

FREE BIOSCITECH BiWeekly Newsletter

15 September 2026

***SELECTION
FROM THE PAST
TWO WEEKS***



***Hottest News In Biotech, BioResearch, Pharma, BioHealth
Highly Selected Research Papers & Patents
Best Recommended Events and Studentship.***



BIOTECH-PHARMA GLOBLE NEWS



Novartis remibrutinib, a high-efficacy oral BTK inhibitor, significantly reduces relapse rates and shows favorable safety profile in Phase III RMS trials

Novartis announced positive topline results from the twin Phase III REMODEL-1/-2 trials, where remibrutinib, its highly selective oral BTK inhibitor, significantly reduced relapse rates versus teriflunomide while showing favorable safety—including no liver safety signal. Approximately 2,000 adults with relapsing MS (RMS) were randomized 1:1 to remibrutinib 100 mg or teriflunomide.

<https://www.novartis.com/news/media-releases/novartis-remibrutinib-high-efficacy-oral-btk-inhibitor-significantly-reduces-relapse-rates-and-shows-favorable-safety-profile-phase-iii-rms-trials>



AbbVie closes its \$10.9 billion acquisition of Apogee Therapeutics

AbbVie just created two companies you've never heard of. That's how a \$10.9 billion deal actually closes. AbbVie paid \$135.11 per share in cash to acquire Apogee Therapeutics, closing September 3, 2026. The target had zero approved products. The price tag: \$10.9 billion, betting entirely on a single unproven IL-13 antibody called zumilokibart.

https://thepharmavanguard.com/news/abbvie-closes-10-9-billion-acquisition-of-apogee-therapeutics/?utm_source=linkedin&utm_medium=social&utm_campaign=li_37227



POSITIVE RESULTS: GSK-mRNA Flue Vaccine

Positive Results An important milestone in the space of seasonal Flu vaccine: GSK to advance mRNA based seasonal influenza vaccine into Phase 3. As the former Alliance Manager for the CureVac–GSK collaboration, I am proud to see the partnered program progress from preclinical development to late-stage clinical development—bringing us one step closer to reducing the burden of influenza.

<https://www.gsk.com/en-gb/media/press-releases/gsk-to-advance-mrna-seasonal-flu-vaccine-candidate-to-phase-iii-following-positive-phase-ii-data/>

BIOTECH-PHARMA GLOBLE NEWS



Isomorphic Labs Secures \$2.1 Billion

Isomorphic Labs secures \$2.1 Billion funding to scale its AI drug design engine

Isomorphic Labs will use the funding to power its world-leading AI drug design engine, scale its business globally and progress its drug candidate pipeline.

<https://www.isomorphiclabs.com/press/isomorphic-labs-funding>



FDA Approves First Drug to Treat Alexander Disease

New therapy is the first to directly target the underlying cause of this rare neurological disease The U.S. Food and Drug Administration has approved Zanvastro (zilganersen) injection for the treatment of Alexander disease in pediatric and adult patients. Zanvastro is the first FDA-approved treatment for Alexander disease and the first therapy to directly target the protein buildup that drives the disease.

<https://www.fda.gov/news-events/press-announcements/fda-approves-first-drug-treat-alexander-disease>

Bristol Myers Squibb Announces Positive Topline Results from Registrational Phase 2 QUINTESSENTIAL Trial of the Potential First-in-Class GPRC5D-Directed CAR T Cell Therapy,

Arlo-cel is a potential first-in-class autologous G protein-coupled receptor class C group 5 member D (GPRC5D)-directed CAR T cell therapy

<https://news.bms.com/news/details/2026/Bristol-Myers-Squibb-Announces-Positive-Topline-Results-from-Registrational-Phase-2-QUINTESSENTIAL-Trial-of-the-Potential-First-in-Class-GPRC5D-Directed-CAR-T-Cell-Therapy-Arlocabtagene-Autoleucel---/default.aspx>

BIOTECH-PHARMA GLOBLE NEWS



GSK has licensed ex-China rights to HUTCHMED's HMPL-A830, an experimental antibody conjugate that delivers a KRAS inhibitor to EGFR-expressing tumors, in a deal worth up to \$1.295 billion. The preclinical asset is expected to enter the clinic this year.

<https://www.biopharminternational.com/view/hutchmed-hmpl-a830-gsk-kras-egfr-deal>

CAR-T SAFETY CONCERN

Novartis, Bristol Myers pause autoimmune CAR-T trials due to safety concerns

The deaths of three study participants led Novartis to halt development of rap-cel in multiple indications, while “transient” side effects pushed Bristol Myers to pause its own program. Novartis and Bristol Myers Squibb have paused multiple trials evaluating their respective cell therapy programs against autoimmune conditions after observing inflammatory side effects in testing, the companies confirmed Monday afternoon.

<https://www.biopharmadive.com/news/novartis-bristol-myers-autoimmune-cell-therapy-trial-halt/829218/>

BioNTech Halts Phase 2 Trial of Individualized mRNA Cancer Vaccine Autogene Cevumeran in Colorectal Cancer

BioNTech announced it has terminated the Phase 2 BNT122-01 trial evaluating autogene cevumeran (BNT122/RO7198457) as an adjuvant monotherapy in patients with circulating tumor DNA (ctDNA)-positive, surgically resected Stage II (high risk) or Stage III colorectal cancer.¹ Autogene cevumeran is an individualized mRNA cancer immunotherapy jointly developed by BioNTech and Genentech, and the termination decision was made in consultation with Genentech.

<https://european-biotechnology.com/latest-news/biontech-cancer-vaccine-trial-halted-after-survival-imbalance/>



PATENTS WATCH



WO2026183142A2 disclosing anti-CD5-targeted LNPs carrying circRNA that encodes an anti-CD19 CAR for in-vivo T-cell programming and B-cell depletion.

Inventor: Orbital Therapeutics

WO2026178657A1 disclosing synthetic peptides that become more cationic and amphipathic at acidic pH to support cytosolic cargo delivery or LNP endosomal escape.

Inventor: Feldan Thérapeutiques

US20260258127A1 disclosing a HER2×CD3 bispecific chemically masked at selected CD3 CDR residues with a cleavable peptide and an approximately 20 kDa blocking group.

Inventor: Medical Technology (Guangdong) Co., Ltd

WO2026178861A1 disclosing sequence-defined DLL3 CAR-T cells equipped with optional PD-1 dominant-negative, PD-1 chimeric-switch or TGFβRII dominant-negative modules.

Inventor: Thinkingbiomed Technology (Beijing) Co Ltd

US20260256929A1 disclosing bicyclic enzyme-cleavable linker–payloads for exatecan hemiasterlin - and other protein conjugates.

Inventor: Sutro Biopharma, Inc

US20260248935A1 disclosing a branched conjugate precursor attaches two drug residues—identical or different—to one antibody-reactive unit, enabling antibody–multidrug conjugates.

Inventor: Sironax.

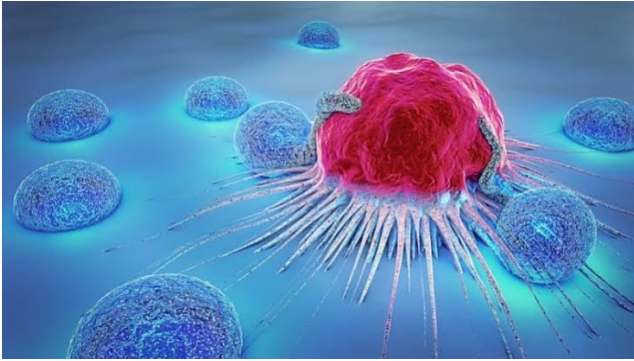
US20260241010A1 disclosing bicyclic peptide–PMO conjugates designed to improve intracellular and CNS delivery of splice-modulating oligonucleotides.

Inventor: Sarepta Therapeutics

US20260242801A1 disclosing quadricistronic CAR-NK constructs that combine tumour recognition with CCR7-mediated homing and additional cell-support functions.

Inventor: ImmunityBio, Inc

SELECTED PUBLICATIONS

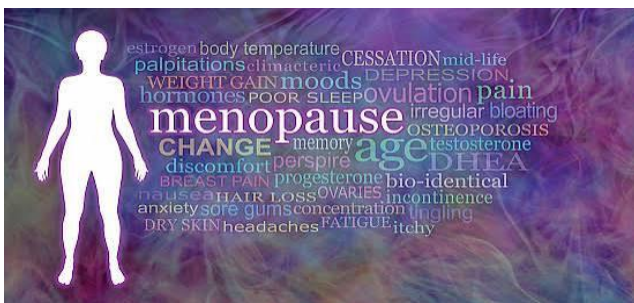


$\gamma\delta$ T cells and cancer

Bolini et al., 2026

<https://doi.org/10.1172/JCI209159>.

$\gamma\delta$ T cells are a unique type of lymphoid cell that play a crucial role in monitoring tissue health and responding to infections and cancer. Unlike $\alpha\beta$ T cells, $\gamma\delta$ T cells use a different TCR that often functions without MHC. They are mostly found in barrier tissues, acting as first responders to threats. There are three main types of human $\gamma\delta$ T cells: $V\gamma9+V\delta2+$ (most common), $V\delta1+$ (found in epithelial tissues), and $V\delta3+$ (rare with specific roles)..

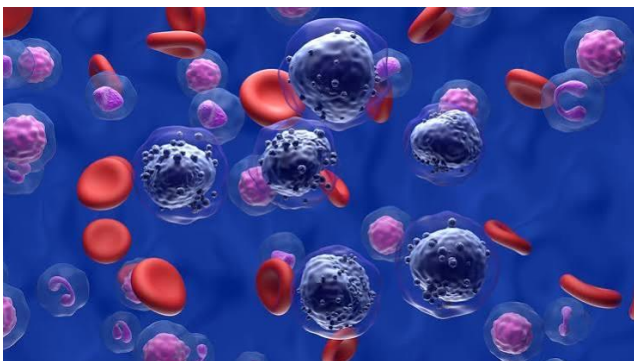


Menopause and “leaky gut”: implications for midlife women’s health

Peters. 2026

<https://doi.org/10.1172/JCI209807>.

Menopause may impact gut barrier health. While estradiol and progesterone's roles in the female reproductive system are known, their effects in the gastrointestinal tract are less studied. Shieh et al. found that in healthy women, markers of gut barrier issues increased during menopause, suggesting ovarian aging affects gut health and prompting further questions on clinical effects and possible treatments.



XY0206 targets FLT3-dependent resistance states in acute myeloid leukemia

Long Shen et al., 2026

<https://doi.org/10.1172/JCI204701>.

Activating mutations in FLT3 lead to aggressive acute myeloid leukemia (AML) with poor outcomes. FLT3 inhibitors have shown some improvement but often face challenges from resistance. XY0206, a new derivative of sunitinib, targets FLT3 and blocks key signaling pathways that promote cell survival, causing cancer cell death in FLT3-ITD AML. XY0206 remains effective even against FLT3 mutations that typically lead to resistance. In clinical trials, it showed a 45.7% overall remission rate and 60.0% among patients with FLT3-ITD mutations.

SELECTED PUBLICATIONS

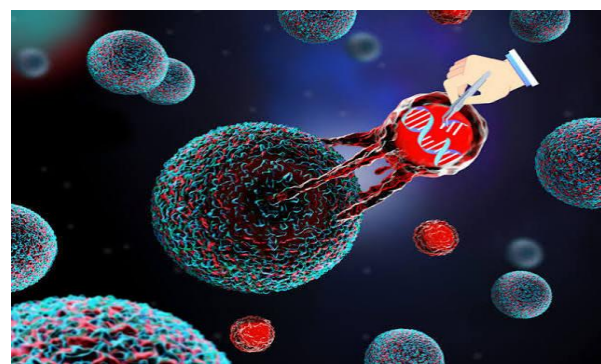


Integration of proteomic aging clocks in a phase 2a clinical trial supports simultaneous geroprotective assessment

Alex Zhavoronkov et al., 2026

<https://doi.org/10.1038/s41587-026-03286-y>

Drugs for diseases related to aging might also affect aging itself, but usual clinical trial methods can't measure this. Aging clocks could help, but current models often give confusing results. Proteomic clocks might be better for identifying aging markers by tracking biological changes. This study compares six proteomic clocks using data from a trial of the drug rentosertib for pulmonary fibrosis. All clocks showed lower biological age in treated groups. However, they can't separate aging effects from disease effects.

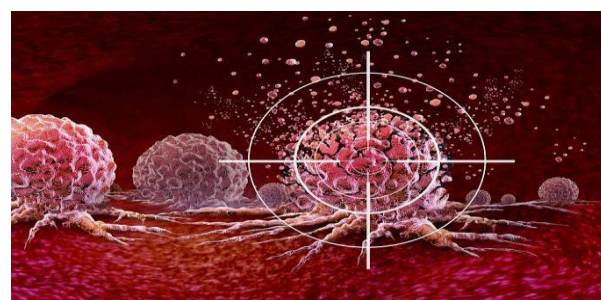


Lentiviral In Vivo CD19 CAR T-Cell Therapy in Neurologic Autoimmune Disorders

To the Editor

DOI: 10.1056/NEJMc2603114

A phase 1 clinical trial tested JY231, a gene therapy, on 16 patients with severe neurologic autoimmune diseases. These patients received a single intravenous infusion of JY231, which uses a viral vector to modify immune cells inside their bodies. The treatment was generally safe, with no severe brain toxicity reported. Most patients experienced mild cytokine release syndrome, which resolved in two weeks, and temporary changes in blood counts that returned to normal within 24 hours.



A bivalent molecular glue linking lysine acetyltransferases to oncogene-induced cell death

Nix et al., 2026

DOI: 10.1016/j.cell.2026.06.037

Developing cancer treatments that specifically target and kill cancer cells is essential for reducing relapse rates. Immunotherapy is a strong example of this approach. This study presents a small-molecule method using chemically induced proximity (CIP) to treat diffuse large B cell lymphoma. Researchers created KAT-TCIPs, which activate cell death pathways suppressed by the BCL6 protein.

SELECTED PUBLICATIONS

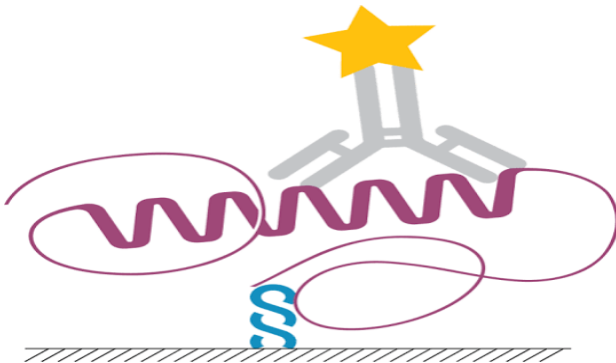


Targeting peripheral 5-HT_{2A}R enhances antitumor immunity in colorectal cancer

Wen et al., 2026

DOI: [10.1016/j.cell.2026.07.028](https://doi.org/10.1016/j.cell.2026.07.028)

Cancer is a major cause of illness and death globally. Classical psychedelics have been used for treating mental health issues related to cancer, but their effect on tumor growth is not well understood. Research shows that lysergic acid diethylamide (LSD) boosts CD8⁺ T cell activity against tumors and slows colorectal cancer (CRC) growth by targeting the serotonin receptor 5-HT_{2A}R. To avoid psychedelic effects, a new drug, IHCH-8110, was created to target peripheral 5-HT_{2A}R.

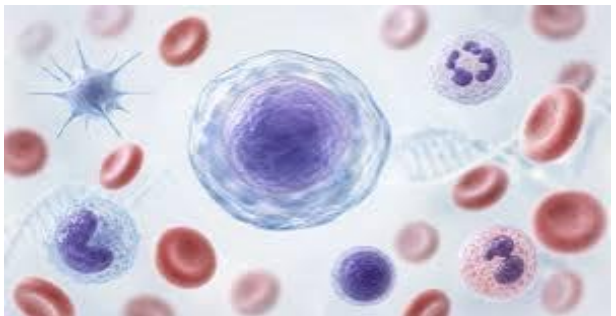


Aptamer targeting HMGB1 attenuates inflammatory disease via domain-specific antagonism

Hui Zhang et al., 2026

DOI: [10.1016/j.chembiol.2026.06.011](https://doi.org/10.1016/j.chembiol.2026.06.011)

HMGB1 is a signal released by stressed or injured cells that promotes inflammation, making it a potential therapeutic target. However, targeting it is challenging because it also has important roles inside cells. A DNA aptamer called ZH-1a can specifically block the harmful effects of HMGB1 outside cells without affecting its functions inside. ZH-1a reduces inflammation in macrophages and improves outcomes in models of acute and chronic inflammatory diseases, especially when used with methotrexate in arthritis.



Exa-cel in Children with Transfusion-Dependent β -Thalassemia or Sickle Cell Disease

Frangoul et al., 2026

DOI: [10.1056/NEJMoa2603387](https://doi.org/10.1056/NEJMoa2603387)

Exagamglogene autotemcel (exa-cel) is a cell therapy using modified CD34⁺ cells to increase fetal hemoglobin for treating sickle cell disease and transfusion-dependent β -thalassemia. In two ongoing studies with children aged 5 to 11, 15 with β -thalassemia and 11 with sickle cell disease received exa-cel following a conditioning treatment. After 16 months, all evaluated children with β -thalassemia were transfusion independent, and most with sickle cell disease were free from crises.

SELECTED PUBLICATIONS

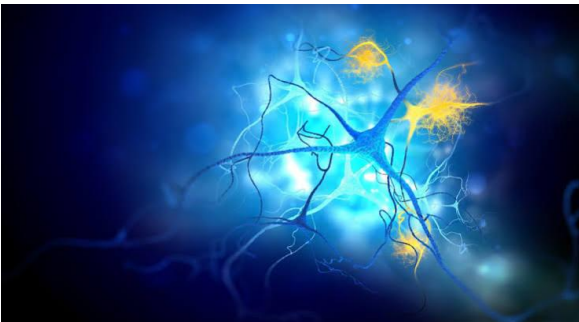


Individualized antisense oligonucleotides for SCN2A-related developmental epileptic encephalopathy

Olivia Kim-McManus et al., 2026

<https://doi.org/10.1038/s41591-026-04527-y>

SCN2A variants are common causes of developmental and epileptic encephalopathies (DEEs) that can lead to seizures from birth, affecting 1-2% of all cases. Many of these variants result in increased sodium current due to gain-of-function characteristics. Two clinical studies were conducted on boys aged 9 and 14 with SCN2A-related DEE, using antisense oligonucleotides (ASOs) to reduce the expression of mutant SCN2A while keeping the normal copy intact.

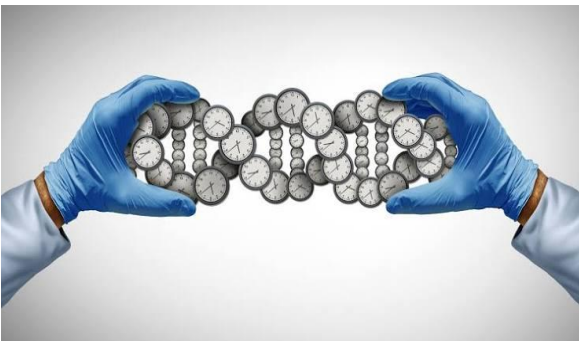


Blood-based circular RNAs for early diagnosis of Alzheimer's disease

Bridget Phillips et al., 2026

<https://doi.org/10.1038/s41591-026-04485-5>

Detection of Alzheimer's disease (AD) before symptoms appear is important for new treatments. Researchers studied blood data from 1,221 people, including those with AD and healthy individuals, and found 34 circular RNAs (circRNAs) linked to AD. A prediction model using these circRNAs was as effective as the plasma phosphorylated Tau-217 (pTau217) in identifying AD cases based on confirmed biomarkers.



Biological aging and generational shifts in early-onset cancer risk

Ruiyi Tian et al., 2026

<https://doi.org/10.1038/s41591-026-04448-w>

Early-onset cancer cases are increasing worldwide, highlighting the need to understand new risk factors tied to different generations. Research on 154,169 young adults from the UK Biobank shows that systemic aging rose across birth groups, with a significant increase in those born between 1965–1974 compared to those born from 1950–1954. This systemic aging is linked to a higher risk of early-onset solid cancers, especially lung, gastrointestinal, and uterine cancers. Similar patterns were found with different aging measures.

SELECTED PUBLICATIONS

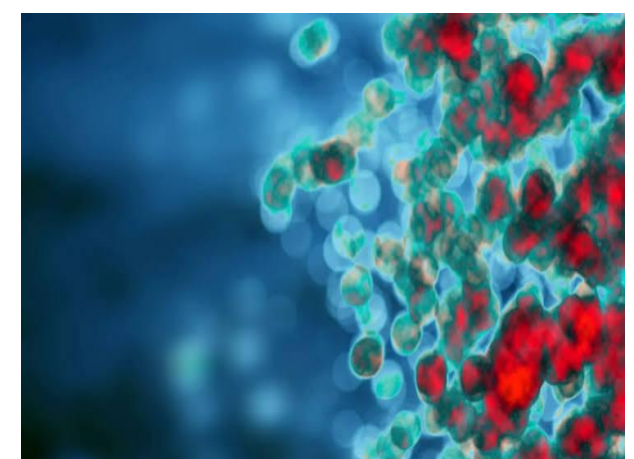


The past and future impact of climate change on childhood malaria in Africa

Colin J. Carlson et al., 2026

<https://doi.org/10.1038/s41586-026-10840-w>

Recent studies have improved our understanding of how climate change affects health, but many impacts remain unmeasured. This research examines over a century of clinical data to see if climate change has increased childhood malaria in sub-Saharan Africa. The findings show that rising temperatures and extreme rainfall have affected malaria rates, especially in East and southern Africa, while also decreasing cases in West Africa. Overall, there is a slight net effect of one extra case per 1,000 children across the continent. The study suggests that future climate change might help reduce malaria cases in West and central Africa. Reducing global warming could prevent more malaria cases, especially in high-elevation areas in East and southern Africa.



Diet–microbiome synergy underlies obesity-associated immunotherapy efficacy

Lysanne Desharnais et al., 2026

<https://doi.org/10.1038/s41586-026-10750-x>

Physiological factors like the gut microbiome and obesity affect anti-tumour immunity and responses to immune checkpoint inhibitors (ICIs), with higher body mass index (BMI) surprisingly linked to better ICI efficacy. The interaction between these factors and diet is not well understood. This study uses 12 mouse diet models to explore the effects of diet on metabolism, immunity, and gut microbes related to ICI sensitivity. It finds that obesity-related ICI responses depend more on diet and gut health than on metabolic issues. Specific diets and bacteria can enhance ICI outcomes, suggesting dietary and microbial strategies may improve ICI effectiveness and fecal microbiota transplants.

RECOMMENDED EVENTS & STUDENTSHIP



Cell Press Symposia: Biological function in 3D: Structure, dynamics, and AI

In partnership with the Southern University of Science and Technology

November 5–7, 2026 | Shenzhen, China

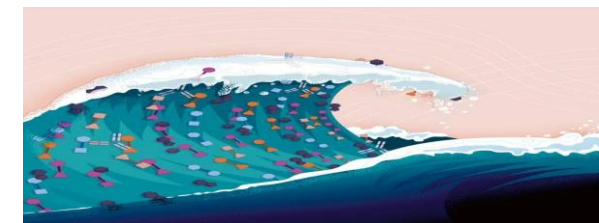
<https://cell-press-symposia.com/3Dbiologicalfunction-2026/index.html>



Reframing Precision Medicine: Innovation to Implementation is a flagship Nature Conference that brings together leaders across science, medicine and policy to ask a simple question: how do we make truly personalised care in the next decade the norm, not the exception?

13-15 October 2026, London

<https://precision-medicine.conferences.nature.com/>



Next Generation Cancer Therapeutics

Date: October 6-8, 2026

Location: Houston, Texas, USA

<https://natureconferences.streamgo.live/next-gen-cancer-ther/lobby>



RNA at the Bench and Bedside V

Date: December 8-10, 2026

Location: La Jolla, California, USA

<https://natureconferences.streamgo.live/rna-at-the-bench-and-bedside-v/lobby>

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