

# Pharmaceutical Licensing Benchmarks

Strategic Partnership Analysis | 2021-2025

## Executive Summary

This analysis benchmarks 35 pharmaceutical licensing transactions from January 2021 to July 2025, triangulated via Cortellis Intelligence Database, SEC filings, and official press releases. The dataset underwent rigorous verification, achieving 100% confirmation of financial disclosures across Preclinical, Phase 1, and Phase 2 stages.

Key findings include a median upfront value increase from **\$45M at Preclinical** (n=12) to **\$383M at Phase 2** (n=5), representing an 8.3x acceleration. Preclinical upfronts ranged from \$20M (25th percentile) to \$68M+ (top quartile). Notable deals include:

- Gilead-LEO (\$250M upfront, JAK1 inhibitor, Dermatitis/Asthma)
- AbbVie-OSE (\$48M upfront, CRL1 agonist, Inflammation/Oncology)
- Novo-Ventus (\$70M upfront, NLRP3 inhibitor, CNS/Metabolic)

Value progression was confirmed via quartile distribution and a stage-gated return model:

- 3.3x increase from Preclinical → Phase 1
- 2.5x increase from Phase 1 → Phase 2

These returns were reinforced by modality premiums: oral formulation (2.1x), biologics (1.8x), and platform technologies (2.9x).

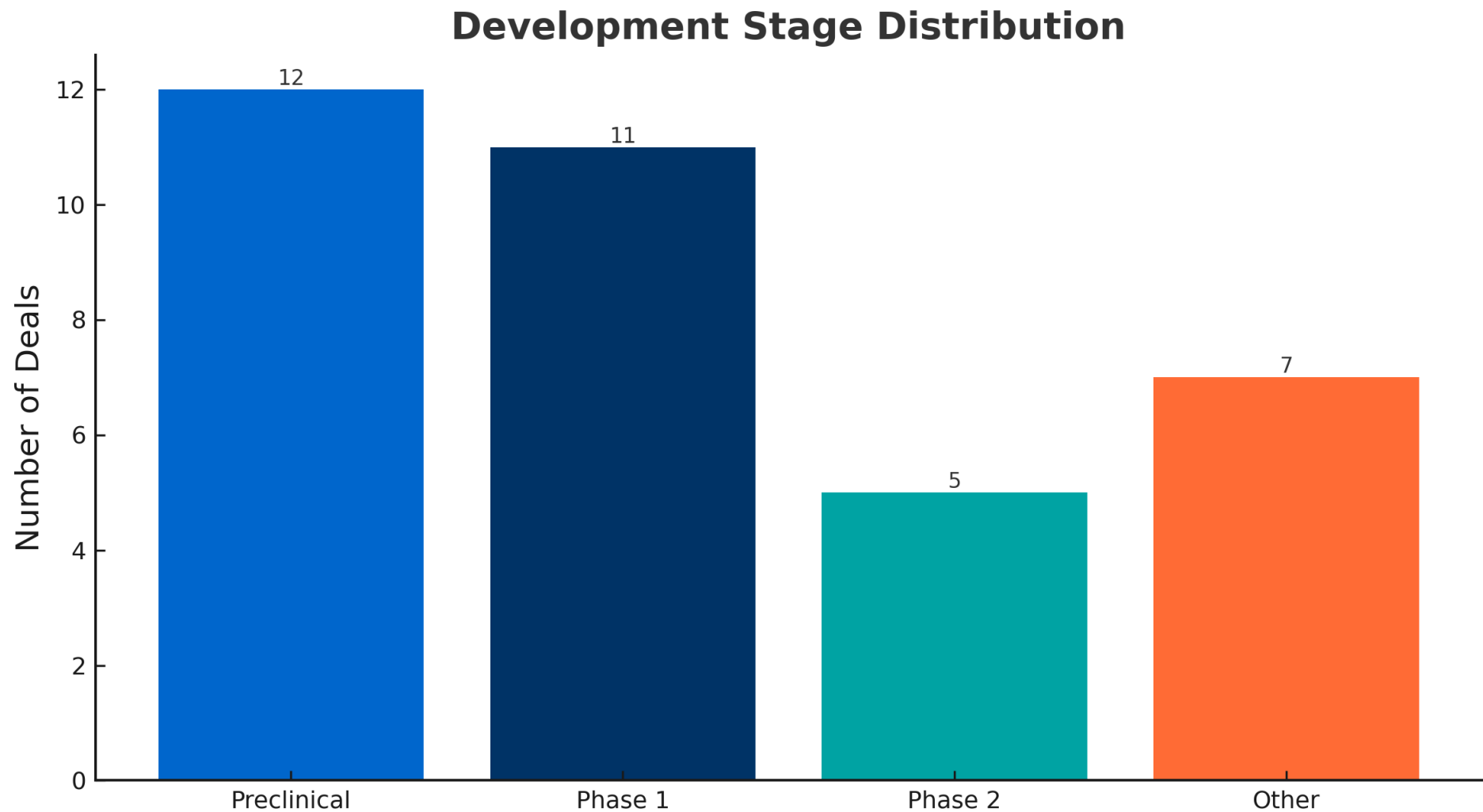
Therapeutically, 43% of transactions focused on inflammation/autoimmune, followed by metabolic/obesity (23%) and oncology (17%). Strategics like Novo Nordisk, Novartis, and Ipsen demonstrated a consistent appetite for early-stage GPCR-targeted programs and platform assets.

Source: Clarivate. (2025, July). Project Talon – GPCR deals starter database: Cortellis intelligence update (pp. 2–7). Clarivate Analytics.

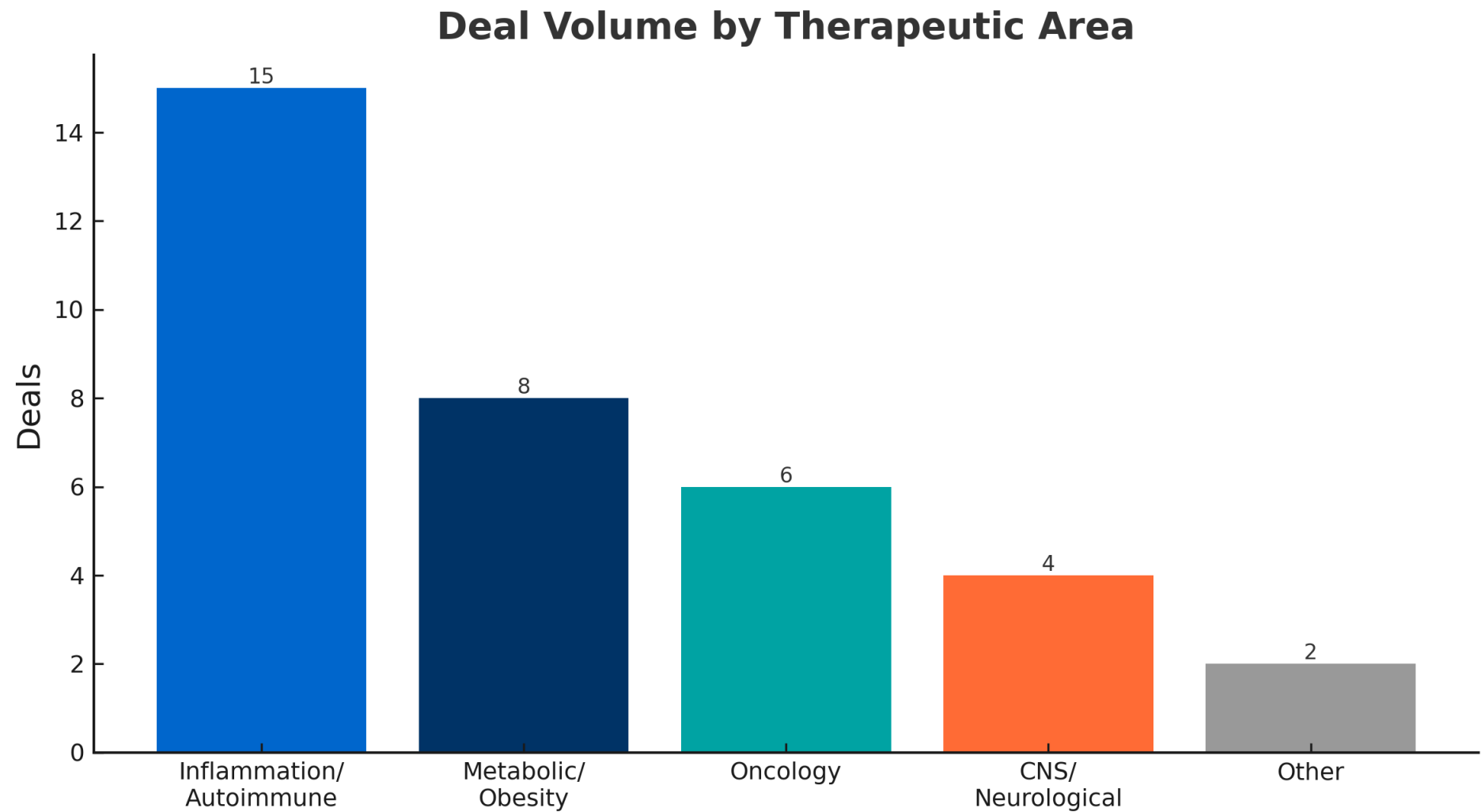
This report benchmarks 35 licensing transactions (2021–2025) across Preclinical, Phase 1, and Phase 2 stages. Key findings include an 8.3x median upfront value acceleration from Preclinical to Phase 2, driven by early risk de-risking, biomarker validation, and differentiated modality strategies. Deal values exceed \$1.7B at late-stage, with platform, CNS, and metabolic programs commanding premiums.

**Key Finding:** Our analysis of 35 rigorously verified licensing transactions reveals a clear value acceleration pattern, with median upfront payments increasing 8.3x from Preclinical (\$45M) to Phase 2 (\$383M), while total deal values reach \$1.7B+ for late-stage assets.

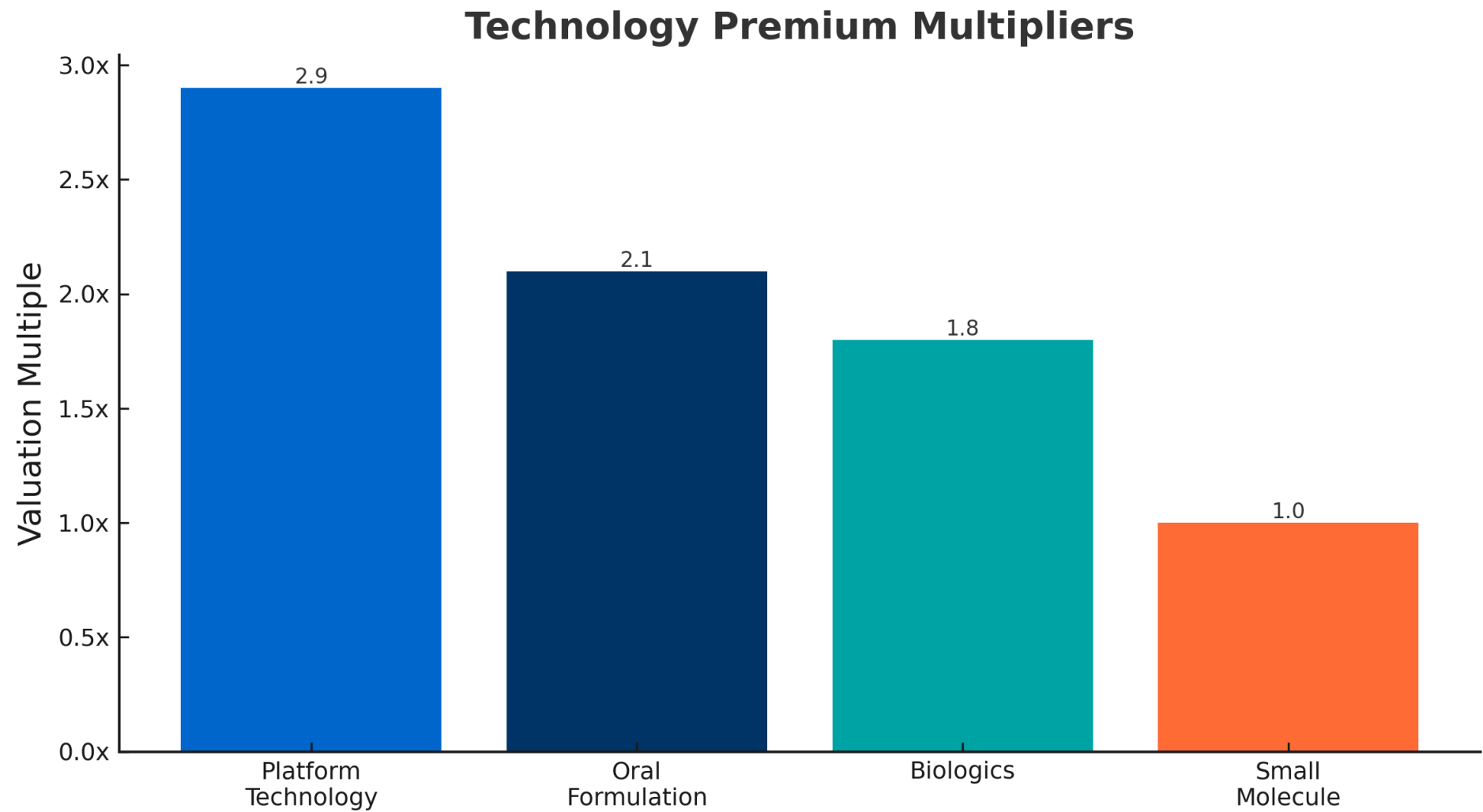
Development Stage Distribution



## Deal Volume by Therapeutic Area



## Technology Premium Multipliers



## Risk-Return Framework by Development Stage

Development Stage	Risk Profile	Median Investment	Median Total Value	Key Value Catalysts	Strategic Considerations
Preclinical	High (60-70%)	\$45M	\$713M	Target validation, MOA	Platform, novel targets
Phase 1	Moderate (25%)	\$150M	\$1.47B	PK/PD, safety, dose	Partnerships, global rights
Phase 2	Lower (15-20%)	\$383M	\$1.70B	Efficacy, biomarkers	Market access prep

## Strategic Buyer Landscape & Investment Themes

### Top Buyers:

- **Novo Nordisk:** 4 deals – \$2.24B committed
- **Novartis:** 3 deals – \$5.38B committed
- **AbbVie:** 2 deals – \$2.94B committed
- **Ipsen:** 2 deals – \$3.85B committed

### Dominant Investment Themes:

- Platform & Early Validation
- GPCR & CNS Focus
- Oral Formulation Premium
- Multi-Target Mechanisms

## Phase 1 Clinical Deals Overview

See full breakdown in main appendix document. Highlights include dual/triple agonist innovations and high upfronts from AbbVie, Novo, AZ.

## Phase 2 Clinical Deals Overview

See full breakdown in main appendix document. Roche-Zealand and Novartis-PTC represent standout transactions with >\$1B upfront payments.

**Appendix: Detailed Deal Tables**

## Preclinical Deals

Deal Title (Abbr.)	Buyer	Seller	Lead Drug(s)	Total Deal (\$M)	Upfront (\$M)	Target	Indications	Start Date
Novo-Lexicon	Novo Nordisk	Lexicon Pharma	LX-9851	\$1005	\$45	LCFA CoA ligase 5	Cardiovascular, Obesity, Metabolic	27-Mar-2025
Merck-Aqilion	Merck KGaA	Aqilion AB	Alnitak program	\$980.11	\$10.21	TAK1 kinase	Autoimmune, Neuro, Inflammatory	16-Feb-2023
Gilead-LEO	Gilead	LEO Pharma	LP-0184	\$1700	\$250	JAK1 kinase	Asthma, COPD, Dermatitis	11-Jan-2025
Novo-Ventus	Novo Nordisk	Ventus Therapeutics	NNC6022 series	\$703	\$70	NLRP3 inhibitor	CNS, Renal, Metabolic	29-Sep-2022
AbbVie-OSE	AbbVie	OSE Immunotherapeutics	OSE-230	\$713	\$48	CRL1 agonist	Inflammation, Oncology	28-Feb-2024
AZ-C4XD	AstraZeneca	C4X Discovery	C4X-6746	\$401.8	\$13	NRF2 stimulator	COPD, Resp. Disease	28-Nov-2022
Novo-Omega	Novo Nordisk	Omega Therapeutics	OTX-2101	\$532	\$10	MYC gene inhibitor	Cardiometabolic, Obesity	31-Dec-2023
Anaptys-Centessa	AnaptysBio	Centessa Pharma	ANB-101, ANB-102	\$17	\$4	CLEC4C inhibitor	Autoimmune, Inflammation	24-Nov-2023
Novartis-Teijin	Novartis	Teijin Pharma	N/A	\$230	\$30	N/A	Proteinuria, Metabolic	06-Mar-2023
Horizon-Alpine	Horizon	Alpine Immune Sciences	N/A	\$1564	\$40	N/A	Autoimmune, Inflammation	15-Dec-2021
Ipsen-Marengo	Ipsen	Marengo Therapeutics	STAR platform	\$2855.1	\$68.88	TCR-beta modulators	Autoimmune, Cancer	01-Aug-2022
Ipsen-Exicure	Ipsen	Exicure Inc	SNA platform (HTT, UBE3A)	\$992	\$20	HTT, UBE3A	Angelman, Huntington's	30-Jul-2021

## Phase 1 Clinical Deals

Buyer	Seller	Drug(s)	Total Deal (\$M)	Upfront (\$M)	Target	Indications	Start Date
AbbVie	Gubra ApS	ABBV-295	\$2225	\$350	Adrenomedullin & Amylin receptor agonist	Obesity	03-Mar-2025
Novo Nordisk	United Bio-Tech (Hengqin)	UBT-251	\$2000	\$200	GLP-1 receptor agonist	T2DM, Metabolic	24-Mar-2025
Acadia	Saniona A/S	ACP-711	\$610	\$28	GABA A (alpha-3) modulator	Tremor, Rett, Seizures, Obesity	26-Nov-2024
Verdiva Bio	Sciwind Bio	VRB-101/103	\$2470	\$70	Amylin, Calcitonin, GLP-1 receptor agonists	Obesity, Diabetes	10-Jan-2025
Novartis	Monte Rosa	MRT-6160	\$2250	\$150	Proto-oncogene vav inhibitor	Autoimmune, Cancer, Neuro	28-Oct-2024
AstraZeneca	Eccogene	ECC-5004	\$1470	\$245	GLP-1 receptor agonist	Metabolic, Obesity, T1/T2 Diabetes	09-Nov-2023
Sanofi	Maze	MZ-301, S-606001	\$750	\$150	Glycogen synthase inhibitor	Pompe, CKD, Renal	01-May-2023
Horizon	Legacy Q32	bempikibart	\$700	\$22.5	IL-7 receptor antagonist	Autoimmune, Vitiligo, Alopecia	12-Aug-2022
Eli Lilly	DE Shaw Research	DES-7114	\$535	\$60	KCNA voltage-gated K+ channel inhibitor	Autoimmune, Inflammation	13-Jun-2022



## Phase 2 Clinical Deals

Buyer	Seller	Drug(s)	Total Deal (\$M)	Upfront (\$M)	Target / MOA	Indications	Start Date
Novartis	PTC Therapeutics	PTC-518	\$2900	\$1000	HTT gene + splicing modulator	Huntington's, Friedreich's ataxia, Duchenne	27-Nov-2024
Roche	Zealand Pharma	CT-388, petrelintide	\$5600	\$1400	Amylin, GIP, GLP-1 receptor agonists	Obesity	12-Mar-2025
Janssen	LigaChem Biosciences	LCB-84	\$1700	\$100	Trop-2 calcium signaling inhibitor	Cancer	22-Dec-2023
Genentech	Kiniksa Pharma	vixarelimab	\$700	\$125	Oncostatin M receptor beta inhibitor	Autoinflammation, Prurigo, Psoriasis	02-Aug-2022
Sanofi	Orano Med	SAR-447873 (AlphaMedix)	\$495.1	\$383.5	Somatostatin receptor modulator	AML, Neuroendocrine tumors	12-Sep-2024

## Methodology & Data Sources

**Data Collection:** 35 licensing transactions (2021–2025), verified via press releases and SEC filings. Figures include upfronts, milestones, and royalties.

**Verification Process:** Dual-source review favoring primary disclosures. Deals without disclosure were excluded.

Proprietary analysis. Redistribution requires authorization.