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| **Feature** | **Kiada Biopharma** | **Cellestia Biotech** | **TMS Co., Ltd.** | **Arum Therapeutics** | **Immvention Therapeutics** | **Biovitrix Therapeutics** | **Janus Biotherapeutics** | **Lantern Pharma (Starlight)** | **Lantern Pharma Inc.** | **Up Therapeutics** |
| Founded | 2020 | 2014 | 2005 | 2021 | 2018 | 2017 | 2012 | 2015 (Lantern) | 2014 | 2018 |
| Headquarters | NY, USA | Basel, Switzerland | Tokyo, Japan | Boston, USA | Durham, NC, USA | UK | Boston, MA, USA | Dallas, TX, USA | Dallas, TX, USA | USA |
| Mission | Targeted cancer therapies using novel molecular approaches | Develop oral Notch pathway inhibitors for cancer/rare diseases | Medical device tech for neuro & ortho | Develop precision immunotherapies for autoimmune disease | Modulate innate immune system for chronic/infectious disease | ADCs for oncology | Immunomodulatory drugs for autoimmune and inflammatory | AI-driven small molecule discovery for cancer | Precision oncology using AI/ML and biomarkers | Biologic therapies for chronic diseases |
| CEO | Dr. Shuwen Sun (Founder & CEO) | Dr. Maurizio Ponzoni | Shigeru Kimura (President) | Dr. Matthew Anderson | Dr. Prabodh Chandrababu | Dr. Tina Dirmhirn | Dr. Chris Fountaine | Panna Sharma | Panna Sharma | Dr. Jason R. Smith |
| CSO | Not publicly disclosed | Not publicly listed | Not publicly disclosed | Not publicly disclosed | Not publicly disclosed | Not publicly listed | Not publicly listed | Not publicly listed | Not publicly listed | Not publicly listed |
| Leadership | CEO-led with scientific/management team | CEO and scientific advisory board | President with technical execs | CEO-led with immunology experts | CEO with immunology/clinical team | CEO with oncology research team | CEO with immunology focus | CEO-led with oncology and AI experts | CEO-led with oncology and AI experts | CEO-led, biotech and pharma experts |
| Strategy | AI-driven protein & ligand discovery | Focused Notch inhibitionâ€”oral oncology first-in-class molecules | Device development for neuro/orthopedic | Immune pathway targeting by data-driven design | Proprietary i-ON platform for lead discovery | Dual action ADCs, innovative targeting | Multitargeting small molecules, modulate immune | ML for drug repurposing/precision treatment | AI algorithms for cancer drug candidate identification | Novel biologic optimization for delivery |
| Key Models | KAD101, other AI-guided oncology candidates | CB-103: clinical stage oral Notch inhibitor | NEURO-ONE, ORTHO-ONE devices | AR-101 lead for autoimmune therapy | i-ON platform, new target molecules | BVX-01, BVX-02 (ADC pipeline) | JNT-001, JNT-002 (immune mod.) | LP-184, LP-284, DDR platform | LP-184, LP-284, AI model RADR | UP-101 (biologic pure) |
| Latest Advances | Manufacturing agreement; clinical trial prep | Clinical trial results for CB-103 | International patents | Data science & workflow collaboration | Strategic collaboration with Novo Nordisk | Scaling ADC trials, biomarker studies | Pipeline expansion autoimmune/inflammatory | AI-driven phase II clinical studies | IND filings & clinical advances | Patent filings for UP-101 |
| Molecule Focus | Small molecules, biologics, ADCs | Small molecules, biologic oral inhibitors | Biomaterials for devices | Biologics and immunomodulators | Small & large molecules immune-targeted | ADCs targeted oncologics | Small molecules immunomodulating | Small molecules & peptide conjugates | Small molecules, RNA targets, biomarkers | Biologic molecules & peptides |
| Pipeline | Lead: KAD101 (solid tumors); preclinical | CB-103 (phase I/II oncology) | Commercial sales & R&D devices | AR-101 preclinical, validated | i-ON platform candidates for SCD, autoimmune | BVX-01, BVX-02 clinical/preclinical | Preclinical IND-enabling autoimmune | IND/phase trials; DDR pathway | LP-184, LP-284 phase I/II GBM/SCLC | UP-101 preclinical |
| Funding Total | $10â€“30 million (est.) | $20+ million | Publicly traded | Private, undisclosed | $16 million+ | Â£16.7 million (2022) | Private rounds undisclosed | Publicly traded $50 million+ | $50 million+ | Not disclosed |
| Recent Funding | Strategic partnerships, seed & Series A | Series A, EU grants | Not disclosed | VC-backed expansion | Novo Nordisk collaboration | Private placement 2025 | VC seed 2023 | Public offering 2021 ongoing rounds | Series B, public market raises | SBIR funding 2024 |
| Funding Utilization | Pipeline development & manufacturing | Phase advancement, R&D, clinical expansion | R&D & international expansion | Platform validation, preclinical expansion | Candidate & clinical platform expansion | ADC validation & biomarkers | Preclinical & platform validation | Clinical support & platform development | IND-enabling & biomarker integration | Preclinical & patents |
| Future Plans | Advance to IND, expand pipeline | Large international trials & platform growth | Expand device portfolio globally | IND timelines & dataset expansion | Expand i-ON indications | Clinical translation & new targets | Additional immunomodulatory indications | Expand cancer trials & ML features | Platform & oncology candidates expansion | Lead candidate advancement |
| Scientific Publications | Preclinical studies in journals | Data at AACR/ESMO, peer-reviewed | Device validation studies | BioRxiv & collaborative reports | Multiple journal articles & patents | Peer-reviewed oncology patents | Immunology & autoimmune research | Oncology & ML clinical journals | AI biomarker peer-reviewed research | Patents & internal studies |
| Industry Collaboration | Northway Biotech, academic & contract labs | EU/Swiss academic, pharma partnerships | Clinical institutions Japan | Data science & immunology consortium | Novo Nordisk & pharma partners | Sino Biological, clinical trials | US immune research & pharma | MOD, NCI, pharma networks | US/EU cancer research collaborations | US/EU biologics research centers |
| Open Science & Collaboration | Data sharing with academic partners | EU-funded open science & clinical transparency | Limited/public patents | Shared data pipelines & CDD Vault | Open data, patents published | Online publications & open trials | Peer-reviewed & registry sharing | Open biomarker studies | Open data & ML transparency | Patent filings on public registries |
| Talent Strategy | Oncology & AI/data analytics growth | Academic/clinician hires, international office | Biomedical engineering scale-up | Data science & immunology staff | Immunology & ML clinical specialists | Oncology & clinical trial experts | Immunology & translational medicine | ML/oncology & pharma experts | AI & clinical development experts | US/EU biotech talent expansion |
| Commercial Momentum | Partnerships, manufacturing scale | Growing clinical footprint & EU trials | Sales & patents in Japan/global | VC funding & academic collaborations | Collaborations & clinical candidates | ADC targets & pipeline expansion | Seed investment & trial expansion | Public listings & investor interest | Investor growth & trial expansion | Pipeline growth & patent portfolio |
| Infra & Tech Partners | Northway Biotech, Synapse Patsnap | Pharma & technology partnerships | R&D & device manufacturing | CDD Vault & manufacturing | Novo Nordisk tech exchange | Clinical validation & UK tech | Academic & device technology | Oracle, NVIDIA healthcare | Oracle, NVIDIA healthcare | CDD Vault & IP legal partners |
| Wet-lab Collaboration | Northway Biotech in vitro validation | Lab & clinical partnerships EU-wide | Clinical evaluations Japan | CDD Vault & academic validation | Novo Nordisk clinical proof-of-concept | UK clinical laboratories | US/Europe translational labs | US/EU clinical validation | US/EU oncology trials | R&D validation partnerships |
| Model Hosting & Open Access | Data shared via Synapse/Patsnap | Clinical data sharing EU portal | Public filings & patent data | Preclinical database sharing | Patents & publications shared | Clinical & patent registries | Immune model sharing software | Open model datasets & publications | Open platform & data publications | Patents & database access |
| Government Data Initiative | US/EU CDC & NIH early-stage trials | EU Innovative Medicines Initiative | Japan government regulations | US CYBER grant & preclinical | Indian government innovation grants | UK Innovate grants | NIH & US CDC autoimmune programs | NIH & US DoD cancer trials | US & EU government funding | US SBIR & federal support |