCT06828055** **Phase: Phase 2** **Class: Best-In-Class** **Modality: peptide** **MoA: oral GLP1R/GIPR dual agonist** **Area: Nutritional and Metabolic Diseases** **Indication: obesity without type 2 diabetes** **Human Patients: 280** **Sponsor: Viking Therapeutics (VKTX)**	Date: 8 May 2025 Quarter: Q3'25 Batch 6 Technical: SUCCESS (statistically significant clinical benefit in weight reduction compared with placebo with superior-to-tirzepatide tolerability) Commercial: SUCCESS (commercially sufficient clinical benefit in weight reduction non-superior-non-inferior to retatrutide; moderately superior to tirzepatide; and strongly superior to orforglipron/GSBR1290/cagrisema)	Readout: 26 Aug 2025 **Lead Time: 110 days in advance** Interpretation: VK2735 oral 90mg achieved 9.8% placebo-adjusted weight reduction and 7% placebo-adjusted discontinuation rate at week 13; superior to 5.5% placebo-adjusted weight reduction at week 13 and superior to 7.7% placebo-adjusted discontinuation rate at week 72 achieved by orforglipron 36mg (see add'l link below); superior to 6.2% placebo-adjusted weight reduction at week 13 yet inferior to 3.6% placebo-adjusted discontinuation rate at week 72 achieved by tirzepatide 15mg (10.1056/NEJMoa2206038)	Correct Prediction Conclusion: statistically significant and commercially sufficient (strongly superior efficacy compared with both orforglipron and tirzepatide and non-inferior tolerability compared with orforglipron) Classification: **True Positive (TP)**
1954	**Orforglipron** **NCTID: NCT05872620** **Phase: Phase 3** **Class: Best-In-Class** **Modality: small molecule** **MoA: oral GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity or Overweight and Type 2 Diabetes** **Human Patients: 1613** **Sponsor: Eli Lilly and Company (LLY)**	Date: 30 Mar 2025 Quarter: Q3'25 Batch 1 Technical: SUCCESS (statistically significant clinical benefit in weight reduction and HbA1c compared with placebo) Commercial: SUCCESS (commercially sufficient clinical benefit as an oral therapy in HbA1c and weight reduction non-superior-non-inferior to semaglutide/GSBR1290 with numerically-inferior-to-semaglutide tolerability)	Readout: 26 Aug 2025 **Lead Time: 149 days in advance** Interpretation: orforglipron 36mg achieved 8.3% placebo-adjusted weight reduction and 6% placebo-adjusted discontinuation rate at week 72; overall non-superior-non-inferior to 6.2% placebo-adjusted weight reduction and 3.3% placebo-adjusted discontinuation rate at week 68 achieved by semaglutide 2.4mg (see add'l link below)	Correct Prediction Conclusion: statistically significant and commercially sufficient (slightly superior efficacy yet slightly inferior tolerability compared with semaglutide; thus commercially more competitive for obesity with T2DM than for obesity without T2DM) Classification: **True Positive (TP)**
1953	**Orforglipron** **NCTID: NCT05869903** **Phase: Phase 3** **Class: Best-In-Class** **Modality: small molecule** **MoA: oral GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity or Overweight With Weight-Related Comorbidities** **Human Patients: 3127** **Sponsor: Eli Lilly and Company (LLY)**	Date: 30 Mar 2025 Quarter: Q3'25 Batch 1 Technical: SUCCESS (statistically significant clinical benefit in weight reduction and HbA1c compared with placebo) Commercial: partial SUCCESS (commercially sufficient clinical benefit as an oral therapy in HbA1c and weight reduction non-superior-non-inferior to semaglutide/GSBR1290 with slightly-inferior-to-semaglutide tolerability)	Readout: 7 Aug 2025 **Lead Time: 130 days in advance** Interpretation: orforglipron 36mg achieved 11.5% placebo-adjusted weight reduction and 7.7% placebo-adjusted discontinuation rate at week 72; slightly inferior to 15.1% placebo-adjusted weight reduction 3.7 % placebo-adjusted discontinuation rate at week 72 achieved by semaglutide 2.4mg (see add'l link below)	Correct Prediction Conclusion: statistically significant and commercially maybe sufficient (slightly inferior efficacy yet moderately inferior tolerability compared with semaglutide) Classification: **True Negative (TN)**
1805	**CardiolRx** **NCTID: NCT05180240** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: oral cannabidiol** **Area: Cardiovascular Diseases** **Indication: Acute Myocarditis** **Human Patients: 109** **Sponsor: Cardiol Therapeutics (CRDL)**	Date: 19 Oct 2024 Quarter: Q1'25 Batch 2 Technical: partial SUCCESS (statistically maybe significant yet moderate clinical benefit in LVEF/KCCQ/mortality against placebo) Commercial: partial SUCCESS (commercially maybe sufficient clinical benefit in LVEF/KCCQ/mortality non-superior to beta blockers yet there is no FDA approved treatments specifically for	Readout: 6 Aug 2025 **Lead Time: 291 days in advance** Interpretation: CardiolRx has met the ECV primary endpoint (p=0.0538) and has not met its GLS primary endpoint	Correct Prediction Conclusion: statistically maybe significant and commercially maybe sufficient Classification: **True Negative (TN)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
		acute myocarditis)		
727	**Tirzepatide** **NCTID: NCT04255433** **Phase: Phase 3** **Class: Best-In-Class** **Modality: peptide** **MoA: GLP1R/GIPR dual agonist** **Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases** **Indication: Type 2 Diabetes Mellitus (T2DM) and heart disease** **Human Patients: 13299** **Sponsor: Eli Lilly and Company (LLY)**	Date: 18 Feb 2024 Quarter: Q2'24 Batch 7 Technical: SUCCESS (statistically significant additive clinical benefit) Commercial: SUCCESS (commercially sufficient additive clinical benefit superior to dulaglutide in MACE-3 endpoint for obese diabetic cardiovascular patients)	Readout: 31 Jul 2025 **Lead Time: 529 days in advance** Interpretation: Tirzepatide achieved 8% dulaglutide-adjusted reduction in MACE-3 (HR = 0.92 p=0.086); 16% dulaglutide-adjsuted reduction in time to all-cause death (HR=0.84; p=0.002); and 28% placebo-adjusted reduction in MACE-3 (HR = 0.72); superior to semaglutide's 20% placebo-adjusted reduction in MACE-3 in SELECT trial (see add'l link below)	Correct Prediction Conclusion: statistically insignificant (numerically superior to dulaglutide) and commercially sufficient (numerically superior to semaglutide) Classification: **True Positive (TP)**
1968	**CAEL-101 (anselamimab)** **NCTID: NCT04504825** **Phase: Phase 3** **Class: First-In-Class** **Modality: monoclonal antibody (mAb)** **MoA: IgG1 monoclonal antibody that binds to a conformational neoepitope contained with the first 18 amino acids of misfolded human immunoglobulin light chains** **Area: Cardiovascular Diseases** **Indication: AL amyloidosis** **Human Patients: 125** **Sponsor: AstraZeneca (AZN)**	Date: 11 Apr 2025 Quarter: Q2'25 Batch 14d Technical: partial FAILURE (statistically maybe significant yet very weak additive clinical benefit to CyBorD in all-cause mortality/frequency of hospitalization/KCCQ/6MWT compared with placebo) Commercial: FAILURE (commercially insufficient additive clinical benefit to CyBorD in all-cause mortality/frequency of hospitalization/KCCQ/6MWT inferior to daratumumab + CyBorD)	Readout: 16 Jul 2025 **Lead Time: 96 days in advance** Interpretation: Anselamimab failed to achieve the primary endpoint	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1967	**CAEL-101 (anselamimab)** **NCTID: NCT04512235** **Phase: Phase 3** **Class: First-In-Class** **Modality: monoclonal antibody (mAb)** **MoA: IgG1 monoclonal antibody that binds to a conformational neoepitope contained with the first 18 amino acids of misfolded human immunoglobulin light chains** **Area: Cardiovascular Diseases** **Indication: AL amyloidosis** **Human Patients: 281** **Sponsor: AstraZeneca (AZN)**	Date: 11 Apr 2025 Quarter: Q2'25 Batch 14d Technical: partial FAILURE (statistically maybe significant yet very weak additive clinical benefit to CyBorD in all-cause mortality/frequency of hospitalization/KCCQ/6MWT compared with placebo) Commercial: FAILURE (commercially insufficient additive clinical benefit to CyBorD in all-cause mortality/frequency of hospitalization/KCCQ/6MWT inferior to daratumumab + CyBorD)	Readout: 16 Jul 2025 **Lead Time: 96 days in advance** Interpretation: Anselamimab failed to achieve the primary endpoint	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1339	**Pemvidutide** **NCTID: NCT05989711** **Phase: Phase 2** **Class: First-In-Class** **Modality: peptide** **MoA: GLP1R/GCGR dual agonist** **Area: Nutritional and Metabolic Diseaseses** **Indication: Non-Alcoholic Steatohepatitis (NASH)** **Human Patients: 190** **Sponsor: Altimmune (ALT)**	Date: 14 Jan 2025 Quarter: Q2'25 Batch 2 Technical: SUCCESS (statistically significant clinical benefit in both NASH resolution and fibrosis improvement compared with placebo) Commercial: FAILURE (commercially insufficient clinical benefit in both NASH resolution and fibrosis improvement inferior to tirzepatide)	Readout: 26 Jun 2025 **Lead Time: 163 days in advance** Interpretation: pemvidutide achieved 8.6% placebo-adjusted fibrosis improvement with no worsening of steatohepatitis (statistically insignificant) and 33% placebo-adjusted steatohepatitis resolution with no worsening of fibrosis (p<0.0001 at week 24; inferior to tirzepatide's 21% and 52% delta at week 52 (see add'l link below); and inferior to efruxifermin's 21% and 61% delta at week 24 (see DOI-10.1001/jamanetworkopen.2022.31982)	Correct Prediction Conclusion: partially statistically significant and commercially insufficient Classification: **True Negative (TN)**
1720	**Apitegromab** **NCTID: NCT06445075**	Date: 6 Aug 2024 Quarter: - Batch -	Readout: 18 Jun 2025 **Lead Time: 316 days in advance**	Correct Prediction Conclusion: statistically significant

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Phase: Phase 2 **Class: First-In-Class** **Modality: monoclonal antibody** **MoA: latent myostatin inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: GLP1RA-related Muscle Preservation for Overweight and Obesity** **Human Patients: 100** **Sponsor: Scholar Rock (SRRK)**	Technical: SUCCESS (statistically significant additive clinical benefit in weight reduction; total lean body mass preservation; and total fat body mass reduction) Commercial: SUCCESS (commercially sufficient additive clinical benefit in weight reduction; total lean body mass preservation; and total fat body mass reduction; superior to semaglutide/tirzepatide monotherapy)	Interpretation: apitegromab achieved a placebo-adjusted 15.6% reduction of muscle loss percentage (p=0.001) at week 24 superior to tirzepatide; and a placebo-adjusted 15.8% increase of fat loss percentage at week 24 superior to tirzepatide; and a placebo-adjusted 1.1% weight gain at week 24 compared with tirzepatide	and commercially sufficient (85% fat mass/15% lean mass compared to tirzepatide alone (70% fat mass/30% lean mass) Classification: **True Positive (TP)**
1393	**Lorundrosta** **NCTID: NCT06150924** **Phase: Phase 2** **Class: Best-In-Class** **Modality: small molecule** **MoA: aldosterone synthase inhibitor** **Area: Cardiovascular Diseases** **Indication: hypertension and Chronic Kidney Disease (CKD) with albuminuria** **Human Patients: 60** **Sponsor: Mineralys Therapeutics (MLYS)**	Date: 26 Jul 2024 Quarter: Q1'25 Batch 4 Technical: SUCCESS (statistically significant additive clinical benefit in AOBP SBP) Commercial: SUCCESS (commercially sufficient additive clinical benefit in AOBP SBP for lorundrostat + dapagliflozin combotherapy adjunctive treatment which would be non-superior to lorundrostat monotherapy adjunctive treatment)	Readout: 17 Jun 2025 **Lead Time: 326 days in advance** Interpretation: lorundrostat + dapagliflozin achieved a 7.5 mmHg placebo-adjusted reduction in systolic blood pressure at week 4 (p=0.0024)	Correct Prediction Conclusion: statistically significant and commercially probably sufficient Classification: **True Positive (TP)**
1270	**Birtamimab** **NCTID: NCT04973137** **Phase: Phase 3** **Class: First-In-Class** **Modality: monoclonal antibody** **MoA: anti-mis-light-chain** **Area: Nutritional and Metabolic Diseases** **Indication: AL amyloidosis** **Human Patients: 220** **Sponsor: Prothena Biosciences (PRTA)**	Date: 14 Jul 2024 Quarter: Q4'24 Batch 11 Technical: partial SUCCESS (statistically maybe significant yet weak additive clinical benefit) Commercial: FAILURE (commercially insufficient additive clinical benefit)	Readout: 23 May 2025 **Lead Time: 313 days in advance** Interpretation: birtamimab failed to meet the primary endpoint of time to all-cause mortality or the secondary endpoints	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1838	**Pacibekitug (TOUR006)** **NCTID: NCT06362759** **Phase: Phase 2** **Class: First-In-Class** **Modality: monoclonal antibody** **MoA: anti-IL6 inhibitor** **Area: Urogenital Diseases** **Indication: Chronic Kidney Disease and Elevated High-Sensitivity C-Reactive Protein (Hs-CRP)** **Human Patients: 143** **Sponsor: Tourmaline Bio (TRML)**	Date: 9 Nov 2024 Quarter: Q1'25 Batch 9 Technical: SUCCESS (statistically significant yet moderate clinical benefit in hs-CRP reduction against placebo) Commercial: FAILURE (commercially insufficient clinical benefit in UACR/UPCR/eGFR inferior to finerenone)	Readout: 20 May 2025 **Lead Time: 192 days in advance** Interpretation: pacibekitug achieved more than 70% placebo-adjusted hs-CRP >=50% reduction at day 90 (p<0.0001)	Correct Prediction Conclusion: statistically significant and commercially TBD (UACR/UPCR/eGFR data pending) Classification: **True Positive (TP)**
1220	**Aficamten** **NCTID: NCT05767346** **Phase: Phase 3** **Class: Best-In-Class** **Modality: small molecule** **MoA: cardic myosin inhibitor** **Area: Cardiovascular Diseases** **Indication: Symptomatic Obstructive Hypertrophic Cardiomyopathy (oHCM)** **Human Patients: 175** **Sponsor: Cytokinetics (CYTK)**	Date: 27 Mar 2025 Quarter: Q2'25 Batch 12b Technical: SUCCESS (statistically significant clinical benefit in pVO2-CPET and NYHA compared with placebo) Commercial: SUCCESS (commercially sufficient clinical benefit in pVO2-CPET and NYHA moderately superior to metoprolol succinate)	Readout: 13 May 2025 **Lead Time: 47 days in advance** Interpretation: aficamten achieve statistically significant clinical benefit in pVO2 compared with metoprolol	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1948	**Orforglipron**	Date: 30 Mar 2025	Readout: 15 Apr 2025	Correct Prediction

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	NCTID: NCT05971940 **Phase: Phase 3** **Class: Best-In-Class** **Modality: small molecule** **MoA: once-daily oral GLPR1 agonist** **Area: Nutritional and Metabolic Diseases** **Indication: type 2 diabetes** **Human Patients: 559** **Sponsor: Eli Lilly and Company (LLY)**	Quarter: Q2'25 Batch 13b Technical: SUCCESS (statistically significant clinical benefit in HbA1c and weight reduction compared with placebo) Commercial: SUCCESS (commercially sufficient clinical benefit as an oral therapy in HbA1c and weight reduction non-superior-non-inferior to semaglutide/GSBR1290 with numerically-inferior-to-semaglutide tolerability)	**Lead Time: 16 days in advance** Interpretation: orforglipron 36mg achieved 6.3% placebo-adjusted weight reduction and 1.4% placebo-adjusted HbA1c reduction at week 40; which is numerically superior to semaglutide 2.4mg's 6.2% placebo-adjusted weight reduction and 1.2% placebo-adjusted HbA1c reduction at week 40 (see add'l link below) orforglipron 36mg achieved 7% placebo-adjusted adverse-effect-caused discontinuation discontinuation rate; slightly inferior to semaglutide 2.4mg's 5% placebo-adjusted adverse-effect-caused discontinuation rate	Conclusion: statistically significant and commercially sufficient (non-sueprior-non-inferior to semaglutide 2.4mg) Classification: **True Positive (TP)**
1755	**Danuglipron** **NCTID: NCT06153758** **Phase: Phase 1** **Class: Best-In-Class** **Modality: small molecule** **MoA: once-daily oral GLPR1 agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 33** **Sponsor: Pfizer (PFE)**	Date: 15 Aug 2024 Quarter: Q4'24 Batch 11 Technical: partial SUCCESS (statistically significant clinical benefit in weight reduction for healthy obese patients against placebo despite being at least numerically inferior to orforglipron/GSBR1290) Commercial: partial SUCCESS (commercially sufficient clinical benefit in muscle retention and cardio protection for healthy obese patients at least numerically superior to orforglipron/GSBR1290)	Readout: 14 Apr 2025 **Lead Time: 242 days in advance** Interpretation: danuglipron discontinued further development based on the totality of efficacy and toxicity information; thus at least inferior to orforglipron	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1830	**VERVE102** **NCTID: NCT06164730** **Phase: Phase 1** **Class: First-In-Class** **Modality: gene therapy** **MoA: LNP-delivered GalNAc-conjugated anti-PCSK9 base editing gene therapy** **Area: Nutritional and Metabolic Diseases** **Indication: heterozygous familial hypercholesterolemia (HeFH) and/or premature coronary artery disease (CAD)** **Human Patients: 36** **Sponsor: Verve Therapeutics (VERV)**	Date: 9 Nov 2024 Quarter: Q1'25 Batch 8 Technical: partial SUCCESS (statistically significant yet moderate clinical benefit in lowering LDL-C) Commercial: FAILURE (commercially insufficient clinical benefit in lowering LDL-C due to non-superior-to-SoC efficacy and inferior-to-SoC toxicity; despite the superiority of VERVE-102 over VERVE-101)	Readout: 14 Apr 2025 **Lead Time: 156 days in advance** Interpretation: VERVE102 achieved a mean reduction in blood LDL-C of 53% without any SAEs; which is inferior to the 76% LDL-C reduction achieved by evolocumab (see add'l link below); and superior to VERVE101 that has one grade 3 TEAE	Correct Prediction Conclusion: statistically significant and commercially insufficient Classification: **True Negative (TN)**
1959	**Mavacamten** **NCTID: NCT05582395** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: cardiac myosin inhibitor** **Area: Cardiovascular Diseases** **Indication: non-obstructive hypertrophic cardiomyopathy (nHCM)** **Human Patients: 580** **Sponsor: Bristol-Myers Squibb (BMY)**	Date: 2 Apr 2025 Quarter: Q2'25 Batch 14b Technical: partial SUCCESS (statistically maybe significant yet weak clinical benefit in KCCQ compared with placebo) Commercial: partial SUCCESS (commercially maybe sufficient yet weak clinical benefit in KCCQ moderately inferior to aficamten)	Readout: 14 Apr 2025 **Lead Time: 12 days in advance** Interpretation: mavacamten failed to meet either the KCCQ-23 CSS or the pVO2 primary endpoints	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1332	**Setmelanotide** **NCTID: NCT05774756** **Phase: Phase 3** **Class: First-In-Class** **Modality: peptide**	Date: 20 Nov 2023 Quarter: Q1'25 Batch 8 Technical: SUCCESS (statistically significant clinical benefit)	Readout: 7 Apr 2025 **Lead Time: 504 days in advance** Interpretation: setmelanotide achieved a 19.8% placebo-adjusted difference in BMI reduction at week	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	MoA: MC4R agonist **Area: Nutritional and Metabolic Diseases** **Indication: Acquired Hypothalamic Obesity** **Human Patients: 120** **Sponsor: Rhythm Pharmaceuticals (RYTM)**	Commercial: SUCCESS (commercially sufficient clinical benefit)	52 (p<0.0001)	
705	**muvalaplin** **NCTID: NCT05565742** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: anti-Lp(a) inhibitor** **Area: Cardiovascular Diseases** **Indication: atherosclerotic cardiovascular disease** **Human Patients: 216** **Sponsor: Eli Lilly and Company (LLY)**	Date: 21 Aug 2022 Quarter: - Batch - Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 30 Mar 2025 **Lead Time: 952 days in advance** Interpretation: lepodisiran met the primary endpoint by achieving a 93.9% placebo-adjusted reduction in Lp(a) levels with the highest tested dose (400mg)	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1531	**Semaglutide** **NCTID: NCT04560998** **Phase: Phase 3** **Class: First-In-Class** **Modality: peptide** **MoA: GLP1R agonist** **Area: Cardiovascular Diseases** **Indication: type 2 diabetes and peripheral artery disease** **Human Patients: 792** **Sponsor: Novo Nordisk (NVO)**	Date: 24 Mar 2024 Quarter: Q2'24 Batch 13 Technical: SUCCESS (statistically significant additive clinical benefit) Commercial: SUCCESS (commercially sufficient additive clinical benefit)	Readout: 29 Mar 2025 **Lead Time: 370 days in advance** Interpretation: semaglutide achieved a 13% placebo-adjusted improvement in maximum walking distance (p=0.0004) and 39.9 meter step incline walking distance improvement at week 52	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1392	**Lorundrostat** **NCTID: NCT05769608** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: aldosterone synthase inhibitor** **Area: Cardiovascular Diseases** **Indication: uncontrolled hypertension** **Human Patients: 285** **Sponsor: Mineralys Therapeutics (MLYS)**	Date: 26 Jul 2024 Quarter: Q1'25 Batch 4 Technical: partial SUCCESS (statistically maybe significant yet very weak additive clinical benefit in ABPM SBP with a negative dose-response relationship) Commercial: FAILURE (commercially insufficient additive clinical benefit in AOBP SBP for the mixed uncontrolled/resistant hypertension patients without further resistance/biomarker-based stratifications; as we predict that lorundrostat (which is non-inferior non-superior to baxodrostat) could deliver commercially sufficient additive clinical benefit only for either resistant hypertension patients or uncontrolled hypertension patients featuring aberrant plasma aldosterone level/aldosterone-to-renin ratio)	Readout: 29 Mar 2025 **Lead Time: 246 days in advance** Interpretation: lorundrostat achieved 7.9mmHg (50mg p =0.001) or 6.4mmHg (50-100mg p=0.006) placebo-adjusted 24hr ABPM reduction at week 12 featuring a negative dose-response relationship; which is non-superior to 6-12 mmHg placebo-adjusted 24hr ABPM reduction achieved by adding a third therapy to two standard anti-hypertension medications (see add'l link below)	Correct Prediction Conclusion: statistically significant (yet weak efficacy) and commercially insufficient Classification: **True Negative (TN)**
1864	**Eneboparatide (AZP-3601)** **NCTID: NCT05778071** **Phase: Phase 3** **Class: First-In-Class** **Modality: peptide** **MoA: PTH1R agonist** **Area: Endocrine System Diseases** **Indication: Chronic Hypoparathyroidism (HypoPT)** **Human Patients: 165** **Sponsor: AstraZeneca (AZN)**	Date: 12 Dec 2024 Quarter: Q1'25 Batch 13b Technical: SUCCESS (statistically significant clinical benefit in the composite endpoint compared with placebo) Commercial: SUCCESS (commercially sufficient clinical benefit in both supplement independence and hypercalciuria)	Readout: 17 Mar 2025 **Lead Time: 95 days in advance** Interpretation: eneboparatide has met the composite primary endpoint	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
1394	**Lorundrostat** **NCTID: NCT06153693** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: aldosterone synthase inhibitor** **Area: Cardiovascular Diseases** **Indication: Uncontrolled and Resistant Hypertension** **Human Patients: 1083** **Sponsor: Mineralys Therapeutics (MLYS)**	Date: 26 Jul 2024 Quarter: Q1'25 Batch 4 Technical: partial SUCCESS (statistically maybe significant yet weak additive clinical benefit in AOBP SBP with a negative dose-response relationship) Commercial: partial SUCCESS (commercially maybe sufficient additive clinical benefit in AOBP SBP for the mixed uncontrolled/resistant hypertension patients possibly with poorly controlled obesity/diabetes without further resistance/biomarker-based stratifications; as we predict that lorundrostat (which is non-inferior non-superior to baxodrostat) could deliver commercially sufficient additive clinical benefit only for either resistant hypertension patients or uncontrolled hypertension patients featuring aberrant plasma aldosterone level/aldosterone-to-renin ratio)	Readout: 10 Mar 2025 **Lead Time: 227 days in advance** Interpretation: lorundrostat achieved 9.1mmHg (50mg p <0.0001; 50-100mg insignificant) placebo-adjusted AOBP reduction at week 6 featuring a negative dose-response relationship	Correct Prediction Conclusion: statistically significant and commercially sufficient for mix patients Classification: **True Positive (TP)**
1518	**CagriSema** **NCTID: NCT05394519** **Phase: Phase 3** **Class: First-In-Class** **Modality: peptide** **MoA: combo amylin analog + GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Overweight Obesity Type 2 Diabetes Mellitus** **Human Patients: 1200** **Sponsor: Novo Nordisk (NVO)**	Date: 31 Jan 2025 Quarter: Q1'25 Batch 13c Technical: SUCCESS (statistically significant clinical benefit in HbA1c and weight reduction compared with placebo yet featuring negative morbidity-response relationship and negative age-response relationship for obese T2DM patients) Commercial: FAILURE (commercially insufficient clinical benefit in HbA1c and weight reduction at most numerically superior to semaglutide for obese T2DM patients)	Readout: 10 Mar 2025 **Lead Time: 38 days in advance** Interpretation: CagriSema achieved 10.3% placebo-adjusted weight loss at week 68; which is superior to semaglutide that achieved 6.2% placebo-adjusted weight loss at week 68 (DOI-10.1016/S0140-6736(21)00213-0); yet inferior to tirzepatide achieved 12.2% placebo-adjusted weight loss at week 68 (see add'l link below)	Correct Prediction Conclusion: statistically significant and commercially insufficient (superior to semaglutide yet inferior to tirzaptide) Classification: **True Negative (TN)**
1683	**Monlunabant (INV202)** **NCTID: NCT05514548** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: peripherally selective beta-arrestin-2-biased CB1 inverse agonist** **Area: Urogenital Diseases** **Indication: Diabetic Kidney Disease** **Human Patients: 265** **Sponsor: Novo Nordisk (NVO)**	Date: 17 Jul 2024 Quarter: Q3'24 Batch 18 Technical: partial FAILURE (statistically insignificant additive clinical benefit in UACR) partial SUCCESS (statistically significant yet moderate additive clinical benefit in UPCR) Commercial: FAILURE (commercially insufficient additive clinical benefit in eGFR)	Readout: 5 Feb 2025 **Lead Time: 203 days in advance** Interpretation: monlunabant failed to achieve statistical significance in uACR compared with placebo	Correct Prediction Conclusion: statistically insignificant and commercially insufficient; correct prediction Classification: **True Negative (TN)**
1680	**ordesekimab (AMG714/PRV015)** **NCTID: NCT04424927** **Phase: Phase 2** **Class: First-In-Class** **Modality: monoclonal antibody** **MoA: anti-IL15 inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: Non-responsive Celiac Disease** **Human Patients: 226** **Sponsor: Amgen / Sanofi (AMGN / SNY)**	Date: 14 Jul 2024 Quarter: Q3'24 Batch 17 Technical: partial SUCCESS (statistically maybe significant yet very weak clinical benefit in CeD PRO) Commercial: FAILURE (commercially insufficient clinical benefit in CeD PRO)	Readout: 4 Feb 2025 **Lead Time: 205 days in advance** Interpretation: ordesekimab failed to achieved statistical significance for primary or secondary endpoints	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1657	**XXB750**	Date: 1 Jul 2024 Quarter: Q3'24 Batch 14	Readout: 31 Jan 2025 **Lead Time: 214 days in advance**	Correct Prediction

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	NCTID: NCT05562934 **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: long-acting NPR1 agonist** **Area: Cardiovascular Diseases** **Indication: Resistant Hypertension** **Human Patients: 191** **Sponsor: Novartis (NVS)**	Technical: partial SUCCESS (statistically maybe significant yet very weak additive clinical benefit in mean 24hr SBP at week 12 with moderate toxicity) Commercial: FAILURE (commercially insufficient additive clinical benefit in mean 24hr SBP at week 12 inferior to baxdrostat)	Interpretation: XXB750 hasn't met the efficacy threshold and further development discontinued without disclosure of data	Conclusion: statistically probably insignificant and commercially insufficient Classification: **True Negative (TN)**
1717	**Enobosarm** **NCTID: NCT06282458** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: nonsteroidal selective androgen receptor modulator** **Area: Nutritional and Metabolic Diseaseses** **Indication: Muscle Loss Obesity** **Human Patients: 150** **Sponsor: Veru (VERU)**	Date: 13 Oct 2024 Quarter: Q1'25 Batch 1 Technical: partial SUCCESS (statistically maybe significant yet weak additive clinical benefit in lowering the reduction of total lean body mass with the toxicity of weakening muscle strength) Commercial: FAILURE (commercially insufficient additive clinical benefit with inferior-to-semaglutide reduction in total fat mass)	Readout: 27 Jan 2025 **Lead Time: 106 days in advance** Interpretation: Enobosarm achieved a placebo-adjusted 2.9% reduction of muscle loss (p=0.002) superior to semaglutide; yet a placebo-adjusted 2.3% improvement of fat loss (p=0.096) non-superior to semaglutide; and a placebo-adjusted 0.3kg less weight loss slightly inferior to semaglutide	Correct Prediction Conclusion: statistically significant and commercially maybe insufficient (weak efficacy) Classification: **True Negative (TN)**
1851	**Semaglutide** **NCTID: NCT05646706** **Phase: Phase 3** **Class: Best-In-Class** **Modality: pepetide** **MoA: GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 1407** **Sponsor: Novo Nordisk (NVO)**	Date: 3 Dec 2024 Quarter: Q1'25 Batch 12 Technical: SUCCESS (statistically significant clinical benefit in overall/stratified weight reduction against placebo) Commercial: SUCCESS (commercially sufficient clinical benefit in overall/stratified weight reduction superior to semaglutide 2.4mg; superior to tirzepatide; yet inferior to VK2735)	Readout: 17 Jan 2025 **Lead Time: 45 days in advance** Interpretation: semaglutide 7.2mg achieved 18.3% placebo-adjusted weight reduction at week 72; thus superior to 15.1% placebo-adjusted weight reduction at week 72 achieved by semaglutide 2.4mg (higher than 12.5% placebo-adjusted weight reduction at week 68 achieved by semaglutide 2.4mg in the pivotal trial DOI-10.1056/NEJMoa2032183); inferior to 20.1% placebo-adjusted weight reduction at week 72 achieved by tirzepatide	Correct Prediction Conclusion: statistically significant and commercially probably sufficient Classification: **True Positive (TP)**
1514	**CagriSema** **NCTID: NCT06131437** **Phase: Phase 3** **Class: First-In-Class** **Modality: peptide** **MoA: combo amylin analog + GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 800** **Sponsor: Novo Nordisk (NVO)**	Date: 21 Aug 2024 Quarter: Q4'24 Batch 13 Technical: SUCCESS (statistically significant clinical benefit in weight reduction superior to tirzepatide yet non-superior to VK2735 for nondiabetic obese young population) Commercial: SUCCESS (commercially sufficient clinical benefit in total lean body mass preservation and total fat body mass reduction/change in waist circumference superior to tirzepatide yet non-superior to VK2735 for nondiabetic obese young population)	Readout: 20 Dec 2024 **Lead Time: 121 days in advance** Interpretation: CagriSema achieved 20.4% placebo-adjusted weight loss at week 68; which is superior to semaglutide that achieved 13.8% placebo-adjusted weight loss at week 68 and cagrilintide that achieved 9.5% placebo-adjsuted weight loss at week 68 as the active control arm; tirzepatide achieved 19.5% placebo-adjusted weight loss at week 68 (DOI- 10.1056/NEJMoa2206038); VK2735 achieved 13.1% placebo-adjusted weight loss at week 13 (see add'l link below); superior to tirzepatide's 7% placebo-adjusted weight loss at week 13 and probably superior to CagriSema's undisclosed (yet estimated to be 8-10%) placebo-adjusted weight loss at week 13	Correct Prediction Conclusion: statistically significant and commercially sufficient (numerically superior to tirzaptide yet probably non-superior to VK2735) Classification: **True Positive (TP)**
1517	**CagriSema** **NCTID: NCT05567796** **Phase: Phase 3** **Class: First-In-Class** **Modality: peptide** **MoA: combo amylin analog + GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity**	Date: 24 Mar 2024 Quarter: Q3'24 Batch 18 Technical: SUCCESS (statistically significant clinical benefit in weight reduction) Commercial: SUCCESS (commercially sufficient clinical benefit with superior-to-semaglutide-and-cagrilintide efficacy weight	Readout: 20 Dec 2024 **Lead Time: 271 days in advance** Interpretation: CagriSema achieved 20.4% placebo-adjusted weight loss at week 68; which is superior to semaglutide that achieved 13.8% placebo-adjusted weight loss at week 68 and cagrilintide that achieved 9.5% placebo-adjsuted weight loss at week 68 as the active control arm;	Correct Prediction Conclusion: statistically significant and commercially sufficient (numerically superior to tirzaptide yet probably non-superior to VK2735) Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Human Patients: 3400 **Sponsor: Novo Nordisk (NVO)**	reduction)	tirzepatide achieved 19.5% placebo-adjusted weight loss at week 68 (DOI- 10.1056/NEJMoa2206038); VK2735 achieved 13.1% placebo-adjusted weight loss at week 13 (see add'l link below); superior to tirzepatide's 7% placebo-adjusted weight loss at week 13 and probably superior to CagriSema's undisclosed (yet estimated to be 8-10%) placebo-adjusted weight loss at week 13	
1744	**Belapectin** **NCTID: NCT04365868** **Phase: Phase 2 Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: galectin-3 inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: Cirrhotic Portal Hypertension Caused by Metabolic Dysfunction-Associated Steatohepatitis (MASH)** **Human Patients: 357** **Sponsor: Galectin Therapeutics (GALT)**	Date: 10 Aug 2024 Quarter: Q4'24 Batch 6 Technical: partial SUCCESS (statistically maybe significant yet weak clinical benefit in esophageal varices prevention) Commercial: FAILURE (commercially insufficient clinical benefit in esophageal varices prevention inferior to beta blockers)	Readout: 20 Dec 2024 **Lead Time: 132 days in advance** Interpretation: belapectin failed to achieve statistical significance in the primary endpoint of esophageal varices compared with placebo	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1694	**REGN9933** **NCTID: NCT05618808** **Phase: Phase 2** **Class: First-In-Class** **Modality: monoclonal antibody** **MoA: anti-Factor-XI inhibitor** **Area: Cardiovascular Diseases** **Indication: Venous thromboembolism (VTE)** **Human Patients: 373** **Sponsor: Regeneron Pharmaceuticals (REGN)**	Date: 22 Jul 2024 Quarter: Q3'24 Batch 19 Technical: partial SUCCESS (statistically significant clinical benefit in reduction of major bleeding incidence superior to enoxaparin/apixaban) partial FAILURE (statistically maybe insignificant clinical benefit in non-bleeding TEAE maybe inferior to enoxaparin/apixaban) Commercial: partial SUCCESS (commercially maybe sufficient clinical benefit in reduction of venous thromboembolism incidence non-superior to enoxaparin/apixaban)	Readout: 19 Dec 2024 **Lead Time: 150 days in advance** Interpretation: REGN9933 achieved 17% VTE event rate; superior to enoxaparin's 21% VTE event rate yet inferior to apixaban's 12% VTE event rate; REGN9933 achieved 22% AE rate; inferior to enoxaparin's 21% AE rate yet superior to apixaban's 25% AE rate	Correct Prediction Conclusion: statistically significant and commercially insufficient (non-superior to enoxaparin/apixaban in a crowded market) Classification: **True Negative (TN)**
1129	**Lonapegsomatropin** **NCTID: NCT05690386** **Phase: Phase 2** **Class: Best-In-Class** **Modality: peptide** **MoA: long-lasting growth hormone** **Area: Urogenital Diseases** **Indication: Turner Syndrome** **Human Patients: 48** **Sponsor: Ascendis Pharma (ASND)**	Date: 29 Aug 2024 Quarter: Q4'24 Batch 15 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit superior to daily somatropin)	Readout: 16 Dec 2024 **Lead Time: 109 days in advance** Interpretation: lonapegsomatropin met the primary endpoint of annualized height velocity at week 26; similar to daily somatropin	Correct Prediction Conclusion: statistically significant and commercially probably sufficient Classification: **True Positive (TP)**
1706	**Nebulization (KB408)** **NCTID: NCT06049082** **Phase: Phase 1** **Class: First-In-Class** **Modality: inhaled formulation** **MoA: inhaled replication-defective HSV1-delivered SERPINA1** **Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases** **Indication: Alpha 1-Antitrypsin**	Date: 31 Jul 2024 Quarter: Q3'24 Batch 21 Technical: partial SUCCESS (statistically significant clinical benefit in lung AAT concentration) partial FAILURE (statistically insignificant clinical benefit in lung NE level) Commercial: FAILURE (commercially insufficient clinical benefit in FEV1)	Readout: 12 Dec 2024 **Lead Time: 134 days in advance** Interpretation: KB408 achieved 5.3-9.7 micromolar mean total AAT protein; inferior to the 10.8 micromolar mean total AAT protein achieved by WVE006	Correct Prediction Conclusion: statistically significant (AAT concentration) and commercially TBD (wait for FEV1 data) Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Deficiency (AATD) **Human Patients: 12** **Sponsor: Krystal Biotech (KRYS)**			
913	**Tildacerfont** **NCTID: NCT04544410** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: CRF1R antagonist** **Area: Urogenital Diseases** **Indication: Adult Congenital Adrenal Hyperplasia (CAH)** **Human Patients: 90** **Sponsor: Spruce Biosciences (SPRB)**	Date: 30 Nov 2023 Quarter: - Batch - Technical: FAILURE (statistically insignificant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit)	Readout: 10 Dec 2024 **Lead Time: 376 days in advance** Interpretation: ildacerfont did not achieve statistical significance in GC level reduction	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
912	**Tildacerfont** **NCTID: NCT05128942** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: CRF1R antagonist** **Area: Urogenital Diseases** **Indication: pediatric Congenital Adrenal Hyperplasia (CAH)** **Human Patients: 70** **Sponsor: Spruce Biosciences (SPRB)**	Date: 30 Nov 2023 Quarter: Q1'24 Batch 5 Technical: FAILURE (statistically insignificant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit)	Readout: 10 Dec 2024 **Lead Time: 376 days in advance** Interpretation: tildacerfont did not achieve statistical significance in A4/GC level reduction	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1012	**Obicetrapib** **NCTID: NCT05142722** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: selective CETP inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: Atherosclerotic Cardiovascular Disease (ASCVD) / Heterozygous familial hypercholesterolemia (HeFH)** **Human Patients: 2532** **Sponsor: NewAmsterdam Pharma (NAMS)**	Date: 12 May 2024 Quarter: Q4'24 Batch 10 Technical: FAILURE (statistically insignificant additive clinical benefit of obicetrapib in MACE or cardiovascular hospitalization with significantly increased toxicity-driven mortality) Commercial: FAILURE (commercially insufficient additive clinical benefit of obicetrapib in MACE or cardiovascular hospitalization with significantly increased toxicity-driven mortality)	Readout: 10 Dec 2024 **Lead Time: 212 days in advance** Interpretation: obicetrapib + SoC did not achieve statistical significance in MACE reduction compared with SoC alone (0.79 HR)	Correct Prediction Conclusion: statistically insignificant (insignificant MACE reduction benefit) and commercially insufficient (insufficient MACE reduction benefit) Classification: **True Negative (TN)**
1685	**tirzepatide** **NCTID: NCT05822830** **Phase: Phase 3** **Class: First-In-Class** **Modality: peptide** **MoA: GLP1R/GIPR-biased dual agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 700** **Sponsor: Eli Lilly and Company (LLY)**	Date: 17 Jul 2024 Quarter: Q3'24 Batch 18 Technical: SUCCESS (statistically significant clinical benefit in overall weight reduction superior to semaglutide) Commercial: SUCCESS (commercially sufficient clinical benefit in stratified weight reduction superior to semaglutide)	Readout: 4 Dec 2024 **Lead Time: 140 days in advance** Interpretation: tirzepatide achieved 20.2% weight loss at week 72; which is superior to semaglutide that achieved 13.7% weight loss at week 72 as the active control arm; tirzepatide achieved superiority over semaglutide in all the five key secondary endpoints (e.g. 31.6% of people taking tirzepatide achieved at least 25% body weight loss compared to 16.1% of those taking semaglutide)	Correct Prediction Conclusion: statistically significant (weight loss) and commercially sufficient (superior to semaglutide's efficacy) Classification: **True Positive (TP)**
1442	**MariTide (AMG133)** **NCTID: NCT05669599** **Phase: Phase 2** **Class: First-In-Class** **Modality: antibody fragment biologic** **MoA: antibody-peptide conjugate that activates GLP1R**	Date: 3 Feb 2024 Quarter: Q3'24 Batch 11 Technical: partial SUCCESS (statistically significant clinical benefit in weight loss) partial FAILURE (statistically insignificant clinical benefit in HbA1c reduction)	Readout: 26 Nov 2024 **Lead Time: 297 days in advance** Interpretation: MariTide achieved 20% weight loss with 11% TEAE-related discontinuation for obese nondiabetic patients; numerically superior to the tirzepatide's 19.5% weight loss yet	Correct Prediction Conclusion: statistically significant(weight loss) and commercially insufficient (inferior to tirzepatide/semaglutide tolerability) Classification: **True Negative (TN)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	via peptide and inhibits GIPR via antibody **Area: Nutritional and Metabolic Diseases** **Indication: Obesity Overweight Type 2 Diabetes Mellitus** **Human Patients: 592** **Sponsor: Amgen (AMGN)**	Commercial: FAILURE (commercially insufficient clinical benefit due to inferior-to-tirzepatide/semaglutide long-term detrimental toxicity for both nondiabetic and diabetic patients; despite superior-to-tirzepatide/semaglutide efficacy in morbid weight loss)	inferior to tirzepatide 6.2% TEAE-related discontinuation for obese nondiabetic patients at week 52 (10.1056/NEJMoa2206038); superior to the semaglutide's 13.4% weight loss yet inferior to semaglutide's 5-8% TEAE-related discontinuation for obese nondiabetic patients at week 52 (see add link for semaglutide's data on Lancet)	
1596	**obicetrapib** **NCTID: NCT06005597** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: selective CETP inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: familial hypercholesterolemia (HeFH) and/or atherosclerotic cardiovascular disease (ASCVD)** **Human Patients: 407** **Sponsor: NewAmsterdam Pharma (NAMS)**	Date: 12 May 2024 Quarter: Q1'25 Batch 4 Technical: partial SUCCESS (statistically maybe significant yet weak additive clinical benefit of obicetrapib in LDL-C reduction) Commercial: FAILURE (commercially insufficient additive clinical benefit of obicetrapib in MACE with significantly increased toxicity-driven mortality; The MACE-based clinical benefit of obicetrapib + ezetimibe + SoC is inferior to that of SoC + ezetimibe or SoC alone)	Readout: 20 Nov 2024 **Lead Time: 192 days in advance** Interpretation: obicetrapib + ezetimibe + SoC achieved 48.6% LDL-C reduction at day 84; which is superior to ezetimibe + SoC or SoC alone (yet weaker than 54-59% reduction as the market concensus for strong efficacy); obicetrapib achieved 7% TEAE; which is inferior to ezetimibe + SoC (3%) or SoC alone (4%)	Correct Prediction Conclusion: statistically significant yet weak and commercially TBD (no MACE data available) Classification: **True Positive (TP)**
1684	**Tirzepatide (LY3298176)** **NCTID: NCT04847557** **Phase: Phase 3** **Class: First-In-Class** **Modality: synthetic peptide** **MoA: GLP1R/GIPR-biased dual agonist** **Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases** **Indication: Heart Failure With Preserved Ejection Fraction (HFpEF) and Obesity** **Human Patients: 731** **Sponsor: Eli Lilly and Company (LLY)**	Date: 17 Jul 2024 Quarter: Q3'24 Batch 18 Technical: SUCCESS (statistically significant additive clinical benefit in KCCQ/mortality/heart failure as an adjunctive therapy) Commercial: SUCCESS (commercially sufficient additive clinical benefit in 6MWD superior to semaglutide as an adjunctive therapy)	Readout: 16 Nov 2024 **Lead Time: 122 days in advance** Interpretation: -38% risk reduction in composite endpoint (DOI-10.1056/NEJMoa2410027) and 6.8-9.8 point improvement in KCCQ-CSS by week 52 (vs 7.5 by week 52 for semaglutide in Butler et Al. 2024 LANCET); 30.3m and 15.9m placebo-adjusted efficacy/regimen 6WMD (vs 18.2m and 14.3m achieved by semaglutide by week 52 Butler et Al. 2024 LANCET)	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1759	**AZD5004** **NCTID: NCT06555822** **Phase: Phase 1** **Class: Best-In-Class** **Modality: small molecule** **MoA: GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 15** **Sponsor: AstraZeneca (AZN)**	Date: 19 Aug 2024 Quarter: Q4'24 Batch 12 Technical: partial FAILURE (statistically significant clinical benefit in weight reduction for healthy obese patients against placebo despite being at least numerically inferior to orfoglipron/GSBR1290) Commercial: partial SUCCESS (commercially sufficient clinical benefit in muscle retention and cardio protection for healthy obese patients at least numerically superior to orfoglipron/GSBR1290)	Readout: 5 Nov 2024 **Lead Time: 78 days in advance** Interpretation: AZD5004 achieved 5.8% weight reduction in more than four weeks (no placebo arm data); thus inferior to VK2735's 6.8% weight reduction at day 28 (see add'l link below)	Correct Prediction Conclusion: statistically significant and commercially probably insufficient Classification: **True Negative (TN)**
1497	**AZD6234** **NCTID: NCT06132841** **Phase: Phase 1** **Class: First-In-Class** **Modality: peptide** **MoA: long-lasting amylin analog** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 76** **Sponsor: AstraZeneca (AZN)**	Date: 6 Mar 2024 Quarter: Q2'24 Batch 11 Technical: SUCCESS (statistically significant clinical benefit in weight loss) Commercial: FAILURE (commercially insufficient clinical benefit for repeated-dose AZD6234; which is inferior to semaglutide with increasing toxicity for elderly obese population with comorbidities)	Readout: 5 Nov 2024 **Lead Time: 244 days in advance** Interpretation: AZD6234 achieved statistically significant reduction in weight compared to placebo (no specific number or p-value)	Correct Prediction Conclusion: statistically significant and commercially probably insufficient (no disclosure of data usually indicates weak efficacy) Classification: **True Negative (TN)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
1496	**AZD6234** **NCTID: NCT05511025** **Phase: Phase 1** **Class: First-In-Class** **Modality: peptide** **MoA: long-lasting amylin analog** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 54** **Sponsor: AstraZeneca (AZN)**	Date: 6 Mar 2024 Quarter: Q2'24 Batch 11 Technical: SUCCESS (statistically significant clinical benefit in weight loss) Commercial: FAILURE (commercially insufficient clinical benefit for single-dose AZD6234+acetaminophen; which is non-inferior to semaglutide for nondiabetic obese population and inferior to semaglutide for diabetic obese population)	Readout: 5 Nov 2024 **Lead Time: 244 days in advance** Interpretation: AZD6234 achieved statistically significant reduction in weight compared to placebo (no specific number or p-value)	Correct Prediction Conclusion: statistically significant and commercially probably insufficient (no disclosure of data usually indicates weak efficacy) Classification: **True Negative (TN)**
1330	**Setmelanotide** **NCTID: NCT04963231** **Phase: Phase 2** **Class: First-In-Class** **Modality: peptide** **MoA: MC4R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Hypothalamic Obesity** **Human Patients: 164** **Sponsor: Rhythm Pharmaceuticals (RYTM)**	Date: 20 Nov 2023 Quarter: 2H'23 Batch 29 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 4 Nov 2024 **Lead Time: 350 days in advance** Interpretation: setmelanotide achieved 55% placebo-adjusted higher proportion of patients who achieved 5% BMI reduction	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1523	**Semaglutide** **NCTID: NCT04822181** **Phase: Phase 3** **Class: First-In-Class** **Modality: pepetide** **MoA: GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Non-alcoholic Steatohepatitis** **Human Patients: 1200** **Sponsor: Novo Nordisk (NVO)**	Date: 24 Mar 2024 Quarter: Q3'24 Batch 18 Technical: SUCCESS (statistically significant clinical benefit) Commercial: partial SUCCESS (commercially sufficient yet modest clinical benefit of semaglutide inferior-to-tirzepatide/efruxifermin for non-cirrhotic NASH)	Readout: 1 Nov 2024 **Lead Time: 222 days in advance** Interpretation: Semaglutide achieved 14.5% placebo-adjusted fibrosis improvement with no worsening of steatohepatitis and 28.8% placebo-adjusted steatohepatitis resolution with no worsening of fibrosis at week 72; inferior to tirzepatide's 21% and 52% delta at week 52 (DOI-10.1056/NEJMoa2401943) ; and inferior to efruxifermin's 21% and 61% delta at week 24 (see 10.1001/jamanetworkopen.2022.31982)	Correct Prediction Conclusion: statistically significant and commercially insufficient (inferior to tirzepatide/efruxifermin) Classification: **True Negative (TN)**
546	**Relacorilant** **NCTID: NCT04308590** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: oral non-sterioidal glucocorticoid receptor antagonist** **Area: Endocrine System Diseases** **Indication: Hypercortisolism** **Human Patients: 137** **Sponsor: Corcept Therapeutics (CORT)**	Date: 16 Jul 2023 Quarter: 2H'23 Batch 10 Technical: FAILURE (statistical insignificant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit)	Readout: 30 Oct 2024 **Lead Time: 472 days in advance** Interpretation: relacorilant failed to achieve the mean SBP primary efficacy endpoint against placebo	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1532	**Semaglutide** **NCTID: NCT03914326** **Phase: Phase 3** **Class: First-In-Class** **Modality: pepetide** **MoA: GLP1R agonist** **Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases** **Indication: Cardiovascular Outcomes with Type 2 Diabetes** **Human Patients: 9651**	Date: 24 Mar 2024 Quarter: Q3'24 Batch 18 Technical: SUCCESS (statistically significant additive clinical benefit) Commercial: SUCCESS (commercially sufficient additive clinical benefit)	Readout: 21 Oct 2024 **Lead Time: 211 days in advance** Interpretation: Semaglutide achieved 14% placebo-adjusted reduction in MACE (no FDA-approved SoC)	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Sponsor: Novo Nordisk (NVO)			
1742	**WVE-006** **NCTID: NCT06405633** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: base editing** **MoA: GalNAc-conjugated ADAR-dependent mRNA single-base modifier** **Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases** **Indication: alpha-1 antitrypsin deficiency (AATD)** **Human Patients: 24** **Sponsor: Wave Life Sciences (WVE)**	Date: 10 Aug 2024 Quarter: Q4'24 Batch 5 Technical: SUCCESS (statistically significant additive clinical benefit in lung AAT/NE concentration) Commercial: SUCCESS (commercially sufficient additive clinical benefit in FEV1 superior to both fazirsiran and KB408)	Readout: 16 Oct 2024 **Lead Time: 67 days in advance** Interpretation: WVE-006 achieved 10.8 micromolar mean total AAT protein at day 15 (meeting the level that has been the basis for regulatory approval)	Correct Prediction Conclusion: statistically significant and commercially TBD (pending FEV1 data) Classification: **True Positive (TP)**
1682	**INV-202 (Monlunabant)** **NCTID: NCT05891834** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: peripherally selective beta-arrestin-2-biased CB1 inverse agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity and Metabolic Syndrome** **Human Patients: 243** **Sponsor: Novo Nordisk (NVO)**	Date: 17 Jul 2024 Quarter: Q3'24 Batch 18 Technical: partial SUCCESS (statistically significant yet weak clinical benefit in weight reduction against placebo with moderate toxicity) Commercial: FAILURE (commercially insufficient clinical benefit in weight reduction and adverse effect both inferior to semaglutide)	Readout: 20 Sep 2024 **Lead Time: 65 days in advance** Interpretation: monlunabant achieved 5.8% placebo-adjusted weight reduction in week 16; inferior to tirzepatide 9% placebo-adjusted weight reduction in week 16 (see 10.1056/NEJMoa2206038); Reporting mild-to-moderate psychiatric side effects in additional to typical GI adverse effects.	Correct Prediction Conclusion: statistically significant and commercially insufficient (inferior to tirzepatide in both efficacy and toxicity) Classification: **True Negative (TN)**
1601	**EDG-7500** **NCTID: NCT06347159** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: oral selective cardiac sarcomere modulator** **Area: Cardiovascular Diseases** **Indication: Hypertrophic Cardiomyopathy (HCM)** **Human Patients: 55** **Sponsor: Edgewise Therapeutics (EWTX)**	Date: 12 May 2024 Quarter: Q3'24 Batch 7 Technical: SUCCESS (statistically significant clinical benefit in LVOT-G) Commercial: SUCCESS (commercially sufficient clinical benefit with maybe-superior to-CK274 and superior-to-metoprolol-succinate efficacy in LVOT-G)	Readout: 19 Sep 2024 **Lead Time: 130 days in advance** Interpretation: EDG7500 achieved 67% mean reduction in resting LVOT-G and 55% mean reduction in provokable LVOT-G at day 10; which are superior to aficamten's 44.8% mean reduction in provokable LVOT-G at week 12 (DOI-10.1056/NEJMoa2401424)	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1698	**TERN-601** **NCTID: N/A (adapt NCT05762471 as reference)** **Phase: Phase 1** **Class: Best-In-Class** **Modality: small molecule** **MoA: oral small molecule GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 37** **Sponsor: Terns Pharmaceuticals (TERN)**	Date: 24 Jul 2024 Quarter: Q3'24 Batch 19 Technical: SUCCESS (statistically significant clinical benefit in weight reduction against placebo) Commercial: partial SUCCESS (commercially maybe sufficient clinical benefit in weight reduction inferior to VK2735; non-superior non-inferior to orforglipron/GSBR1290)	Readout: 9 Sep 2024 **Lead Time: 47 days in advance** Interpretation: TERN601 achieved 4.9% placebo-adjusted weight reduction at week 4 (N=9) vs. 3.2% placebo-adjusted weight reduction at week 4 achieved by orforglipron (N=57).	Correct Prediction Conclusion: statistically significant (placebo) and commercially sufficient (non-superior non-inferior to orforglipron) Classification: **True Positive (TP)**
1470	**Dapiglutide** **NCTID: NCT05788601** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: peptide**	Date: 15 Feb 2024 Quarter: Q2'24 Batch 11 Technical: SUCCESS (statistically significant clinical benefit)	Readout: 9 Sep 2024 **Lead Time: 207 days in advance** Interpretation: dapiglutide achieved 8.9% placebo-adjusted weight reduction at week 13 vs. 7%	Correct Prediction Conclusion: statistically significant and commercially sufficient (superior to tirzepatide)

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	MoA: dual GLP1R/GLP2R agonist **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 54** **Sponsor: Zealand Pharma (ZEAL.CO)**	Commercial: SUCCESS (commercially sufficient clinical benefit superior to tirzepatide)	placebo-adjusted weight reduction at week 13 achieved by tirzepatide.	Classification: **True Positive (TP)**
720	**Insulin Efsitora Alfa (LY3209590)** **Insulin Degludec** **NCTID: NCT05275400** **Phase: Phase 3** **Class: Best-In-Class** **Modality: protein biologic** **MoA: once-weekly insulin treatment** **Area: Nutritional and Metabolic Diseases** **Indication: Type 2 Diabetes** **Human Patients: 986** **Sponsor: Eli Lilly and Company (LLY)**	Date: 26 Nov 2022 Quarter: - Batch - Technical: SUCCESS (non-inferior) Commercial: SUCCESS (non-inferior)	Readout: 5 Sep 2024 **Lead Time: 649 days in advance** Interpretation: -0.86% (efsitora) vs -0.76% (degludec) HbA1C at week 26.	Correct Prediction Conclusion: statistically significant and commercially sufficient (non-inferior) Classification: **True Positive (TP)**
1377	**Vutrisiran Sterile Normal Saline (0.9% NaCl)** **NCTID: NCT04153149** **Phase: Phase 3** **Class: First-In-Class** **Modality: small interfering RNA (siRNA) antisense oligonucleotide** **MoA: anti-TTR siRNA** **Area: Nutritional and Metabolic Diseases** **Indication: Transthyretin Amyloidosis (ATTR) With Cardiomyopathy** **Human Patients: 655** **Sponsor: Alnylam Pharmaceuticals (ALNY)**	Date: 22 Dec 2023 Quarter: Q1'24 Batch 11 Technical: FAILURE (statistically maybe significant yet weak clinical benefit for the composite endpoint) Commercial: FAILURE (commercially insufficient clinical benefit inferior to both tafamidis and acroramidis)	Readout: 30 Aug 2024 **Lead Time: 252 days in advance** Interpretation: composite primary endpoint met (1.2% ARR and 13.8% RRR at month 30); inferior to 6.4% ARR and 25% RRR at month 30 p<0.0001 for Acoramidis in ATTRIBUTE-cm study; and inferior to 13.4% ARR and 31.2% RRR at month 30 p=0.0006 for tafamidis in ATTR-ACT study); secondary endpoint 6MWD met p<0.025 (vs p<0.0001 for both Acoramidis and tafamidis); all cause modality met with p<0.05.	Correct Prediction Conclusion: statistically significant and commercially insufficient inferior to both Acoramidis and tafamidis Classification: **True Negative (TN)**
882	**Pegcetacoplan** **NCTID: NCT05067127** **Phase: Phase 3** **Class: First-In-Class** **Modality: PEGylated peptide** **MoA: PEGylated C3b inhibitor** **Area: Urogenital Diseases** **Indication: C3 glomerulopathy (C3G) or immune-complex membranoproliferative glomerulonephritis (IC-MPGN)** **Human Patients: 90** **Sponsor: Apellis Pharmaceuticals (APLS)**	Date: 14 May 2024 Quarter: Q3'24 Batch 10 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit in eGFR)	Readout: 8 Aug 2024 **Lead Time: 86 days in advance** Interpretation: Pegcetacoplan achieved 68% placebo-adjusted reduction in proteinuria (p<0.0001) and statistically significant improvement in eGFR secondary endpoint.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1677	**Biological- Human Acellular Vessel (HAV) Procedure-Arteriovenous fistula (AVF)** **NCTID: NCT03183245** **Phase: Phase 3** **Class: First-In-Class** **Modality: bioengineered acellular tissue (Device)** **MoA: tissue-enginner acellular vascular conduit** **Area: Renal Replacement Therapy** **Indication: Hemodialysis** **Human Patients: 240**	Date: 14 Jul 2024 Quarter: Q3'24 Batch 17 Technical: SUCCESS (statistically significant clinical benefit in proportion of subjects with functional patency at month 6 non-inferior to AVF and proportion of subjects with secondary patency at month 12 superior to AVF) Commercial: SUCCESS (commercially sufficient clinical benefit in patency/infection/aneurysm increasingly superior to AVF as time	Readout: 31 Jul 2024 **Lead Time: 17 days in advance** Interpretation: functional patency at month 6 and secondary patency at month 12 jointly superior to SoC AV fistula (p=0.0071).	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Sponsor: Humacyte (HUMA)	progresses)		
1011	**Obicetrapib** **NCTID: NCT05425745** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: selective CETP inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: Heterozygous Familial Hypercholesterolemia (HeFH)** **Human Patients: 354** **Sponsor: NewAmsterdam Pharma (NAMS)**	Date: 12 May 2024 Quarter: Q3'24 Batch 6 Technical: partial SUCCESS (statistically maybe significant yet weak additive clinical benefit of obicetrapib in LDL-C reduction with significantly increased toxicity-driven mortality) Commercial: FAILURE (commercially insufficient additive clinical benefit of obicetrapib in MACE or cardiovascular hospitalization with significantly increased toxicity-driven mortality)	Readout: 29 Jul 2024 **Lead Time: 78 days in advance** Interpretation: safe yet with 41.5% LDL-C reduction by Day 364 which is weaker than the market expected 50% LDL-C reduction.	Correct Prediction Conclusion: statistically significant yet commercially insufficient Classification: **True Negative (TN)**
901	**ALT-801** **NCTID: NCT05295875** **Phase: Phase 2** **Class: Best-In-Class** **Modality: peptide biologic** **MoA: dual GLP1/glucagon receptor agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 391** **Sponsor: Altimmune (ALT)**	Date: 20 Nov 2023 Quarter: 2H'23 Batch 30 Technical: SUCCESS (statistically significant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit)	Readout: 23 Jun 2024 **Lead Time: 216 days in advance** Interpretation: -13.2% placebo-adjusted weight loss at week 48 (vs -20% placebo-adjusted weight loss at week 48 for tirzepatide 15mg).	Correct Prediction Conclusion: statistically significant and commercially insufficient inferior to tirzepatide Classification: **True Negative (TN)**
1498	**ZP8396** **NCTID: NCT05613387** **Phase: Phase 1** **Class: First-In-Class** **Modality: peptide biologic** **MoA: long-lasting amylin analog** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 68** **Sponsor: Zealand Pharma (ZEAL.CO)**	Date: 6 Mar 2024 Quarter: Q2'24 Batch 11 Technical: SUCCESS (statistically significant clinical benefit in weight loss) Commercial: FAILURE (commercially insufficient clinical benefit for repeated-dose ZP8396; which is inferior to semaglutide with increasing toxicity for elderly obese population with comorbidities)	Readout: 20 Jun 2024 **Lead Time: 106 days in advance** Interpretation: 6.9% weight loss in 16 weeks among male adults with 49 years old vs 13.1% weight loss in 12 weeks by Amycretin.	Correct Prediction Conclusion: statistically significant and commercially insufficient Classification: **True Negative (TN)**
647	**Renal Autologous Cell Therapy** **NCTID: NCT05018416** **Phase: Phase 2** **Class: First-In-Class** **Modality: Cell Therapy** **MoA: renal autologous kidney progenitor cell therapy** **Area: Nutritional and Metabolic Diseases and Urogenital Diseases** **Indication: Type 1 or 2 Diabetes and Chronic Kidney Disease** **Human Patients: 53** **Sponsor: ProKidney (PROK)**	Date: 14 Feb 2024 Quarter: Q2'24 Batch 1 Technical: FAILURE (statistically insignificant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit)	Readout: 10 Jun 2024 **Lead Time: 117 days in advance** Interpretation: average eGFR change from baseline to 18 months was -1.3 ml/min/1.73m2 (given no-zero placebo average eGFR change; the placebo-adjusted eGFR change of REACT would probably be smaller than the SoC Empagliflozin (DOI-10.1056/NEJMoa2204233).	Overall Correct Prediction Conclusion: statistically probably insignificant and commercially probably insufficient Classification: **True Negative (TN)**
543	**Relacorilant** **NCTID: NCT03697109** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: oral non-steroidal glucocorticoid receptor antagonist** **Area: Endocrine System Diseases**	Date: 22 Oct 2022 Quarter: Q3'24 Batch 1 Technical: FAILURE (statistical insignificant clinical benefit in the randomized-withdrawal phase) Commercial: FAILURE (commercially insufficient clinical benefit in the randomized-withdrawal phase)	Readout: 7 Jun 2024 **Lead Time: 594 days in advance** Interpretation: primary endpoint loss of response met with borderline statistical significance (p=0.02) secondary endpoint 24h SBP achieved statistical significance (P-0.0025) yet 24h DBP didn't achieve statistical significance (P=0.046); neither body weight	Overall Correct Prediction Conclusion: statistically borderline significant and commercially insufficient Classification: **True Negative (TN)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Indication: Cushing Syndrome **Human Patients: 152** **Sponsor: Corcept Therapeutics (CORT)**		(P=0.09) nor HbA1c (P=0.04) achieved statistical significance.	
1492	**BMF-219** **NCTID: NCT06152042** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: oral small molecule MENIN inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: Type 1 Diabetes Mellitus** **Human Patients: 190** **Sponsor: Biomea Fusion (BMEA)**	Date: 29 Feb 2024 Quarter: - Batch - Technical: FAILURE (statistically insignificant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit for T1DM patients)	Readout: 6 Jun 2024 **Lead Time: 98 days in advance** Interpretation: full clinical hold due to hepatitoxicity	Correct Prediction Conclusion: statistically insignificant and commercially insufficient (hepatitoxicity) Classification: **True Negative (TN)**
1481	**S-309309** **NCTID: NCT05925114** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: MGAT2 inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: Obesity** **Human Patients: 365** **Sponsor: Shionogi & Co (SGIOY)**	Date: 26 Feb 2024 Quarter: Q2'24 Batch 8 Technical: partial SUCCESS (statistically maybe significant yet weak clinical benefit in weight loss) Commercial: FAILURE (commercially insufficient clinical benefit inferior to semaglutide/tirzepatide)	Readout: 4 Jun 2024 **Lead Time: 99 days in advance** Interpretation: S309309 achieved less than 5% absolute weight reduction in week 24; inferior to semaglutide 10.9% absolute weight reduction in week 24 (see 10.1001/jamanetworkopen.2022.31982)	Correct Prediction Conclusion: statistically maybe significant and commercially insufficient (inferior to semaglutide in weight loss efficacy) Classification: **True Negative (TN)**
475	**VK2809** **NCTID: NCT04173065** **Phase: Phase 2** **Class: Best-In-Class** **Modality: small molecule** **MoA: liver-selective thyroid hormone receptor beta agonist** **Area: Nutritional and Metabolic Diseaseses** **Indication: NASH - Nonalcoholic Steatohepatitis** **Human Patients: 248** **Sponsor: Viking Therapeutics (VKTX)**	Date: 16 Oct 2023 Quarter: Q1'24 Batch 4 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 4 Jun 2024 **Lead Time: 232 days in advance** Interpretation: 39.7% NASH resolution without worsening of fibrosis combined and 17% fibrosis improvement without worsening of NASH (vs 16-20% and 10-12% for resmetirom).	Correct Prediction Conclusion: statistically significant and commercially sufficient (superior to resmetirom) Classification: **True Positive (TP)**
1060	**CRN04894** **NCTID: NCT05804669** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: oral ACTH MC2R antagonist** **Area: Endocrine System Diseases** **Indication: ACTH-Dependent Cushing's Syndrome (ADCS)** **Human Patients: 18** **Sponsor: Crinetics Pharmaceuticals (CRNX)**	Date: 14 Aug 2023 Quarter: - Batch - Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 3 Jun 2024 **Lead Time: 294 days in advance** Interpretation: 100% Urinary free cortisol level for ADCS.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1208	**CRN04894** **NCTID: NCT05907291** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: oral ACTH MC2R**	Date: 14 Aug 2023 Quarter: - Batch - Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS	Readout: 3 Jun 2024 **Lead Time: 294 days in advance** Interpretation: 100% A4 normal for CAH.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	antagonist **Area: Urogenital Diseases** **Indication: Congenital Adrenal Hyperplasia (CAH)** **Human Patients: 30** **Sponsor: Crinetics Pharmaceuticals (CRNX)**	(commercially sufficient clinical benefit)		
793	**ARO-APOC3** **NCTID: NCT05089084** **Phase: Phase 3** **Class: First-In-Class** **Modality: small interfering RNA (siRNA) antisense oligonucleotide** **MoA: siRNA-GalNAc conjugate that supresses APOC3 mRNA** **Area: Nutritional and Metabolic Diseases** **Indication: Familial Chylomicronemia** **Human Patients: 75** **Sponsor: Arrowhead Pharmaceuticals (ARWR)**	Date: 14 Feb 2024 Quarter: Q2'24 Batch 3 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 3 Jun 2024 **Lead Time: 110 days in advance** Interpretation: 80% triglyceride reduction; 94% APOC3 reduction.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1266	**GSBR-1290** **NCTID: NCT05762471** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: small-molecule** **MoA: an oral and biased small molecule GLP1R agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Overweight or Obesity Type2 Diabetes Mellitus** **Human Patients: 142** **Sponsor: Structure Therapeutics (GPCR)**	Date: 6 Mar 2024 Quarter: Q2'24 Batch 11 Technical: SUCCESS (statistically significant clinical benefit in weight loss) Commercial: partial SUCCESS (commercially insufficient clinical benefit inferior to VK2735 for obesity)	Readout: 3 Jun 2024 **Lead Time: 89 days in advance** Interpretation: 6.2-6.9% placebo-adjust weight loss at week 12 (vs 13.1% at week 12 by Amycretin (on a par with VK2735) and 6-7% by ordorglipron at week 12).	Correct Prediction Conclusion: statistically significant and commercially insufficient Classification: **True Negative (TN)**
1494	**Biological NTLA-2002 Normal Saline IV Administration** **NCTID: NCT05120830** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: gene therapy** **MoA: LNP-deliverd CRISPR/CAS9-based anti-KLKB1 gene therapy** **Area: Cardiovascular Diseases** **Indication: Hereditary Angioedema** **Human Patients: 37** **Sponsor: Intellia Therapeutics (NTLA)**	Date: 3 Mar 2024 Quarter: Q2'24 Batch 10 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 2 Jun 2024 **Lead Time: 91 days in advance** Interpretation: -98% mean monthly HAE attacks vs -85% by PHVS's deucrictibant.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
792	**ARO-APOC3** **NCTID: NCT04998201** **Phase: Phase 2** **Class: First-In-Class** **Modality: small interfering RNA (siRNA) antisense oligonucleotide** **MoA: siRNA-GalNAc conjugate that supresses APOC3 mRNA** **Area: Nutritional and Metabolic Diseases** **Indication: Mixed Dyslipidemia** **Human Patients: 353** **Sponsor: Arrowhead**	Date: 14 Feb 2024 Quarter: - Batch - Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 28 May 2024 **Lead Time: 104 days in advance** Interpretation: 50-62% triglyceride reduction; superior to 30-50% achieved by SoC (Fibrates).	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Pharmaceuticals (ARWR)			
721	**Insulin Efsitora Alfa (LY3209590) Insulin Degludec** **NCTID: NCT05362058** **Phase: Phase 3** **Class: Best-In-Class** **Modality: protein biologic** **MoA: once-weekly insulin treatment** **Area: Nutritional and Metabolic Diseases** **Indication: Type 2 Diabetes** **Human Patients: 928** **Sponsor: Eli Lilly and Company (LLY)**	Date: 26 Nov 2022 Quarter: - Batch - Technical: SUCCESS Commercial: SUCCESS (non-inferior)	Readout: 16 May 2024 **Lead Time: 537 days in advance** Interpretation: -1.34% (efsitora) vs -1.26% (degludec) HbA1C at week 52; non-inferior.	Correct Prediction Conclusion: statistically significant and commercially sufficient (once-weekly is more convenient than SoC's once-daily dosage) Classification: **True Positive (TP)**
704	**LY3209590** **NCTID: NCT05462756** **Phase: Phase 3** **Class: Best-In-Class** **Modality: protein biologic** **MoA: once-weekly insulin treatment** **Area: Nutritional and Metabolic Diseases** **Indication: Type 2 Diabetes** **Human Patients: 730** **Sponsor: Eli Lilly and Company (LLY)**	Date: 21 Nov 2022 Quarter: - Batch - Technical: SUCCESS Commercial: SUCCESS (non-inferior)	Readout: 16 May 2024 **Lead Time: 542 days in advance** Interpretation: -1.34% (efsitora) vs -1.26% (degludec) HbA1C at week 52; non-inferior.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
870	**INZ-701** **NCTID: NCT05030831** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: fusion protein biologic** **MoA: soluble recombinant ENPP1 enzyme** **Area: Cardiovascular Diseases** **Indication: ABCC6 Deficiency Causing Pseudoxanthoma Elasticum (PXE)** **Human Patients: 10** **Sponsor: Inozyme Pharma (INZY)**	Date: 16 Jan 2024 Quarter: Q1'24 Batch 15 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 8 Apr 2024 **Lead Time: 83 days in advance** Interpretation: safe with clinical improvement in multiple exploratory efficacy endpoints.	Correct Prediction Conclusion: statistically significant (phase 1/2) and commerically TBD Classification: **True Positive (TP)**
788	**ARO-APOC3** **NCTID: NCT04720534** **Phase: Phase 2** **Class: First-In-Class** **Modality: small interfering RNA (siRNA) antisense oligonucleotide** **MoA: siRNA-GalNAc conjugate that supresses APOC3 mRNA** **Area: Nutritional and Metabolic Diseases** **Indication: Severe Hypertriglyceridemia** **Human Patients: 229** **Sponsor: Arrowhead Pharmaceuticals (ARWR)**	Date: 14 Feb 2024 Quarter: - Batch - Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 7 Apr 2024 **Lead Time: 53 days in advance** Interpretation: 86% triglyceride reduction superior to 30-50% achieved by SoC (Fibrates).	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1512	**Semaglutide** **NCTID: NCT04916470** **Phase: Phase 3** **Class: First-In-Class** **Modality: pepetide** **MoA: GLP1R agonist**	Date: 23 Mar 2024 Quarter: Q2'24 Batch 13 Technical: FAILURE (statistically insignificant additive clinical benefit in KCCQ and 6MWD as an adjunctive therapy)	Readout: 7 Apr 2024 **Lead Time: 15 days in advance** Interpretation: 7.3 point improvement in KCCQ-CSS (5 is the minimum clinically meaningful standard) & 14.3m improvement in 6MWD vs 80m	Overall Correct Prediction Conclusion: statistically significant (placebo) yet commercially insufficient (small 6MWD; Novo Nordisk decided not to file an NDA for marketing approval)

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases **Indication: Heart Failure With Preserved Ejection Fraction (HFpEF) and Diabetes Mellitus Type 2** **Human Patients: 610** **Sponsor: Novo Nordisk (NVO)**	Commercial: FAILURE (commercially insufficient additive clinical benefit in KCCQ and 6MWD as an adjunctive therapy)	as sufficient for an quality-of-life improvement (Morbach et al. 2024 Clinical Research In Cardiology); 25m as clinically meaningful improvement (Jain et al. Arnold 2021 Circulation Heart Failure).	Classification: **True Negative (TN)**
1376	**Zilebesiran Olmesartan Amlodipine Indapamide** **NCTID: NCT05103332** **Phase: Phase 2** **Class: First-In-Class** **Modality: small interfering RNA (siRNA) antisense oligonucleotide** **MoA: anti-AGT siRNA** **Area: Cardiovascular Diseases** **Indication: Hypertension** **Human Patients: 672** **Sponsor: Alnylam Pharmaceuticals (ALNY)**	Date: 15 Dec 2023 Quarter: Q1'24 Batch 11 Technical: FAILURE (statistically insignificant additive clinical benefit) Commercial: FAILURE (commercially insufficient additive clinical benefit)	Readout: 7 Apr 2024 **Lead Time: 114 days in advance** Interpretation: statistically insignificant changes in 24-Hour Mean SBP for the SoC olmesartan ((p=0.036 by phase 3 standard; Paz et so. Coll-de-Tuero 2016 Medicine; Chrysant et Al. Robinson 2003 J of Human Hypertension) in both primary/secondary endpoints.	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1022	**DISC-1459** **NCTID: ACTRN12622000799752** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: GLYT1 small molecule inhibitor** **Area: Digestive System Diseases** **Indication: Erythropoietic Protoporphyria (EEP)** **Human Patients: 22** **Sponsor: Disc Medicine (IRON)**	Date: 24 Apr 2023 Quarter: Q2'23 Batch 18 Technical: partial SUCCESS (statistically significant yet weak clinical benefit) Commercial: FAILURE (comercially insufficient clinical benefit)	Readout: 1 Apr 2024 **Lead Time: 343 days in advance** Interpretation: primary endpoint met yet key secondary endpoint (light tolerance) not met.	Overall Correct Prediction Conclusion: statistically significant yet weak and commercially insufficient. Original correct prospective prediction No.1022 in Q2'23; then modified to the false prediction misled by later released preliminary data. Classification: **True Negative (TN)**
476	**VK2735** **NCTID: NCT05204237** **Phase: Phase 1** **Class: Best-In-Class** **Modality: pepetide drug** **MoA: GLP1R/GIPR-biased dual agonist** **Area: Nutritional and Metabolic Diseases** **Indication: Weight Loss NASH** **Human Patients: 136** **Sponsor: Viking Therapeutics (VKTX)**	Date: 16 Oct 2023 Quarter: Q1'24 Batch 4 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit superior to GSBR1289 and orforglipron)	Readout: 26 Mar 2024 **Lead Time: 162 days in advance** Interpretation: 5.3% from baseline and 3.3% placebo-adjust weight reduction at 4 weeks vs 3% from baseline and 2% placebo-adjusted weight reduction for tirzapatide.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1397	**STAR-0215** **NCTID: NCT05695248** **Phase: Phase 1 Phase 2** **Class: Best-In-Class** **Modality: monoclonal antibody (mAb)** **MoA: YTE-modified anti-kallikrein mAb inhibitor** **Area: Cardiovascular Diseases** **Indication: Hereditary Angioedema** **Human Patients: 28** **Sponsor: Astria Therapeutics (ATXS)**	Date: 21 Dec 2023 Quarter: Q1'24 Batch 11 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit with superior-to-lanadelumab efficacy and durability)	Readout: 25 Mar 2024 **Lead Time: 95 days in advance** Interpretation: -93% mean monthly HAE attacks vs -85% by PHVS's deucrictibant; -92%-100% moderate to severe HAE attacks vs 83% by Takeda's lanadelumab.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1370	**Lanifibranor (IVA337) Placebo Empagliflozin**	Date: 2 Dec 2023 Quarter: Q1'24 Batch 9	Readout: 18 Mar 2024 **Lead Time: 107 days in advance**	Correct Prediction

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	NCTID: NCT05232071 **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: It is a pan-PPAR agonist** **Area: Nutritional and Metabolic Diseaseses** **Indication: NASH and Type 2 Diabetes Mellitus** **Human Patients: 42** **Sponsor: Inventiva Pharma (IVA)**	Technical: partial SUCCESS (statistically significant yet moderate clinical benefit for lanifibranor + empagliflozin) Commercial: FAILURE (commercially insufficient clinical benefit for lanifibranor + empagliflozin; inferior to tirzepatide)	Interpretation: -1.15% & -1.6% HbA1c (mono and combo) at week 24; inferior to the SoC tirzepatide -1.6-2.4% HbA1c at week 26.	Conclusion: statistical significant and commercially insufficient Classification: **True Negative (TN)**
911	**Tildacerfont** **NCTID: NCT04457336** **Phase: Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: oral small molecule CRF1R antagonist** **Area: Urogenital Diseases** **Indication: Congenital Adrenal Hyperplasia** **Human Patients: 96** **Sponsor: Spruce Biosciences (SPRB)**	Date: 30 Nov 2023 Quarter: Q1'24 Batch 5 Technical: FAILURE (statistically insignificant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit)	Readout: 13 Mar 2024 **Lead Time: 104 days in advance** Interpretation: primary endpoint not met.	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
1047	**BMF-219** **NCTID: NCT05731544** **Phase: Phase 1 Phase 2** **Class: First-In-Class** **Modality: small molecule** **MoA: oral small molecule MENIN inhibitor** **Area: Nutritional and Metabolic Diseases** **Indication: Type 2 Diabetes Mellitus** **Human Patients: 414** **Sponsor: Biomea Fusion (BMEA)**	Date: 29 Feb 2024 Quarter: Q2'24 Batch 9 Technical: partial SUCCESS (statistically maybe significant yet weak clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit for T2DM patients)	Readout: 6 Mar 2024 **Lead Time: 6 days in advance** Interpretation: -0.4% to -1.4% HbA1c at week 26; which is inferior to tirzepatide's -1.6 to -2.4% HbA1c at week 26; full clinical hold due to hepatitoxicity	Correct Prediction Conclusion: statistically insignificant and commercially insufficient Classification: **True Negative (TN)**
463	**Apraglutide** **NCTID: NCT04627025** **Phase: Phase 3** **Class: Best-In-Class** **Modality: peptide drug** **MoA: GLP2R agonist** **Area: Digestive System Diseases** **Indication: Short Bowel Syndrome with Intestinal Failure (SBS-IF)** **Human Patients: 164** **Sponsor: Ironwood Pharmaceuticals (IRWD)**	Date: 5 Jan 2024 Quarter: Q1'24 Batch 17 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit)	Readout: 29 Feb 2024 **Lead Time: 55 days in advance** Interpretation: 13% placebo-adjusted actual weekly PS volume change (p=0.001) & at least 1 day/week (p=0.04) at week 24 vs 17% actual weekly PS volume change (p<0.001) for once-daily teduglutide; effective for stoma population but not effective for colon-in-continuity population with less intestine resection.	Overall Correct Prediction Conclusion: statistically significant; once-weekly apraglutide commercially sufficient non-inferior to once-daily teduglutide Classification: **True Positive (TP)**
1290	**VK2735** **NCTID: NCT06068946** **Phase: Phase 2** **Class: Best-In-Class** **Modality: synthetic peptide** **MoA: GLP1R/GIPR-biased dual agonist** **Area: Nutritional and Metabolic Diseaseses** **Indication: Weight Loss** **Human Patients: 176** **Sponsor: Viking Therapeutics (VKTX)**	Date: 15 Oct 2023 Quarter: 2H'23 Batch 24 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit superior to GSBR1289 and orforglipron)	Readout: 27 Feb 2024 **Lead Time: 135 days in advance** Interpretation: 13.1% placebo-adjusted weight loss at week 13 vs 7% of tirzepatide at week 13; no plateau.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
1068	**KVD900** **NCTID: NCT05259917** **Phase: Phase 3** **Class: Best-In-Class** **Modality: small molecule** **MoA: plasma kallikrein inhibitor** **Area: Cardiovascular Diseases** **Indication: Hereditary Angioedema** **Human Patients: 136** **Sponsor: KalVista Pharmaceuticals (KALV)**	Date: 25 May 2023 Quarter: 2H'23 Batch 2 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (Commercially sufficient clinical benefit non-inferior to lanadelumab)	Readout: 13 Feb 2024 **Lead Time: 264 days in advance** Interpretation: met all primary and secondary endpoints.	Correct Prediction Conclusion: statistically significant and commercially sufficient as a non-inferior oral on-demand treatment Classification: **True Positive (TP)**
709	**Tirzepatide (LY3298176)** **NCTID: NCT04166773** **Phase: Phase 2** **Class: First-In-Class** **Modality: synthetic peptide** **MoA: GLP1R/GIPR-biased dual agonist** **Area: Nutritional and Metabolic Diseaseses** **Indication: Nonalcoholic Steatohepatitis (NASH)** **Human Patients: 196** **Sponsor: Eli Lilly and Company (LLY)**	Date: 26 Nov 2022 Quarter: - Batch - Technical: SUCCESS Commercial: SUCCESS	Readout: 6 Feb 2024 **Lead Time: 437 days in advance** Interpretation: 61% placebo-adjusted absence of NASH with no worsening of fibrosis; which is superior to 16-20% achieved by the SoC resmetirom	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**
1400	**Donidalorsen (ISIS 721744 or IONIS-PKK-LRx)** **NCTID: NCT05139810** **Phase: Phase 3** **Class: First-In-Class** **Modality: small interfering RNA (siRNA) antisense oligonucleotide** **MoA: GalNAc3-conjugated anti-prekallikrein ASO** **Area: Cardiovascular Diseases** **Indication: Hereditary Angioedema** **Human Patients: 91** **Sponsor: Ionis Pharmaceuticals (IONS)**	Date: 3 Jan 2024 Quarter: Q1'24 Batch 13 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit non-superior non-inferior to deucrictibant)	Readout: 22 Jan 2024 **Lead Time: 19 days in advance** Interpretation: primary and secondary endpoints met with 87% lower attack rate vs 85% lower attack rate achieved by deucrictibant.	Correct Prediction Conclusion: statistically significant and commercial sufficient (no approved drug for this MoA). Classification: **True Positive (TP)**
1312	**AT-001** **NCTID: NCT04083339** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: Aldose Reductase inhibitor** **Area: Cardiovascular Diseases** **Indication: Diabetic Cardiomyopathy** **Human Patients: 675** **Sponsor: Applied Therapeutics (APLT)**	Date: 2 Nov 2023 Quarter: 2H'23 Batch 27 Technical: FAILURE (statistically insignificant clinical benefit) Commercial: FAILURE (commercially insufficient clinical benefit)	Readout: 8 Jan 2024 **Lead Time: 67 days in advance** Interpretation: primary efficacy endpoint peak VO2 not met.	Correct Prediction Conclusion: statistically insignificant and commercial insufficient Classification: **True Negative (TN)**
927	**Aficamten (CK-3773274)** **NCTID: NCT05186818** **Phase: Phase 3** **Class: First-In-Class** **Modality: small molecule** **MoA: cardiac myosin inhibitor** **Area: Cardiovascular Diseases** **Indication: Obstructive Hypertrophic Cardiomyopathy (oHCM)** **Human Patients: 282**	Date: 21 Aug 2023 Quarter: 2H'23 Batch 16 Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient clinical benefit superior to metoprolol succinate)	Readout: 27 Dec 2023 **Lead Time: 128 days in advance** Interpretation: primary endpoint met with 1.74/mL/kg/min placebo-adjusted pVO2 improvement superior to the previous best treatment metoprolol succinate; and all endpoints met with high sttistical significane (p<0.0001) even for patients who have received background beta-blockers.	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Validated Trial Evidence: Filtered Registry (106 of 604 trials)

Filtered view: **Metabolic**

#	Clinical Trial	Certified Prediction	Validation	Result
	Sponsor: Cytokinetics (CYTK)			
973	**Semaglutide** **NCTID: NCT03574597** **Phase: Phase 3** **Class: First-In-Class** **Modality: pepetide** **MoA: GLP1R agonist** **Area: Cardiovascular Diseases and Nutritional and Metabolic Diseases** **Indication: Cardiovascular risk in obesity patients** **Human Patients: 17604** **Sponsor: Novo Nordisk (NVO)**	Date: 20 May 2023 Quarter: 1H'23 Batch Update Technical: SUCCESS (statistically significant clinical benefit) Commercial: SUCCESS (commercially sufficient additive clinical benefit)	Readout: 8 Aug 2023 **Lead Time: 80 days in advance** Interpretation: semaglutide + SoC achieved 20% reduction in MACE-3 compared with placebo + SoC (6.5% vs 8.0%; HR = 0.80; P < 0.001) (see add'l link below)	Correct Prediction Conclusion: statistically significant and commercially sufficient Classification: **True Positive (TP)**

Appendix: Statistical Methodology & Glossary

KPI FORMULAS

Accuracy
`(TP + TN) / (TP + TN + FP + FN)`

Precision (PPV)
`TP / (TP + FP)`

NPV
`TN / (TN + FN)`

F1-Score
`2 × TP / (2 × TP + FP + FN)`

DOR
`(TP × TN) / (FP × FN)`

Sensitivity
`TP / (TP + FN)`

Specificity
`TN / (TN + FP)`

GLOSSARY

Ex-Ante / Prospective	Prediction issued before outcome is known; timestamped proof
TP	True Positive — predicted blockbuster drug-indication pair with moderately or strongly superior to SoC clinical benefit with HR < 0.6, confirmed by clinical readout
TN	True Negative — predicted non-blockbuster drug-indicatpion pair with weakly superior or inferior to SoC clinical benefit with HR > 0.6, confirmed by clinical readout
FP	False Positive — predicted blockbuster drug-indication pair with moderately or strongly superior to SoC clinical benefit with HR < 0.6, contradicted by clinical readout
FN	False Negative — predicted non-blockbuster drug-indicatpion pair with weakly superior or inferior to SoC clinical benefit with HR > 0.6, contradicted by clinical readout
FIC	First-In-Class — novel mechanism of action and indication pair, no approved precedent
BIC	Best-In-Class — improved agent within an established class
DOR	Diagnostic Odds Ratio — measures discriminative power
MoA	Mechanism of Action — how a drug exerts its therapeutic effect
SoC	Standard of Care — current best available treatment
NCTID	ClinicalTrials.gov trial identifier (e.g., NCT12345678)

DATA PROVENANCE

- All predictions in this dossier are sourced from the BioinvestGPT validated prediction database.
- Each prediction is independently verifiable via its unique index number on data.bioinvestgpt.com.
- Clinical readout outcomes are sourced from official company press releases, ClinicalTrials.gov results, and peer-reviewed literature.
- This dossier was generated on April 8, 2026.

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Clinical trials are inherently uncertain. Regulatory approval, commercial success, and patient outcomes depend on numerous factors beyond the scope of this analysis, including but not limited to: regulatory authority decisions, manufacturing capabilities, competitive dynamics, payer coverage, and post-marketing safety signals.

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