

Biotechnology & Health:

Biotechnology & Pharma Innovation:

China's Biotech Sector Surpasses EU in Innovation: Chinese drugmakers are increasingly challenging Western dominance in novel drug development. The number of novel drugs in development in China, for conditions including cancer and weight loss, has surged to over 1,250 in the past year. This figure now surpasses the European Union and is nearly on par with the United States (approximately 1,440 drugs in development). This indicates a significant shift in the global pharmaceutical landscape.

Anthem Biosciences IPO (India): Anthem Biosciences, a prominent Indian contract research and manufacturing services (CRAMS) player, has launched its mainboard IPO. The company offers research, development, and manufacturing solutions to global pharmaceutical and biotech clients, highlighting India's growing role in the global biotech supply chain.

Tecnologico de Monterrey's Nanobiotechnology for Agriculture: Researchers at Tecnologico de Monterrey are pioneering the use of nanobiotechnology to promote sustainable agriculture. They are developing nanoparticles that activate natural defenses in crops, aiming to improve resistance and productivity in plants. This project induces immunization mechanisms in plants, similar to vaccines in humans, with initial promising results in crops like poblano pepper and Cavendish banana.

Digital Health & AI in Healthcare:

ANDHealth Secures \$33 Million for Digital Health: ANDHealth, an Australian organization, has secured \$33 million to expand its digital health commercialization program. The funding aims to strengthen the pipeline of evidence-based, clinically validated digital health technologies, with a focus on areas like remote monitoring, digital therapeutics, clinical decision support, and patient engagement tools.

IIT Delhi's AI in Healthcare Program: The Indian Institute of Technology (IIT) Delhi, in partnership with TeamLease EdTech, has introduced a comprehensive online executive program in Artificial Intelligence (AI) in Healthcare. Designed for working professionals, including doctors, engineers, and data scientists, it aims to bridge the gap between healthcare and technology.

WHO's AI for Health Summit: The World Health Organization (WHO) and its partners hosted a workshop session at the AI for Good Summit 2025. The session focused on advancing standardized AI for Health (AI4H) guidelines, strengthening cross-sector collaboration, and broadening engagement across the global health and AI communities. AI is seen as having significant potential to enhance emergency response, optimize resource allocation, and expand access to care globally.

AI Transforming Healthcare (Ongoing Trend): Reports continue to highlight AI's growing role in healthcare, from medical imaging and diagnostics to drug discovery, clinical decision support, robotic surgery, and precision medicine. The AI healthcare market is projected for significant growth, solidifying AI's position as a cornerstone of healthcare innovation in 2025.



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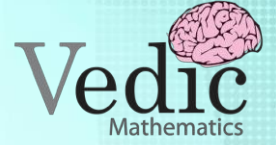
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Drug Approvals & Clinical Trials (Recent & Upcoming):

FDA Approvals (Early July 2025): The FDA has recently approved several significant drugs:

Ekterly (sebetralstat) Tablets: The first and only oral on-demand treatment for Hereditary Angioedema (HAE), approved on July 3, 2025.

Lynozyl (linvoseltamab-gcpt) Injection: Granted accelerated approval for relapsed or refractory multiple myeloma on July 2, 2025.

Zegfrovy (sunvozertinib) Tablets: Granted accelerated approval for Non-Small Cell Lung Cancer with EGFR Exon 20 Insertion Mutations on July 2, 2025.

Novartis Wins Approval for First Malaria Treatment for Newborns: Swissmedic (Switzerland's regulatory agency) has approved Coartem Baby (artemether-lumefantrine), marking a groundbreaking milestone as the first malaria drug specifically tailored for newborns and very young infants (under 4.5 kg). This dispersible, cherry-flavored tablet addresses a critical treatment gap and is poised for rapid rollout across Africa.

CRISPR Clinical Trials Update: CRISPR-based medicines continue to advance. Following the first-ever approval of Casgevy for sickle cell disease and beta thalassemia, 50 active sites have opened globally. Personalized in vivo CRISPR therapy for an infant with CPS1 deficiency was developed and delivered in just six months, paving the way for on-demand gene-editing therapies. Early results from trials targeting heart disease are also positive.

Public Health Initiatives:

2nd Global Convening of the Global Initiative on Digital Health: This virtual event (July 14-18, 2025) brings together stakeholders to discuss strengthening governance, local entrepreneurship, and sustainability in national digital transformation within healthcare, especially for low- and middle-income countries.

World Allergy Day 2025 Focus on Anaphylaxis: Celebrated on July 8th, the focus this year was on anaphylaxis, the most severe allergic reaction. The World Allergy Organization (WAO) highlighted the rising threat of anaphylaxis (up to 5 million cases annually globally) and urged better access to life-saving epinephrine auto-injectors.

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1. In the past year, how many novel drugs in development has China's biotech sector reached, surpassing the EU?

- a) Over 500
- b) Over 800
- c) Over 1,250
- d) Over 1,500

Answer: c) Over 1,250

The news states, "The number of novel drugs in development in China... has surged to over 1,250 in the past year. This figure now surpasses the European Union..."

2. Anthem Biosciences, an Indian CRAMS player, has launched its mainboard IPO. What does CRAMS stand for in this context?

- a) Clinical Research and Marketing Solutions
- b) Contract Research and Manufacturing Services





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- c) Comprehensive Regulatory and Management Systems
d) Chemical Recovery and Material Sciences

Answer: b) Contract Research and Manufacturing Services
The news identifies Anthem Biosciences as a "prominent Indian contract research and manufacturing services (CRAMS) player."

3.Researchers at Tecnologico de Monterrey are using nanobiotechnology to activate what in crops?

- a) Photosynthesis
b) Natural defenses
c) Faster growth hormones
d) Pest attractants

Answer: b) Natural defenses
The news states, "They are developing nanoparticles that activate natural defenses in crops, aiming to improve resistance and productivity in plants."

4.How much funding has ANDHealth, an Australian organization, secured to expand its digital health commercialization program?

- a) \$10 million
b) \$20 million
c) \$33 million
d) \$50 million

Answer: c) \$33 million
The news reports, "ANDHealth, an Australian organization, has secured \$33 million to expand its digital health commercialization program."

5.What kind of program has IIT Delhi, in partnership with TeamLease EdTech, introduced?

- a) A diploma in medical ethics.
b) A certificate in hospital management.

- c) A comprehensive online executive program in Artificial Intelligence (AI) in Healthcare.
d) A degree in biomedical engineering.

Answer: c) A comprehensive online executive program in Artificial Intelligence (AI) in Healthcare.

Explanation: The news states, "The Indian Institute of Technology (IIT) Delhi, in partnership with TeamLease EdTech, has introduced a comprehensive online executive program in Artificial Intelligence (AI) in Healthcare."

6.What was a key focus of the WHO's workshop session at the AI for Good Summit 2025?

- a) Developing new AI-powered diagnostic tools.
b) Advancing standardized AI for Health (AI4H) guidelines and strengthening cross-sector collaboration.
c) Discussing ethical implications of AI in warfare.
d) Promoting AI in agricultural development.

Answer: b) Advancing standardized AI for Health (AI4H) guidelines and strengthening cross-sector collaboration.

The news mentions, "The session focused on advancing standardized AI for Health (AI4H) guidelines, strengthening cross-sector collaboration, and broadening engagement across the global health and AI communities."

7.What is the projected worldwide end-user spending on generative AI (GenAI) models expected to reach in 2025, according to a Gartner report?

- a) \$5.2 billion
b) \$8.7 billion
c) \$14.2 billion
d) \$20.0 billion





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Answer: c) \$14.2 billion

The news reports, "A Gartner report projects that worldwide end-user spending on generative AI (GenAI) models will reach \$14.2 billion in 2025."

8. Which of the following drugs was not mentioned as recently approved by the FDA in early July 2025?

- a) Ekterly (sebetralstat) Tablets
- b) Linozyfic (linvoseltamab-gcpt) Injection
- c) Zegfrovy (sunvozertinib) Tablets
- d) Remdesivir (for COVID-19)

Answer: d) Remdesivir (for COVID-19)

The news specifically lists Ekterly, Linozyfic, and Zegfrovy as recent FDA approvals in early July 2025. Remdesivir is not mentioned in this context.

9. Which Swiss regulatory agency approved Coartem Baby, the first malaria treatment specifically for newborns?

- a) FDA (Food and Drug Administration)
- b) EMA (European Medicines Agency)
- c) Swissmedic
- d) PMDA (Pharmaceuticals and Medical Devices Agency)

Answer: c) Swissmedic

The news states, "Swissmedic (Switzerland's regulatory agency) has approved Coartem Baby..."

10. Following the approval of Casgevy, how many active sites for CRISPR-based medicines have opened globally?

- a) 10
- b) 25
- c) 50
- d) 100

Answer: c) 50

The news states, "Following the first-ever approval of Casgevy... 50 active sites have opened globally."

11. What is the focus of the 2nd Global Convening of the Global Initiative on Digital Health (July 14-18, 2025)?

- a) Developing new medical devices.
- b) Strengthening governance, local entrepreneurship, and sustainability in national digital transformation within healthcare.
- c) Promoting international travel for medical tourism.
- d) Researching new infectious diseases.

Answer: b) Strengthening governance, local entrepreneurship, and sustainability in national digital transformation within healthcare.

The news states, "This virtual event... brings together stakeholders to discuss strengthening governance, local entrepreneurship, and sustainability in national digital transformation within healthcare, especially for low- and middle-income countries."

12. What was the specific focus of World Allergy Day 2025, celebrated on July 8th?

- a) Asthma management.
- b) Food allergies.
- c) Anaphylaxis.
- d) Eczema prevention.

Answer: c) Anaphylaxis.

The news reports, "Celebrated on July 8th, the focus this year was on anaphylaxis, the most severe allergic reaction."

