MARCH 2026

Volume 1, Issue 2

BIOCONJUGATE INSIGHTS

SPOTLIGHT

Linker design
and payload Innovation

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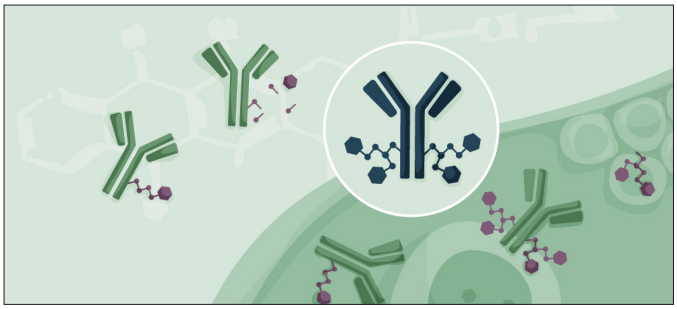
Linker design and payload Innovation



INTERVIEW

SPOTLIGHT ON • Linker design and payload innovation

From infectious disease to oncology: translating a novel glycan target into a 'pan-cancer' ADC

Ali Salanti

INTERVIEW

"We recently obtained the first data [...] which demonstrates that the antibody reaches the tumors to a significant extent with very limited off-target binding."

Lauren Coyle, Editor, *Bioconjugate Insights*, speaks with **Ali Salanti**, Professor, University of Copenhagen, and CEO, Var2 Pharma, about the development of a new monovalent ADC with broad anti-tumor activity – from a serendipitous discovery to preparing for clinical trials.

Bioconjugate Insights 2026; 1(2), 75–79 · DOI: 10.18609/bci.2026.011

Q Can you briefly describe what you are working on and what was the origin of VAR2 Pharma's technology?

AS At the University of Copenhagen, I head a Translational Research Center running Phase 1 and Phase 2 trials, primarily in infectious diseases. I am also the founder of several companies operating across various areas of pharmaceuticals, including VAR2 Pharmaceuticals.

During my group's research into malaria, we identified a previously unrecognized cancer target. The structure was initially discovered because the malaria parasite exploits it to sequester in the human placenta. We subsequently found that this glycan structure reappears in all malignant tissues with limited expression in all normal tissues.

Guided by the malaria parasite's specificity for this glycan, termed onco-fetal chondroitin sulfate (ofCS), we developed a highly ofCS-specific antibody and demonstrated that it binds all malignant cells and tissues, irrespective of cancer origin. This includes hematological tumors as well as mesenchymal and epithelial cancers. The antibody also binds circulating tumor cells and cancer stem cells, but importantly, it does not bind normal cells outside of the placenta.

We subsequently developed an ADC and showed that it specifically accumulates in tumors in animal models. In these models, the treatment was fully curative across a wide range of cancers, including melanoma, colorectal cancer, lung, and breast cancers. This effect was achieved with a clinically relevant dose of 2.5 mg/kg and with a DAR of only 2. Because this is a completely new cancer target, we decided to conduct an immune-PET imaging study before initiating an ADC trial in patients. The aim was to determine whether a microdose of the antibody targeting this novel glycan would actually reach the tumor and to map out potential off-targets

We recently obtained the first data from this ongoing study, which demonstrates that the antibody reaches the tumors to a significant extent with very limited off-target binding. Significant tumor uptake was demonstrated in six out of six tested patients, presenting with lung, rectal, esophagus, or bladder cancers, again demonstrating the pan-cancer potential in targeting ofCS.

We are now eager to progress our ADC (VTP-03), and our aim is to submit a clinical trial application early in 2027.

Q A central feature of VTP-03 is its monovalent IgG format. How did monovalency influence tumor penetration, target engagement, and safety in preclinical models?

AS It was important for us to develop an ADC that could achieve complete tumor penetration, rather than binding only around blood vessels and then slowly moving into the surrounding tissue. Our studies also show that malignant tissue presents with very large amounts of ofCS. We speculated that if we used a classical high-affinity, bivalent antibody, it might become trapped around or outside the vasculature and never fully diffuse into the tumor tissue.

To test this, we designed a study where we generated a panel of ofCS-specific antibodies with different valency. We created monovalent, bivalent, tetravalent, and classical IgG formats. These antibodies were injected intravenously into tumor-bearing mice. After administration, we collected the tumors and all relevant organs and analyzed the intratumoral distribution and off-targets of each format. Specifically, we found that one antibody format performed particularly well in terms of binding across the entire tumor mass

"In these models, the treatment was fully curative across a wide range of cancers, including melanoma, colorectal cancer, lung, and breast cancers."

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"...we selected a valine–citrulline linker that has been used clinically for many years ... This allows us to compare our results with existing ADC data."

and being retained in the tumor. That format was a monovalent single-chain variable fragment (scFv)-Fc format, in which the Fc domain region is retained to provide half-life extension.

Q You engineered hinge region mutations to achieve homogenous DAR2. From your data, how important was DAR uniformity for stability, PK/PD, and toxicity control?

AS It was a relatively straightforward modification to mutate the two cysteines, however, the antibody format we are using is somewhat unusual. It consists of a scFv fused to an Fc domain, which then dimerizes with another Fc domain through knob-in-hole mutations. As the antibody is designed with an scFv rather than a Fab, the molecule only contains free disulfide bonds in the hinge region, and following mutations of two of these cysteines, we could obtain a completely homogenous DAR2 antibody.

This design meant that we could mutate those two cysteines without affecting the structural integrity or stability of the molecule. The molecule also contains additional disulfide bonds further up in the Fc region that help maintain stability.

We did not directly compare this with a heterogeneous DAR preparation. However, there is extensive literature showing that heterogeneous DAR distributions can negatively affect stability, pharmacokinetics, and toxicity. Therefore, we decided to take advantage of the opportunity to generate a uniform DAR2 molecule and optimize the construct from the outset.

Q When refining VTP-03 ADC, what were the most important considerations when selecting the linker chemistry?

AS The target is highly abundant in stromal cells within the extracellular matrix, as well as on the surface of the cancer cells. Because of this distribution, we wanted to avoid a situation where the antibody could bind outside the cells, and the payload fail to be released effectively. From a biological perspective, we find it attractive to be able to target both tumor-supportive stromal cells as well as the cancer cells, as this could disrupt the entire TME, reducing the risk of recurrence.

To address that, we wanted a payload with a strong bystander effect. I think most people working with ADCs now are looking for payloads with bystander activity. However, since this is a completely new target, we did not want to pioneer a completely new payload or linker technology.

Instead, we selected a valine–citrulline linker that has been used clinically for many years. Its behavior is well understood, and there is extensive comparative data available regarding plasma stability, toxicity profile, and general performance. This allows us to compare our results with existing ADC data.

Q As your ADC progresses toward the clinic, are there elements of the linker, payload, or antibody architecture that you want to optimize further?

AS At this stage, no. We plan to move forward with the current design so that we can establish a clear baseline for how the ADC performs with a well-characterized linker–payload system. Once we move into later-stage clinical studies, it may make sense to evaluate other payloads, such as non-cytotoxic or dual payloads.

BIOGRAPHY

Ali Salanti is a Danish Professor and Head of Centre for Translational Medicine and Parasitology at University of Copenhagen and founder of four clinical stage biotech companies where he is acting CEO in two of these. He first gained international recognition in 2003 for identifying VAR2CSA, a unique malaria protein that enables *Plasmodium falciparum* to evade immune clearance by binding to a distinct chondroitin sulfate motif in the placenta. This finding was effectively translated to several clinical trials with a clinical Phase 2 is in the planning. Building on placental malaria pathology, he uncovered that the same oncofetal chondroitin sulfate (ofCS) structure that the malaria parasite binds to in the placenta re-appears in all malignancies and remains non-expressed in all normal tissue (beside fetal tissue). This led to the therapeutic company VAR2Pharmaceuticals and the diagnostic company VARCT Diagnostics. Targeting ofCS in cancer has proven very effective preclinical and a Phase 0 immuno-PET/CT study is ongoing while preparations for a Phase 1–2a trial with an antibody drug conjugate has commenced. Professor Salanti has more than 160 publications, an H-index of 56, has been awarded over 10 patents and raised over €50 million in private capital.

Ali Salanti, Professor, University of Copenhagen; CEO, Var2 Pharma

AUTHORSHIP & CONFLICT OF INTEREST

Contributions: The named author takes responsibility for the integrity of the work as a whole, and has given his approval for this version to be published.

Acknowledgements: None.

Disclosure and potential conflicts of interest: Ali Salanti is co-founder and shareholder in VAR2 Pharmaceuticals holding the IP rights to commercialize antibodies targeting ofCS.

Funding declaration: The author received no financial support for the research, authorship and/or publication of this article.

AI process statement: BioInsights used an AI tool (ChatGPT) to support non-creative editorial tasks such as the initial tidying of interview text material, including removing repetition and non-substantive dialogue from raw transcripts and correcting spelling and grammar. Human editors created the narrative, edited the content and approved the final version.

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Interview held: Feb 25, 2026.

Revised manuscript received: Mar 12, 2026.

Publication date: Mar 24, 2026.

INTERVIEW

SPOTLIGHT ON • Linker design and payload innovation

Dual-target, dual-payload ADCs to overcome tumor heterogeneity and resistance

Ya-Chi Chen

VIEWPOINT

"Instead of fighting tumor adaptation, we are using it to guide our design."

Lauren Coyle, Launch Commissioning Editor, *Bioconjugate Insights*, speaks with **Ya-Chi Chen,** Chief Scientific Officer, OBI Pharma, about the design of a bispecific, dual-payload ADC, and how this strategy aims to address tumor resistance, heterogeneity, and payload limitations in difficult-to-treat cancers.

Bioconjugate Insights 2026; 1(2), 81–85 · DOI: 10.18609/bci.2026.012

Q Could you give me a brief introduction to the bispecific dual-payload ADC that you have been working on?

YCC OBI-221 is a bispecific, dual-payload ADC designed to simultaneously target c-Met and HER3. Clinically, EGFR-targeted therapies have shown strong initial efficacy in both colorectal cancer and non-small cell lung cancer

"From a payload perspective, the dual-payload approach leverages multiple mechanisms of action to overcome tumor adaptation."

(NSCLC), but tumors inevitably evolve under treatment pressure. What we often observe is the emergence of resistance through c-Met amplification, effectively creating a bypass signaling pathway.

In parallel, the antigen landscape shifts, for instance, in metastatic NSCLC, EGFR expression tends to decrease while HER3 is upregulated [1]. This highlights a fundamental challenge. Tumor biology is dynamic, which is why single-target ADCs often lose effectiveness over time. And in certain tumors, such as colorectal cancer, both c-Met and HER3 play critical roles to tumor survival, so targeting either pathway alone is unlikely to provide a durable benefit [2]. Importantly, co-expression of these targets is more prevalent in tumor cells than in normal tissues, supporting a favorable therapeutic window.

With OBI-221, we are actively learning about that biology. Instead of fighting tumor adaptation, we are using it to guide our design. By targeting both pathways simultaneously, we not only block signaling but, more importantly, use that dual engagement to drive efficient internalization and deliver two payloads with different yet complementary mechanisms.

Cancer adapts while ADC design must adapt even faster. Our solution is a next-generation structural upgrade: dual targeting for enhanced payload delivery, paired with dual payloads to overcome resistance. Through smart dual target selection, OBI-221 transforms tumor adaptation into a vulnerability, defining the future of ADC therapy.

Q What are the advantages of this dual-payload, bispecific approach?

YCC Dual-target and/or dual-payload ADCs are attracting a lot of interest. First-generation ADCs often work well initially, as we have seen with sacituzumab govitecan-hziy (TRODELVY®) or datopotamab deruxtecan (DATROWAY®) in triple-negative breast cancer. However, the duration of response is often limited to a few months after which the tumor adapts. Tumors evolve, and so do targets. Treatment pressure can drive antigen escape. Dual targeting helps mitigate that. The bispecific targeting improves internalization via co-endocytosis and increases cancer specificity. It can also reduce antigen downregulation or escape, while addressing tumor heterogeneity across different tumor types.

From a payload perspective, the dual-payload approach leverages multiple mechanisms of action to overcome tumor adaptation. Clinical data show that when patients are treated sequentially with different payloads – even against distinct targets – the response to the second payload is often shorter in duration, suggesting the emergence of cross-resistance mechanisms. Delivering both mechanisms simultaneously, as with OBI-221, addresses this challenge by preventing adaptation to a single mechanism, enhancing tumor cell killing, and reducing the likelihood of sequential resistance.

Relying on one mechanism creates points of failure at every step. That is why we need a design that enhances efficient payload delivery into tumor cells while combining mechanistically distinct payloads to overcome and overwhelm tumor defense mechanisms.

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Q What are the challenges in producing these complex molecules?

YCC Conjugating two payloads at a high DAR is a significant technical challenge. Many groups developing dual-payload ADCs face two main hurdles: aggregation and site-specific conjugation hurdles. At OBI, we addressed these with GlycOBIDUO®, a glycan-based system that enables precise, site-specific conjugation and allows tuning of different dual-payload ratios for optimal results.

OBI-221 achieves a total DAR of ten, a level that is difficult for many companies to achieve due to aggregation from payload hydrophobicity. OBI's HYPrOBI® linker overcomes this by enhancing payload solubility, enabling high DARs without aggregation, and achieving GMP yields of 80–95%. This performance has been consistent across different ADCs and in collaboration with multiple companies, demonstrating the robustness and reproducibility of our approach.

Q How do differences in stability, release kinetics, and intracellular trafficking between the two payloads influence the overall therapeutic performance?

YCC We used high-resolution confocal microscopy to quantify ADC payload delivery to lysosomes. OBI-221 delivered significantly more payload than standard single-target ADCs, highlighting the limitations of single-antigen density and internalization efficiency.

In vitro release kinetics experiments confirmed that OBI-221's payload release profile closely mirrors that of single-payload ADCs, demonstrating that co-delivery translates into effective co-function. Overall, the payload efficiently reaches the lysosome and is released in a controlled, biologically appropriate manner.

The design of bispecific dual-payload ADCs translates into stronger and more consistent antitumor activity in preclinical models. OBI-221, in particular, shows robust efficacy across a wide range of target expression levels, from low to high, maintaining reliable tumor control even in challenging settings. Notably, it drives significant tumor regression in low HER3–expressing tumors, where many ADCs typically underperform. This contrasts with c-Met-targeted ADCs like Emrelis®, which are approved only in NSCLC patients with high target expression, highlighting OBI-221's potential to expand efficacy across a broader patient population.

Q From a safety perspective, does combining complementary cytotoxic mechanisms narrow the therapeutic window, or can this actually improve tolerability through lower individual payload dosing?

YCC As I mentioned earlier, healthy tissues rarely express both targets. With dual-target design, it increases cancer specificity and reduces on-target toxicity in normal tissues. People also worry that combining two payloads might cause excess toxicity.

That is a common assumption, but the data does not always support it. For example, MRG002, a DAR4 HER2 ADC with a cysteine-based vc linker delivering MMAE, has a reported highest nonseverely toxic dose (HNSTD) of around 6 mg/kg. In contrast, Sutro's dual-payload ADC, which combines MMAE and Exatecan with a higher overall DAR (4 + 8) and uses site-specific conjugation with a glucuronide linker, shows a higher HNSTD of about 12.5 mg/kg [3].

It highlights that tolerability is not simply a function of payload load. It is heavily influenced by the underlying chemistry – particularly linker stability and conjugation strategy. Premature payload release in circulation is often a key driver of toxicity, so more stable, controlled delivery systems can significantly improve the safety profile.

OBI-221 is built with that exact principle in mind. By leveraging site-specific conjugation and OBI's proprietary HYPrOBI linker platform, we are aiming to enhance payload stability and minimize off-target release. The goal is not just to deliver potent payloads, but to do so in a controlled way that ultimately expands the therapeutic window.

Q Looking ahead, what do you see as the key scientific barrier to broader adoption of dual-payload ADCs?

YCC One major barrier to the broader adoption of dual-payload ADCs is the limited diversity of clinically tractable payloads. While advances in linker and conjugation technologies are critical, the field still requires a broader payload toolbox with orthogonal and biologically complementary mechanisms.

Future payloads should go beyond killing tumor cells and target cancer-specific vulnerabilities, such as suppressed immune function and altered metabolism, stress response pathways, and targetable aspects of the tumor microenvironment. For example, many metastatic or therapy-resistant cancers show metabolic changes, offering opportunities for payloads that exploit these adaptations.

By incorporating multiple, complementary mechanisms of action, these strategies may reduce the likelihood of adaptive resistance and improve the durability of response.

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BIOGRAPHY

Ya-Chi Chen is the Chief Scientific Officer at OBI Pharma, where she leads the company's research and development strategy for next-generation antibody-drug conjugates (ADCs). Prior to this role, she served as Vice President and Head of Biology Discovery and

PPT (Pharmacology, Pharmacokinetics, and Toxicology) at OBI Pharma. Dr Chen has over 20 years of experience in the pharmaceutical industry holding leadership roles across leading global companies including Gilead Sciences, Revolution Medicines, Genentech, BioMarin Pharmaceutical, and Hoffmann-La Roche. Her work has spanned clinical pharmacology, translational science, and early-to-late-stage drug development across oncology, immunology, and virology. At Gilead, she led the clinical pharmacology strategy for the Trodelvy® program. While at Genentech and Roche she played key roles in the development of multiple oncology and immunology therapies. Today, at OBI Pharma, she is applying this extensive experience to advance the frontier of ADC design. Dr Chen earned her BS in Pharmacy and MS in Pharmaceutical Science from Taipei Medical University, followed by an MS in Clinical Pharmacy and a PharmD from the University of Iowa. She then completed a joint postdoctoral drug development fellowship through a joint program between the University of North Carolina at Chapel Hill and GSK.

Ya-Chi Chen PharmD, Chief Scientific Officer, OBI Pharma

AUTHORSHIP & CONFLICT OF INTEREST

Contributions: The named author takes responsibility for the integrity of the work as a whole, and has given his approval for this version to be published.

Acknowledgements: The author would like to thank the internal team at OBI Pharma for their valuable support, collaboration, and contributions throughout the development of this work.

Disclosure and potential conflicts of interest: Ya-Chi Chen is employed by OBI Pharma.

Funding declaration: The author received no financial support for the research, authorship and/or publication of this article.

AI process statement: This article was originally developed by the author. AI tools (e.g., ChatGPT) were used by the editorial team solely for structural refinement. All substantive content reflects the authors' original work and upholds rigorous standards of professional expertise, ethics, and scientific integrity. The final version was reviewed, revised, and formally approved by the author prior to publication.

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Article source: This article was developed by BioInsights' Editorial team using insights shared during an interview with the named author. It is a reflection of the discussion held that has been edited for clarity and flow. The named author reviewed and approved the final version prior to publication.

Interview held: Feb 25, 2026.

Revised manuscript received: Mar 19, 2026.

Publication date: Mar 31, 2026.

INDUSTRY INSIGHTS ♦ MARCH 2026

Clinical momentum builds across ADCs and next-generation conjugates

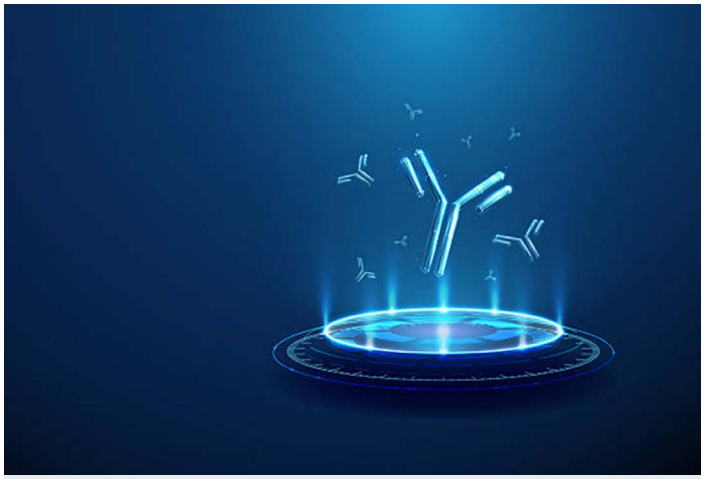
COLLABORATIONS, PARTNERSHIPS, AND AQUISITIONS ♦ REGULATORY CHANGES AND UPDATES ♦ MARKET TRENDS ♦ RESEARCH AND DEVELOPMENT HIGHLIGHTS ♦ CLINICAL TRIALS AND RESEARCH ♦ CONFERENCES, EVENTS, AND PUBLICATIONS

Lauren Coyle
Commissioning Editor, *Bioconjugate Insights*

February through March saw a high volume of clinical trial activity across the bioconjugate landscape, with multiple programs advancing through early- and late-stage development and generating increasingly competitive efficacy signals. Across oncology, several ADCs reported encouraging data, including CytomX's EpCAM-targeting candidate in colorectal cancer and Phase 3 results for enfortumab vedotin plus pembrolizumab in bladder cancer. Bispecific and next-generation ADCs continued to expand into harder-to-treat settings such as triple-negative breast cancer and lung cancer. First-in-human and early-stage studies were also initiated across a broad range of targets and formats, including PD-L1, EGFR, B7-H3, and dual-target ADCs, alongside emerging modalities such as antibody-targeted therapy conjugates and peptide-drug conjugates.

Beyond ADCs, clinical momentum extended to oligonucleotides and RNA-based conjugates, with Dyne advancing into Phase 3 in myotonic dystrophy and multiple RNAi and RNA-editing programs progressing in metabolic and rare diseases. Radioconjugates and fluorescent peptide conjugates also continued to gain traction, supported by new trial initiations and positive late-stage readouts.

On the dealmaking front, Aditxt acquired Ignite Proteomics, Novartis completed its acquisition of Avidity Biosciences, Fujifilm invested in VALANX Biotech to strengthen ADC manufacturing capabilities, and Earendil Labs partnered with WuXi XDC on AI-enabled ADC development. Additional collaboration activities include isotope supply, AI-based translational modeling, and radioligand support agreements.



Earendil Labs and WuXi XDC announced strategic collaboration for AI-enabled development of next-generation ADCs; **Collaborations, Partnerships, and Acquisitions, page 98.**
Credit: www.istockphoto.com

Regulatory activity remained active, with US FDA Priority Review for Enhertu in post-neoadjuvant HER2-positive early breast cancer, IND clearance for NEOK Bio's bispecific ADC, and China expanding the indication for CanSino Biologics' meningococcal conjugate vaccine.

While dealmaking and platform innovation remained active, the breadth of clinical execution this month highlights an increasingly mature pipeline, with more programs moving toward registrational pathways, combination strategies, and earlier lines of therapy, signaling a shift from platform validation toward competitive clinical differentiation.

COLLABORATIONS, ACQUISITIONS, AND PARTNERSHIPS

Aditxt acquired Ignite Proteomics in $36M deal to expand precision oncology capabilities [1]

Aditxt announced the acquisition of Ignite Proteomics in a transaction valued at $36M in Series A-2 convertible preferred stock. Ignite provides a functional proteomics platform based on reverse-phase protein array technology to support cancer therapy selection by measuring protein expression and activity. The platform is positioned to address a growing need for patient stratification as targeted therapies and ADCs expand, with an estimated $3B serviceable market in patients eligible for such treatments. The acquisition adds a commercial-stage diagnostic capability to Aditxt's oncology portfolio, supporting treatment selection and longitudinal monitoring in precision medicine.

FDA cleared IND for NEOK Bio's bispecific ADC; Regulatory Changes and Updates, page 99. Credit: www.neokbio.com

Fujifilm invested in VALANX Biotech to advance site-specific ADC manufacturing technologies [2]

Fujifilm announced a strategic investment in VALANX Biotech to strengthen its ADC CDMO capabilities through access to site-specific conjugation technologies. VALANX's Golden Site™ Technology incorporates synthetic amino acids into antibodies to enable precise control of conjugation sites and DAR, supporting improved ADC uniformity and stability. The collaboration aligns with Fujifilm's strategy to expand end-to-end ADC manufacturing services, including antibody, linker, payload, conjugation, and formulation capabilities across its group companies. Fujifilm plans to launch integrated ADC manufacturing services in Japan by 2027. The investment was made through Fujifilm's corporate venture capital activities to support adoption of advanced bioconjugation technologies.

Novartis completed $12B acquisition of Avidity Biosciences to expand RNA therapeutics portfolio [3]

Novartis announced the completion of its acquisition of Avidity Biosciences, making the company an indirect wholly owned subsidiary. The transaction, originally announced in October 2025, provides Novartis with Avidity's Antibody Oligonucleotide Conjugate (AOC™) platform and associated neuromuscular disease pipeline. Under the terms of the merger, Avidity shareholders received $72/share in cash, valuing the company at approximately $12B on a fully diluted basis and an enterprise value of approximately $11B. Following the transaction, Avidity's shares ceased trading on the Nasdaq Stock Market. The acquisition adds muscle-targeted AOC therapeutics and late-stage programs for genetic neuromuscular diseases to Novartis' RNA therapeutics portfolio.

Earendil Labs and WuXi XDC announced strategic collaboration for AI-enabled development of next-generation ADCs [4]

Earendil Labs and WuXi XDC announced a strategic collaboration to develop next-generation ADCs by combining Earendil's AI-driven antibody discovery platform with WuXi XDC's WuXiTecan-2 payload-linker technology. Under the agreement, WuXi XDC granted Earendil Labs an exclusive global license to the WuXiTecan-2 platform for multiple targets, enabling conjugation of antibodies and bispecific antibodies identified through Earendil's AI platform. The collaboration has a potential value of up to $885M, including upfront, development, regulatory, and sales milestone payments, along with tiered royalties on future product sales. WuXi XDC will provide CMC development and manufacturing through its CRDMO platform, while Earendil Labs will lead product development, regulatory submissions, and commercialization of resulting ADC candidates.

Affibody signs Lu-177 supply agreement with SHINE to support radioligand therapy development [5]

Affibody AB announced a Letter of Intent with SHINE Technologies to

secure supply of non-carrier-added lutetium-177 (Lu-177) for its radioligand therapy (RLT) programs. Under the agreement, SHINE will provide Lu-177 to support clinical research and development, including Affibody's lead candidate ABY-271, a Lu-177-conjugated HER2-targeting Affibody® molecule currently being evaluated in a Phase 1 trial for metastatic breast cancer. The collaboration may also extend to commercial supply if ABY-271 advances toward market approval. The arrangement strengthens isotope supply infrastructure for Affibody's RLT pipeline, which leverages engineered Affibody molecules to deliver targeted radiation to tumors across multiple oncology indications.

BostonGene and Daiichi Sankyo collaborate to apply AI modeling to ADC clinical development [6]

BostonGene announced a strategic collaboration with Daiichi Sankyo to integrate AI–driven translational analysis into the development of an ADC program. BostonGene's platform uses large-scale multiomic and histopathologic datasets to generate digital twin models of tumor and immune biology, enabling identification of molecular signatures associated with treatment response. The collaboration aims to move beyond conventional exploratory biomarker analysis by providing data-driven insights to guide patient selection strategies, development prioritization, and clinical positioning of the ADC candidate. By analyzing responder and non-responder profiles and mapping resistance pathways within the TME, the approach is intended to support improved trial design and more precise targeting of patient subgroups in oncology clinical development.

Gyre Therapeutics agreed to acquire Cullgen in $300M deal to expand targeted protein degrader and DAC pipeline; Regulatory Changes and Updates, page 50.
Credit: www.gyretx.com

REGULATORY CHANGES AND UPDATES

Enhertu received FDA Priority Review for post-neoadjuvant treatment of HER2-positive early breast cancer [7]

Daiichi Sankyo and AstraZeneca announced that the FDA granted Priority Review to a supplemental BLA for Enhertu (trastuzumab deruxtecan) as a post-neoadjuvant treatment for patients with HER2-positive early breast cancer with residual invasive disease. The application is based on the Phase 3 DESTINY-Breast05 trial, in which Enhertu reduced the risk of invasive disease recurrence or death by 53% compared with trastuzumab emtansine (hazard ratio 0.47; p<0.0001), with a three-year invasive disease-free survival rate of 92.4% versus 83.7%. The application is being reviewed under Project Orbis, with a Prescription Drug User Fee Act target action date of July 7, 2026.

FDA cleared IND for NEOK Bio's bispecific ADC [8]

NEOK Bio announced that the FDA cleared the IND application for NEOK002, a bispecific ADC targeting epidermal growth factor receptor (EGFR) and mucin 1 (MUC1) for the treatment of solid tumors expressing these targets. The clearance enables initiation of a Phase 1 clinical study to evaluate safety and preliminary activity in patients with EGFR- and MUC1-positive cancers. NEOK002 is designed to improve selectivity and internalization through dual-target engagement, with the aim of enhancing therapeutic window and reducing off-target toxicity compared with monovalent ADC approaches. The program represents the company's second ADC to enter clinical development in 2026, following the recent IND clearance of NEOK001, a bispecific B7-H3/ROR1-targeting ADC.

CanSino Biologics receives China approval to expand indication for Menhycia meningococcal conjugate vaccine [9]

CanSino Biologics announced that China's National Medical Products Administration (NMPA) approved a supplemental application expanding the indicated population for its ACYW135 meningococcal conjugate vaccine (CRM197), Menhycia®. The vaccine is now approved for use in infants and children aged three months to six years, protecting *Neisseria meningitidis* serogroups A, C, Y, and W135. The approval broadens protection in

pediatric populations at high risk for meningococcal meningitis. The expanded indication also addresses evolving epidemiology in China, where circulating serogroups have diversified beyond A and C to include Y and W strains, increasing demand for broader-spectrum conjugate vaccines in national immunization programs.

EMA validates Type II variation for Enhertu in HER2-positive breast cancer with residual disease [10]

The European Medicines Agency (EMA) has validated a Type II variation application for Enhertu as monotherapy for adults with HER2-positive breast cancer who have residual invasive disease following neoadjuvant HER2-targeted therapy. Validation confirms the application is complete and initiates review by the EMA's Committee for Medicinal Products for Human Use (CHMP). The submission is based on results from the Phase 3 DESTINY-Breast05 trial, where Enhertu demonstrated a statistically significant improvement in invasive disease-free survival compared with trastuzumab emtansine (T-DM1). If approved, the therapy could provide an additional post-neoadjuvant treatment option aimed at reducing recurrence risk and preventing progression to metastatic disease in patients with residual HER2-positive breast cancer.

Henlius initiated Phase 2/3 trial of PD-L1-targeting ADC in squamous non-small cell lung cancer; Research and Development Highlights, page 102. Credit: www.indiamart.com

MARKET TRENDS

ADC Therapeutics reported 2025 financial results and outlined commercial and clinical outlook for ZYNLONTA® [11]

ADC Therapeutics reported 2025 financial results, with net product revenues of $73.6M for the full year compared to $69.3M in 2024, reflecting stable demand for ZYNLONTA®, a CD19-directed ADC. Cash and cash equivalents increased to $261.3M, supported by $150.8M in PIPE financings, providing a projected runway into 2028. Net loss decreased to $142.6M from $157.8M in 2024, driven by reduced operating expenses. The company highlighted upcoming clinical milestones, including anticipated Phase 3 LOTIS-5 data in 2Q 2026, which may support a supplemental BLA and potential label expansion.

Decoy Therapeutics implemented 1-for-12 reverse stock split to maintain Nasdaq listing compliance [12]

Decoy Therapeutics, a preclinical-stage biopharmaceutical company engineering the next generation of peptide conjugate therapeutics, announced a 1-for-12 reverse stock split of its common stock to regain compliance with the Nasdaq Capital Market's $1 minimum bid price requirement. The split became effective March 06, 2026, with trading on a split-adjusted basis beginning March 09, 2026, under a new CUSIP number. Following the adjustment, the number of outstanding shares was reduced from approximately 6.38M to about 532,000. The reverse split was approved by stockholders at a February 24, 2026, meeting and subsequently authorized by the company's board.

Gyre Therapeutics agreed to acquire Cullgen in $300M deal to expand targeted protein degrader and DAC pipeline [13]

Gyre Therapeutics announced an agreement to acquire Cullgen in an all-stock transaction valued at approximately $300M. Following completion, Cullgen will become a wholly owned subsidiary of Gyre, forming an integrated biopharmaceutical company with operations in the US and China spanning discovery, manufacturing, and commercialization. Cullgen brings capabilities in targeted protein degrader and degrader-antibody conjugate (DAC) discovery and development, including clinical- and preclinical-stage programs. Gyre currently markets ETUARY® in China for lung fibrosis and is advancing Hydronidone (F351) for liver fibrosis toward an NDA submission in China. The companies expect the acquisition to expand Gyre's therapeutic pipeline across inflammatory diseases, cancers, and pain. The transaction is expected to close in the second quarter of 2026, subject to regulatory approvals.

ADC Therapeutics amends royalty agreement with HealthCare Royalty for ZYNLONTA [14]

ADC Therapeutics announced an amendment to its royalty purchase agreement with entities managed by HealthCare Royalty related to sales of the CD19-directed ADC ZYNLONTA (loncastuximab tesirine). The revised agreement reduces the potential change-of-control payment from $750M to $150M through the end of 2027 and $200M thereafter, providing the company with increased strategic flexibility. In exchange, HealthCare Royalty received warrants to purchase approximately 9.8M ADC Therapeutics shares at an exercise price of $3.81 per share, exercisable through 2030. ADC Therapeutics expects additional clinical data readouts that could support expanded indications and potential peak US sales of up to $1B annually.

Physiomics reports higher revenue and new ADC modelling contract in the half-year results [15]

Physiomics reported unaudited financial results for the 6 months ending December 31, 2025, with total income rising 51% year-on-year to £528k and revenue increasing to £498k. The company recorded an operating loss of £327k, reflecting expanded staffing and temporary reliance on external contractors during team growth. Cash and cash equivalents stood at £257k at period end. Operationally, Physiomics secured eleven new contracts across its modelling and simulation and newly launched biometrics service lines. Post-period, the company announced a modelling and simulation contract with a South Korea-based biopharmaceutical client supporting the development of ADC and immuno-oncology programs. The company also expanded its biometrics capabilities and continued development of personalized dosing software integrated with the DoseMeRx platform.

Global oncology clinical trials market projected to grow to $23B by 2033 [16]

A recent industry analysis from Astute Analytica estimates the global oncology clinical trials market reaching ~$23.1B by 2033 as investment in precision oncology accelerates. ADCs represent one of the fastest-growing modalities in oncology, with more than 180 ADCs currently in clinical development and approximately 80% targeting solid tumors. The probability of technical success for ADCs in Phase 3 trials has increased to roughly 53%, compared with an estimated 35% industry average for conventional chemotherapy. Radiopharmaceuticals are also expanding rapidly following the commercial success of therapies such as lutetium-177–based radioligands.

RESEARCH AND DEVELOPMENT HIGHLIGHTS

Daiichi Sankyo submitted supplement NDA in Japan for Enhertu as adjuvant therapy in HER2-positive breast cancer [17]

Daiichi Sankyo submitted a supplemental NDA to Japan's Ministry of Health, Labour and Welfare for Enhertu as an adjuvant treatment for patients with HER2-positive breast cancer with residual invasive disease following neoadjuvant therapy. The submission is based on results from the Phase 3 DESTINY-Breast05 trial, which enrolled 1,635 patients globally and compared Enhertu (5.4 mg/kg) with trastuzumab emtansine. Enhertu demonstrated a 53% reduction in the risk of invasive disease recurrence or death and a statistically significant improvement in invasive disease-free survival. Regulatory submissions based on DESTINY-Breast05 are also under review in other regions.

CLINICAL TRIALS AND RESEARCH

Avacta Therapeutics initiated Phase 1 trial of FAP-activated peptide drug conjugate AVA6103[18]

Avacta Therapeutics announced the opening of a Phase 1 trial evaluating AVA6103 (FAP-Exd), a fibroblast activation protein (FAP)-activated peptide-drug conjugate delivering an exatecan payload, in patients with advanced solid tumors. The dose-escalation Phase 1a study will assess safety, pharmacokinetics, and preliminary efficacy across indications, including pancreatic, gastric, cervical, vulvar, and small cell lung cancers (SCLC). The trial includes parallel dosing schedules administered every two or three weeks to determine an optimal regimen for further development. Initial sites have been activated in the US, with first patient enrollment expected by

the end of March 2026 and preliminary safety and pharmacokinetic data anticipated in the second half of 2026.

CytomX Therapeutics reported Phase 1 expansion data for EpCAM-targeting ADC varsetatug masetecan in metastatic colorectal cancer [19]

CytomX Therapeutics reported Phase 1 expansion data for varsetatug masetecan (Varseta-M), a masked EpCAM-targeting ADC with a topoisomerase 1 (Topo 1) inhibitor payload, in late-line metastatic colorectal cancer. Among 56 efficacy-evaluable patients treated at doses of 7.2–10 mg/kg, confirmed overall response rates reached 20% at 8.6 mg/kg and 32% at 10 mg/kg, with median progression-free survival of 6.8 and 7.1 months, respectively. Disease control rates ranged from 84–90%. The safety profile was consistent with prior data, with manageable adverse events and no interstitial lung disease observed. Dose optimization at 8.6 and 10 mg/kg is ongoing, with plans to align with the FDA on a potential registrational study and to evaluate combination regimens.

Henlius initiated Phase 2/3 trial of PD-L1-targeting ADC in squamous non-small cell lung cancer [20]

Shanghai Henlius Biotech announced the initiation of a multi-regional Phase 2/3 clinical trial (HLX43-NSCLC302) evaluating HLX43, a PD-L1-targeting ADC, in patients with advanced or metastatic squamous non-SCLC (NSCLC) in the US. The study is designed to transition into a pivotal Phase 3 stage following Phase 2 completion and regulatory discussions. HLX43 combines immune checkpoint blockade with cytotoxic payload delivery and has demonstrated preliminary activity in prior studies, including an objective response rate of 40.0% and disease control rate of 73.3% at 2.0 mg/kg in later-line sqNSCLC. The program is part of a broader clinical development effort spanning multiple solid tumors, with ongoing evaluation of combination strategies including anti-EGFR antibodies and anti-PD-1 therapies.

Intensity Therapeutics reported interim data and protocol amendment for INVINCIBLE-4 study of intratumoral conjugate INT230–6 [21]

Intensity Therapeutics provided an update on the Phase 2 INVINCIBLE-4 study evaluating INT230–6, a non-covalently conjugated intratumoral therapy combining cisplatin and vinblastine, in triple-negative breast cancer (TNBC). Enrollment was paused due to skin irritation events, and a protocol amendment has been submitted to resume dosing with reduced injection volume. Among 14 patients treated, preliminary data showed a pathological complete response rate of 71.4% in patients receiving INT230–6 plus standard of care compared with 33% with standard therapy alone. Safety observations indicated fewer grade ≥3 adverse events in the combination cohort. The study is ongoing, with up to 61 patients planned, and further data are expected to be presented at a future conference.

Dyne Therapeutics initiated Phase 3 HARMONIA trial of antibody–oligonucleotide conjugate z-basivarsen in myotonic dystrophy type 1 [22]

Dyne Therapeutics announced initiation of the global Phase 3 HARMONIA trial evaluating z-basivarsen, an AOC, in approximately 150 patients with myotonic

HUTCHMED initiated first-in-human Phase 1/2a trial of EGFR-targeted antibody-targeted therapy conjugate; **Research and Development Highlights**, page 103.
Credit: https://whambrands.com

dystrophy type 1 (DM1). The randomized, placebo-controlled, double-blind study will assess efficacy, safety, and tolerability of intravenous dosing at 6.8 mg/kg every eight weeks over 48 weeks. The primary endpoint is the change from baseline in the five-times sit-to-stand test at week 49, with secondary endpoints including video hand opening time and functional and patient-reported outcomes. Z-basivarsen comprises an antisense oligonucleotide conjugated to a transferrin receptor 1-targeting antibody fragment to enable delivery to muscle and central nervous system tissues. The trial is intended to support confirmatory evidence for potential conversion from accelerated to full regulatory approval.

NextCure provided clinical updates on CDH6- and B7-H4-targeting ADC programs in Phase 1 development [23]

NextCure reported progress across its ADC pipeline, including SIM0505, a cadherin-6 (CDH6)-targeting ADC with a Topo 1 inhibitor payload, currently in a Phase 1 dose-escalation study (NCT06792552) for advanced solid tumors, with a focus on platinum-resistant ovarian cancer. Dose-escalation data are expected in the second quarter of 2026, alongside plans to initiate a dose-optimization study and expand trial sites globally. The company also reported ongoing enrollment in a Phase 1 study of LNCB74, a B7-H4-targeting ADC incorporating a cleavable linker and monomethyl auristatin E (MMAE) payload, with higher dose cohorts now enrolling. Both programs are designed to target tumor-associated antigens with limited expression in healthy tissues to improve therapeutic window and antitumor activity.

Tangram Therapeutics initiated Phase 1/2 trial of GalNAc-siRNA for metabolic dysfunction-associated steatohepatitis [24]

Tangram Therapeutics announced the first participant dosed in the Phase 1/2 RESTORE-MASH trial evaluating TGM-312, a GalNAc-conjugated small interfering RNA (siRNA) therapeutic, in healthy volunteers and individuals with metabolic dysfunction-associated steatohepatitis (MASH). TGM-312 is designed to silence a liver-expressed gene target in hepatocytes and represents the first clinical-stage candidate from the company's GalOmic platform. The study will assess safety, tolerability, and PK/PD, with MASH cohorts incorporating liver biopsy, imaging, and biomarker analyses. TGM-312 is administered via subcutaneous injection and is being investigated as a potential quarterly therapy. Initial safety data from the trial are expected in the second half of 2026.

NeOnc Phase 1 dose-escalation study of bioconjugated temozolomide NEO212 established recommended Phase 2 dose [25]

NeOnc Technologies reported results from the dose-escalation portion of the Phase 1/2 NEO212–01 trial evaluating NEO212, an oral bioconjugated therapy combining temozolomide with perillyl alcohol, for central nervous system cancers. The Phase 1 study reached the maximum tolerated dose at 810 mg following dose-limiting toxicities, establishing a recommended Phase 2 dose of 610 mg in a 28-day cycle. Early signals of antitumor activity were observed in heavily pretreated patients with recurrent glioblastoma and brain metastases during the safety phase. NEO212 is designed to overcome O6-methylguanine-DNA methyltransferase-mediated resistance associated with standard temozolomide therapy. The trial will now proceed to Phase 2 expansion cohorts to further evaluate efficacy, and the company plans to engage the FDA to discuss development plans and a potential accelerated approval pathway.

HUTCHMED initiated first-in-human Phase 1/2a trial of EGFR-targeted antibody-targeted therapy conjugate [26]

HUTCHMED announced initiation of a first-in-human Phase 1/2a clinical trial (NCT07396584) evaluating HMPL-A580, an EGFR-targeted Antibody-Targeted Therapy Conjugate (ATTC), in patients with unresectable, advanced, or metastatic solid tumors in China and the US. HMPL-A580 comprises an anti-EGFR antibody linked via a cleavable linker to a selective PI3K/PIKK small-molecule inhibitor payload. The open-label, multicenter study will assess safety, tolerability, pharmacokinetics, immunogenicity, and preliminary efficacy. The Phase 1 dose-escalation stage aims to determine the maximum tolerated dose and recommended expansion dose, followed by a Phase 2a expansion phase to further evaluate safety and

Alume Biosciences Phase 3 trials of fluorescent peptide–dye conjugate reported positive results for intraoperative nerve visualization; Research and Development Highlights, page 104. Credit: www.istockphoto.com

antitumor activity in selected solid tumors. HMPL-A580 represents the company's second program developed using its ATTC platform.

Alligator reports Phase 2/3 trial has been initiated, evaluating HLX87 ADC combination therapy in HER2-positive breast cancer [27]

Alligator Bioscience reported that Shanghai Henlius Biotech has dosed the first patient in a Phase 2/3 clinical trial (NCT07294508) evaluating HLX22 in combination with HLX87, a HER2-targeting ADC, for first-line treatment of patients with HER2-positive recurrent or metastatic breast cancer in Mainland China. HLX22 is an anti-HER2 monoclonal antibody licensed by Henlius from AbClon and is being investigated across multiple indications. The study assesses the combination regimen as a first-line therapy in advanced disease. Under an existing agreement with AbClon, Alligator Bioscience is entitled to 35% of AbClon's revenues generated from its sublicense to Henlius, including potential milestone payments and royalties if the program is successfully developed and commercialized.

Phase 3 EV-304 trial reported improved event-free survival with enfortumab vedotin plus pembrolizumab in muscle-invasive bladder cancer [28]

Astellas and Pfizer reported Phase 3 results from the EV-304 (KEYNOTE-B15) trial evaluating the Nectin-4–targeting ADC enfortumab vedotin (PADCEV™) in combination with pembrolizumab as perioperative treatment for cisplatin-eligible muscle-invasive bladder cancer. The regimen reduced the risk of tumor recurrence, progression, or death by 47% compared with standard neoadjuvant gemcitabine plus cisplatin chemotherapy. Two-year event-free survival was 79.4% with the combination versus 66.2% with chemotherapy. The study also showed a 35% reduction in risk of death and a pathological complete response rate of 55.8% versus 32.5% with chemotherapy. Results were presented at the American Society of Clinical Oncology Genitourinary Cancers Symposium and will inform regulatory discussions.

Alume Biosciences Phase 3 trials of fluorescent peptide–dye conjugate reported positive results for intraoperative nerve visualization [29]

Alume Biosciences reported topline results from three concurrent Phase 3 registrational trials evaluating bevonescein (ALM-488), a fluorescent peptide–dye conjugate designed for real-time nerve visualization during surgery. In patients undergoing head and neck surgery, two studies met both co-primary endpoints of nerve conspicuity and nerve length measurement, while the third met one co-primary endpoint. A key secondary endpoint assessing nerve branching delineation showed statistically significant improvement across all trials. Safety findings were favorable, and a thorough QT study reported no cardiac safety concerns at doses up to 1,000mg. Bevonescein is designed for use with fluorescence-enabled surgical visualization systems to improve intraoperative identification of vulnerable nerves. The company plans to submit an NDA to the FDA in the second half of 2026.

Phase 3 trial of EGFR×HER3 bispecific ADC reported positive interim results in TNB [30]

SystImmune and Bristol Myers Squibb reported positive topline results from a pre-specified interim analysis of the Phase 3 BL-B01D1–307 study evaluating

izalontamab brengitecan (iza-bren), an EGFR×HER3 bispecific ADC, in patients with unresectable locally advanced or metastatic TNBC whose disease progressed following prior taxane therapy. The study met its dual primary endpoints, demonstrating statistically significant improvements in progression-free survival and overall survival compared with physician's choice chemotherapy. The randomized, open-label, multi-center trial was conducted in China and sponsored by Sichuan Biokin Pharmaceutical Co., Ltd., SystImmune's parent company. Iza-bren is jointly developed by SystImmune and Bristol Myers Squibb outside China and delivers a Topo 1 inhibitor payload following antibody-mediated internalization. Data from the study are expected to be presented at a future medical meeting.

Kivu Bioscience presented preclinical data for CEACAM5-targeted ADC KIVU-305 and initiated a Phase 1 clinical trial [31]

Kivu Bioscience presented preclinical data for KIVU-305, a CEACAM5-targeted ADC, at World ADC London 2026 and announced Human Research Ethics Committee approval and Clinical Trial Notification clearance in Australia to initiate a first-in-human Phase 1 study. KIVU-305 comprises a humanized antibody conjugated using GlycoConnect® technology to a HydraSpace®-linked SYNtecan E™ topoisomerase inhibitor payload and incorporates an Fc-silenced antibody with a DAR of four. Preclinical studies showed selective nanomolar binding to CEACAM5-positive tumor cells, target-dependent cytotoxicity with bystander activity, and anti-tumor efficacy in cell-line and patient-derived xenograft models, including chemotherapy-resistant tumors. Favorable pharmacokinetics, high plasma stability, low free payload levels, and tolerability in non-human primates supported advancement into clinical evaluation in patients with advanced CEACAM5-expressing solid tumors.

IDEAYA Biosciences enrolls first patient in Phase 1 trial of bispecific ADC IDE034 [32]

IDEAYA Biosciences has enrolled the first patient in a Phase 1 dose escalation and expansion study evaluating IDE034, a PTK7/B7H3 bispecific ADC carrying a Topo 1 inhibitor payload. The trial will assess the safety, tolerability, and pharmacokinetics of IDE034 as a monotherapy. IDEAYA also plans to evaluate the ADC in combination with DNA damage response pathway inhibitors, including its proprietary poly(ADP-ribose) glycohydrolase (PARG) inhibitor IDE161. IDE034 is designed to be internalized when PTK7 and B7H3 are co-expressed on the same tumor cell, which may improve selectivity. Dosing of the first patient triggered a $5M milestone payment to Biocytogen under the companies' Option and License Agreement.

AtomVie Global Radiopharma supports first patient dosing in Radiopharm Theranostics' Phase 1/2a trial of 177Lu-BetaBart [33]

AtomVie Global Radiopharma announced that it supported the first patient dosing in Radiopharm Theranostics' Phase 1/2a clinical trial of 177Lu-BetaBart (RV-01) by providing GMP manufacturing and distribution services for the radiotherapeutic. The candidate is a lutetium-177–conjugated monoclonal antibody targeting the 4Ig isoform of B7-H3, an immune checkpoint protein overexpressed in multiple solid tumors. The first-in-human study is designed as a dose-escalation and expansion trial evaluating safety, biodistribution, pharmacokinetics, radiation dosimetry, and preliminary anti-tumor activity while establishing a recommended dose for future studies. The trial plans to enroll 61 patients with a range of advanced solid tumors, including prostate, colorectal, lung, ovarian, and TNBC.

Avidity publishes Phase 1/2 MARINA data for antibody-oligonucleotide conjugate therapy [34]

Avidity Biosciences publishes final results from the Phase 1/2 MARINA trial evaluating delpacibart etedesiran (del-desiran), an AOC, in DM1. Del-desiran is designed to reduce toxic DMPK mRNA, the underlying genetic driver of DM1 pathology. In the randomized, placebo-controlled study of 38 participants, treatment resulted in approximately 40% mean reduction of DMPK mRNA in muscle tissue and improvements in RNA splicing across key muscle-related genes. Exploratory functional measures showed improvements in myotonia, muscle strength, mobility, and activities of daily living. The therapy demonstrated an acceptable safety profile, with most adverse events mild or moderate. Del-desiran is currently being

evaluated in the global Phase 3 HARBOR trial, with topline results expected in the second half of 2026.

IDEAYA advances DLL3 ADC and initiates clinical development of B7H3 PTK7 bispecific ADC following financial update [35]

IDEAYA Biosciences reported pipeline and financial updates for the fourth quarter and full year 2025, highlighting progress across its precision oncology portfolio, including multiple ADC programs. The company plans to provide a clinical data update from the ongoing Phase 1 study of IDE849, a DLL3-targeted Topo 1 ADC, and aims to initiate a registrational monotherapy trial in second-line or refractory SCLC or neuroendocrine carcinoma by the end of 2026. IDEAYA also received FDA IND clearance for IDE034, a B7H3/PTK7 bispecific Topo 1 ADC, with first patient dosing in a Phase 1 dose-escalation trial expected in the first quarter of 2026. The company reported approximately $1.05B in cash and marketable securities as of December 31, 2025, supporting continued clinical development across its pipeline.

TOOLS AND TECHNOLOGIES

Piramal Pharma Solutions completed 1,500th ADC manufacturing batch at Grangemouth facility [36]

Piramal Pharma Solutions announced completion of its 1,500th ADC batch at its bioconjugate development and manufacturing facility in Grangemouth, UK, including a commercial oncology ADC batch. The milestone reflects the company's integrated ADC capabilities spanning proof-of-concept, clinical, and commercial-scale manufacturing. The site supports Piramal's ADCelerate™ program, which is designed to streamline early-phase development through coordinated technology transfer and manufacturing across its global network. The facility has produced hundreds of unique bioconjugates and operates under regulatory accreditations, including the FDA and UK MHRA. This milestone highlights continued expansion of manufacturing capacity and technical expertise to support development and commercialization of ADC therapeutics.

Huonslab presented preclinical data on hyaluronidase platform enabling subcutaneous delivery of ADCs [37]

Huonslab reported preclinical data on its HyDIFFUZE™ recombinant human hyaluronidase platform, demonstrating enhanced subcutaneous delivery of monoclonal antibodies and ADCs at the 2026 American Society for Clinical Pharmacology and Therapeutics meeting. Pharmacokinetic studies in rats across 11 antibodies and three ADCs showed that HyDIFFUZE increased area under the curve by 116–162% and maximum plasma concentration by 113–170% compared with standard formulations. Comparable exposure was maintained even with approximately 25% dose reduction. The platform is designed to improve drug dispersion and enable subcutaneous administration across biologics.

Piramal Pharma Solutions completed 1,500th ADC manufacturing batch at Grangemouth facility; **Tools and Technololgies, page 106.**
Credit: www.piramalpharmasolutions.com

Cellectar expands global patent estate covering phospholipid drug conjugate platform and radiotherapeutics [38]

Cellectar Biosciences announced an expansion of its global intellectual property (IP) portfolio covering its phospholipid-drug conjugate platform and related radiotherapeutic programs. Newly issued patents protect therapeutic and imaging applications of ether and alkyl phospholipid compounds, including the iodine-131 radioconjugate iopofosine I 131 and the iodine-125 Auger-emitting program CLR 125. Additional patents cover fractionated dosing regimens for iopofosine I 131 in oncology. The strengthened IP estate comes ahead of the company's planned third-quarter 2026 filing with the EMA for conditional marketing authorization of iopofosine I 131 in Waldenström macroglobulinemia. The platform enables targeted delivery of radioisotopes and cytotoxic payloads to cancer cells.

CONFERENCES, EVENTS, AND PUBLICATIONS

Wave Life Sciences announced late-breaking presentation of RNA editing therapy WVE-006 clinical data [39]

Wave Life Sciences announced that data from the ongoing RestorAATion-2 clinical trial evaluating WVE-006 will be presented as a late-breaking oral presentation at the American Thoracic Society International Conference in May 2026. WVE-006 is a GalNAc-conjugated RNA editing oligonucleotide designed to correct the mutant transcript responsible for alpha-1 antitrypsin deficiency (AATD). The presentation is expected to include data from the 400 mg multidose cohort and the 600 mg single-dose cohort of the trial. The RestorAATion-2 study is evaluating safety and pharmacologic activity of the candidate in patients with AATD. Wave is also advancing regulatory engagement regarding a potential accelerated approval pathway for WVE-006, with feedback from regulators anticipated in mid-2026.

Avidity Biosciences announced presentation of AOC clinical and preclinical data at the 2026 Muscular Dystrophy Association Clinical & Scientific Conference [40]

Avidity Biosciences announced one oral and six poster presentations at the 2026 Muscular Dystrophy Association Clinical & Scientific Conference, highlighting data from its AOC programs for neuromuscular diseases. The oral presentation will report one-year results from the Phase 1/2 EXPLORE44 trial of delpacibart zotadirsen in individuals with Duchenne muscular dystrophy amenable to exon 44 skipping (DMD44), including near normalization of creatine kinase levels and improvements in functional outcomes. Additional posters will present analyses from the EXPLORE44 program, the design of the Phase 3 SAFARI44 trial evaluating del-zota in DMD44, and studies related to myotonic dystrophy type 1 and facioscapulohumeral muscular dystrophy.

ARTHEx Biotech publishes preclinical data supporting ATX-01 microRNA therapy for DM1 [41]

ARTHEx Biotech has published new research in *The American Journal of Human Genetics* describing the development of ATX-01, a lipid-conjugated antisense oligonucleotide designed to inhibit microRNA-23b (miR-23b) for the treatment of DM1. The study highlights the use of oleic acid conjugation to enhance delivery of the anti-miR compound to skeletal muscle, addressing a major challenge in oligonucleotide therapeutics for neuromuscular disorders. In preclinical models, the conjugated molecule demonstrated improved pharmacokinetics and biodistribution, enabling suppression of miR-23b, restoration of MBNL1 protein expression, and correction of disease-associated RNA splicing defects. The work underscores the role of lipid conjugation strategies in improving tissue targeting and therapeutic activity of RNA-based medicines.

Promatix Biosciences presents preclinical data for EGFR/EphA2 bispecific ADC PBS293-MMAE [42]

Promatix Biosciences presented preclinical data at the 16th World ADC London Summit for PBS293-MMAE, a cis-bispecific ADC targeting EGFR and EphA2 for colorectal cancer. The candidate was developed using Promatix's proteomics-based discovery platform, which identifies tumor-selective antigen pairs to enable 'AND-gate' targeting through hybrid avidity, requiring simultaneous binding to both antigens on the same cell. Preclinical studies

demonstrated strong co-expression of EGFR and EphA2 in colorectal cancer models and confirmed dual-antigen–dependent binding, internalization, and cytotoxic activity. In xenograft models, PBS293-MMAE showed significantly greater tumor growth inhibition compared with cetuximab-MMAE and exhibited reduced cytotoxicity in normal keratinocytes, suggesting improved tumor selectivity. The program represents a first-in-class bispecific ADC approach designed to expand therapeutic targeting in colorectal cancer.

Bioconjugate Insights' Comissioning Editor Lauren Coyle has extensive experience in bioconjugation (i.e., ADCs, conjugate chemistry, diagnostics and imaging, bi/multi-specifics, targeted delivery, and theranostics). Lauren's focus is on advancing the field by facilitating and disseminating high-impact research on conjugation technologies and their applications. Lauren works closely with researchers, scientists, and industry professionals to publish cutting-edge studies exploring the latest advances in conjugation chemistry, drug delivery systems, and the development and delivery of targeted therapeutics. In addition to her editorial responsibilities, she maintains a strong network within the biopharma industry, staying up to date with emerging trends and breakthroughs in bioconjugation.

Kyntra Bio to present Phase 1b/2 data for CD46-targeted ADC FG-3246 at ASCO GU 2026 [43]

Kyntra Bio announced that results from an investigator-sponsored Phase 1b/2 study evaluating the CD46-targeted ADC FG-3246 in combination with enzalutamide in metastatic castration-resistant prostate cancer (mCRPC) will be presented at the 2026 ASCO Genitourinary Cancers Symposium. In the study of 44 patients with progressive mCRPC, the combination demonstrated a composite response rate of 21% overall and 40% in patients previously treated with only one androgen receptor pathway inhibitor (ARPI). Median radiographic progression-free survival was 7.0 months in the overall cohort and 10.1 months in patients with one prior ARPI. The ADC targets CD46, which is highly expressed in prostate tumors, and is conjugated to the cytotoxic payload MMAE. A companion CD46-targeted PET imaging agent, FG-3180, is also being evaluated as a biomarker for patient selection.

OKYO Pharma to present Phase 2a data for lipid-conjugated peptide at ARVO 2026 [44]

OKYO Pharma announced that data from its Phase 2a proof-of-concept trial of urcosimod will be presented at the Association for Research in Vision and Ophthalmology 2026 Annual Meeting. Urcosimod is a lipid-conjugated chemerin peptide agonist targeting the ChemR23 receptor and is being developed as a non-opioid topical therapy for neuropathic corneal pain. In the first-in-human study, treatment resulted in clinically meaningful reductions in pain measured by the Visual Analogue Scale, improvements in patient quality-of-life metrics, and potential restoration of corneal nerve structure. The therapy demonstrated encouraging safety and efficacy signals in the Phase 2a trial. Urcosimod has received FDA Fast Track designation, and OKYO plans to initiate a larger multicenter Phase 2b/3 trial involving approximately 150 patients.

Radiance Biopharma presents RB-601 bispecific nano ADC at World ADC London [45]

Radiance Biopharma's CEO, Robert K. Brooks, presents at the 16th Annual World ADC London Conference on the company's lead program RB-601, a first-in-class c-MET/EGFR bispecific nano ADC. The candidate is designed to simultaneously target two oncogenic pathways frequently co-expressed in solid tumors such as NSCLC and colorectal cancer. Approximately half the molecular size of conventional ADCs, the nano-engineered construct is intended to improve tumor penetration, enhance payload delivery efficiency, and reduce systemic toxicity. RB-601 is currently being evaluated in a Phase 1/2 clinical trial in China, with plans to initiate US clinical studies in 2026 as part of the program's global development strategy.

Want to know more about the 16th Annual World ADC London Summit? You can read our Editors' Event Summary here.

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27. Alligator Bioscience. Alligator Bioscience comments on Henlius dosing first patient in Phase 2/3 breast cancer study of HLX22. Mar 02, 2026.
28. Astellas Pharma. PADCEV™ + Keytruda® Cuts Risk of Recurrence or Death by Nearly 50% in Cisplatin-Eligible Muscle-Invasive Bladder Cancer. Mar 01, 2026.
29. Alume Biosciences. Alume Delivers Positive Topline Results for Bevonescein, a Potential First-in-Class Surgical Nerve Visualization Drug. Feb 27, 2026.

30. Bristol Myer Squibb. SystImmune and Bristol Myers Squibb Highlight Positive Phase 3 Interim Topline Results for izalontamab brengitecan (Iza-bren) in Previously Treated Unresectable Locally Advanced or Metastatic Triple-Negative Breast Cancer. Feb 26, 2026.

31. Kivu Biosciences. Kivu Bioscience Presents KIVU-305 Preclinical Data at World ADC London 2026 and Advances into Phase 1 Clinical Trial. Feb 25, 2026.

32. IDEAYA Biosciences. IDEAYA Biosciences Announces First-Patient-In for Phase 1 Trial of IDE034, a Potential First-In-Class B7H3/PTK7 Bispecific TOP1 ADC. Feb 25, 2026.

33. AtomVie Global Radiopharma. AtomVie Global Radiopharma Supplies First Patient Dose in Radiopharm Theranostics' Phase 1/2a Clinical Study of 177Lu-BetaBart (RV-01). Feb 24, 2026.

34. Avidity Biosciences. The New England Journal of Medicine Publishes Results from Phase 1/2 MARINA® Trial of Delpacibart Etedesiran (del-desiran) for Treatment of Myotonic Dystrophy Type 1. Feb 18, 2026.

35. IDEAYA Biosciences. IDEAYA Biosciences Reports Fourth Quarter and Full Year 2025 Financial Results and Provides a Business Update. Feb 17, 2026.

36. Piramal Pharma Solutions. Piramal Pharma Solutions' Grangemouth, UK Facility Successfully Delivers 1,500th ADC Batch. Mar 16, 2026.

37. Huonslab. Huonslab Announces Applicable SC delivery for Antibodies and ADCs with 'HyDIFFUZE™ Platform'. Mar 05, 2026.

38. Cellectar. Cellectar Biosciences Expands Global Intellectual Property Estate. Feb 17, 2026.

39. Wave Life Science. Wave Life Sciences Announces Acceptance of Late-Breaking Oral Presentation on WVE-006 for Alpha-1 Antitrypsin Deficiency at the American Thoracic Society International Conference. Mar 05, 2026.

40. Avidity Biosciences. Avidity Biosciences Announces Multiple Upcoming Presentations at 2026 Muscular Dystrophy Association (MDA) Clinical & Scientific Conference.

41. ARTHEx Biotech. ARTHEx Biotech publishes preclinical data supporting ATX-01 microRNA therapy for myotonic dystrophy type 1. Feb 25, 2026.

42. Promatix Biosciences. Promatix Biosciences Presents Positive Preclinical Data with First-in-Class PBS293 EGFR×EphA2 Cis-Bispecific ADC Demonstrating Enhanced Tumour Selectivity. Feb 24, 2026.

43. Kyntra Bio. Kyntra Bio Announces Positive Data from the Investigator-Sponsored Phase 1b/2 Study of FG-3246 in Combination with Enzalutamide in Patients with Metastatic Castration Resistant Prostate Cancer to Be Presented at ASCO GU 2026. Feb 23, 2026.

44. OKYO Pharma. OKYO Abstract Selected for Presentation at Premier Global Ophthalmology Congress. Feb 23, 2026.

45. Radiance Biopharma. Radiance Biopharma showcases First-in-Class c-MET/EGFR bispecific Nano ADC at leading global ADC conference. Feb 20, 2026.