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TRENDS 2026: Rise of Resilient Life Sciences Innovation

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US President Donald Trumpâ??s tariffs, with a fear of global recession and geopolitical tensions affecting industries worldwide, was the memorable aspect of 2025. Despite these challenges, the Indian life sciences sector has remained resilient and steadfast. To avoid the impact of Trump's tariffs, almost all major pharma firms expanded or increased their presence in the US, often through acquisitions. A key highlight was the Indian government introducing several measures to simplify drug approvals and support innovation. Key reforms included updating the New Drug and Clinical Trial Rules (2019) and adopting digital platforms for regulatory submissions to improve transparency, reduce approval timelines, strengthen pharmacovigilance, and maintain quality standards. As we move into 2026, many of the trends and themes from 2025 are expected to carry forward, shaping the industryâ??s trajectory in the year ahead. Letâ??s look at these trends across different sectors.



A major trend in 2025 was the rise of anti-obesity drugs. Mounjaro, in particular, saw rapid uptake and became the second-highest selling weight-loss drug in India within just six months.

Another highlight was the opening of several Centres of Excellence (CoE). Notably, Miltenyi Biotec inaugurated India's first Cell and Gene Therapy (CGT) CoE in Hyderabad, reflecting the growing focus on advanced therapies.

Much like everything in life, artificial intelligence (AI) continued to deepen its presence across healthcare, transforming diagnostics, research, and drug development.

Pharma and Biotech

Policy and Innovation Driving Advanced Therapies

The Government of India has launched the 'Promotion of Research and Innovation in Pharma MedTech sector (PRIP)' scheme to promote innovation in India. The scheme has a total financial outlay of Rs 5000 crore, which includes Rs 700 crore to establish Centers of Excellence (CoEs) at seven National Institutes of Pharmaceutical Education & Research (NIPERs), and Rs 4200 crore to accelerate investments in the R&D ecosystem within the sector. The scheme has defined three priority areas for funding: new medicines, Complex generics and biosimilars and novel medical devices.

"It will be interesting to see the impact this scheme will make in 2026 and beyond. Considering the immense potential for increase in innovation within Pharma/Medtech in India, the overall ecosystem will benefit from this scheme and promote innovation at both the industry and academic level. Considering India's large population and specific healthcare needs, we can expect good innovation momentum in these areas moving forward. Moreover, Indian pharma needs to transform from being a generics producer to an innovation producer for long term growth," said **Prashant Khadayate, Director – Lifesciences Consulting & Research, GlobalData.**

This policy-driven push is expected to accelerate biology-led innovation in 2026, with advanced therapeutic modalities driving the next wave of growth. Cell therapies, autologous, allogeneic, and in vivo, are expected to shift from niche applications to scalable platforms across oncology, immunology, and regenerative medicine. While India approved its first CAR-T therapy only last year, experts anticipate a steady rise in CGT approvals in the coming years.

"Upcoming year will be defined by acceleration in high-value generics, complex formulations, and biologics. India's role as the leading global supplier of affordable medicines will deepen, but the next phase of growth clearly lies in complex Injectables, peptides, sustained-release products, specialty therapies, and biosimilars—segments that are seeing stronger regulatory acceptance and higher demand across developed and emerging markets. With global healthcare systems seeking cost-effective alternatives, compliance strength, quality maturity, and digital transparency will become decisive factors in winning international confidence," said **Bhavin Mehta, Vice Chairman of the Pharmaceutical Exports Promotion Council of India (Pharmexcil).**

Expanding to other geographies

A parallel, equally powerful trend is the broad-based diversification of export geographies. To mitigate the impact of US tariffs, pharmaceutical companies are exploring expansion into other geographies. While the US will remain a key driver, momentum is now shifting toward Africa, Latin America, Southeast Asia, the Middle East, and China, supported by rising procurement volumes and deeper commercial linkages.

“Exporters are responding by expanding Active Pharmaceutical Ingredients (APIs) capacity, Contract Development and Manufacturing Organisation (CDMO) partnerships, and resilient supply-chain models, enabling stronger participation in global tenders and reducing vulnerability to single-market fluctuations. The scale of India’s domestic market further enhances this export competitiveness, strengthening the manufacturing base and enabling a wider, more agile product portfolio. Reinforcing these sectoral tailwinds is the strong policy and trade push from the Government which is proactively shaping a future-ready export ecosystem”, said Mehta.

“Production-linked incentives (PLI) for APIs and formulations, new bulk drug and medical device parks, enhanced regulatory cooperation with partner countries, trade missions, and an active FTA pipeline are collectively expanding market access for Indian manufacturers. Initiatives around digital quality systems, track-and-trace compliance, logistics modernisation, and sustainability standards are also elevating our positioning as a dependable global supplier. These measures are creating an enabling environment for exporters to scale their global footprint and transition from being primarily volume-driven suppliers to becoming high-trust, innovation-aligned partners in the global pharmaceutical value chain”, added Mehta

AI and Gen AI in Drug Discovery & Diagnostics

Artificial intelligence including generative AI is revolutionising drug discovery by accelerating candidate analysis, predicting drug-body interactions, and enabling faster, cost-effective therapy development.

“AI also advances diagnostics, facilitating early disease detection and precision treatment tailoring. For instance, Qure.ai’s AI-driven medical imaging solutions enable early diagnosis of TB, lung cancer, and stroke. Concurrently, decentralised clinical trials leveraging remote monitoring and AI analytics are increasing patient-centricity, accessibility, and efficiency, thereby accelerating therapy approval processes. The healthcare industry is projected to face continued cost pressures driven by new medical technologies, cited as the top driver by 74 per cent of insurers globally, underscoring AI’s central role in innovation and cost management,” said **Ajay Mahipal - Co-Founder and General Partner, HealthKois**.

Rise of Preventive Interventions

Preventive healthcare is emerging as a key growth driver, reshaping patient care globally. “We are entering a pivotal moment, where innovation and patient expectations are converging to redefine the healthcare industry. The vaccines market, valued at over $78 billion in 2023 and projected to nearly double by 2032, is a clear indicator that preventive and accessible healthcare will drive global growth in the decade ahead,” observed **Sarvesh Mutha, Managing Director, IntegriMedical.**

Shakul Srivastava, Vice President, Indian Immunologicals Limited, echoing similar sentiments, said, “The key trends are shifting toward preventive interventions, driven by the latest biotech innovations and enhanced through smart use of digital technologies.”

MedTech

"India’s MedTech sector is poised for remarkable growth, projected to reach $50 billion by 2026. At Medtronic, we see this momentum transforming healthcare making it more personalised, predictive, and supportive for every patient. Innovations in AI, IoMT, and personalised therapies will enable clinicians to deliver virtual care, proactive interventions, and treatments tailored to individual needs. Rising chronic diseases and an ageing population (200M+ seniors by 2030) will increase demand for remote monitoring systems bringing healthcare closer to home. By combining compassionate care with leading-edge technology, the MedTech innovations will empower patients and clinicians to achieve better health outcomes, together,” said **Mandeep Singh Kumar, Managing Director and Vice President, Medtronic India.**

Sharing his views Mutha said “AI-driven diagnostics and decision support systems are transforming healthcare by enabling faster, more accurate clinical decisions through predictive analytics and digital monitoring tools, ultimately improving both care quality and operational efficiency. At the same time, needle-free and innovative drug delivery technologies are rapidly gaining traction across areas such as vaccines, IVF hormones, growth hormones, and pain management, offering greater patient comfort, reducing infection risks, and improving treatment adherence. Complementing these advancements, pharmaceutical companies are increasingly forming collaborative partnerships with MedTech innovators to enhance dosing accuracy, ensure treatment consistency, and deliver more patient-centered solutions, making healthcare safer, more effective, and more

accessible.”

Clinical Trials

Rise in Early-Phase Trials

The regulatory reforms introduced in 2025 are expected to act as a catalyst in 2026, driving a new wave of innovation-led clinical research in India. Experts note a growing interest in early-phase studies and multi-regional clinical trials, supported by increasing expertise in complex areas such as CGT and tri-specific antibodies, which are set to become a mainstay in the coming year.

Digitisation of Clinical Trials

In 2026, India's life sciences sector is expected to significantly transform, driven by the increasing integration of technologies such as AI, wearables, and data analytics. In clinical trials, this will enhance participant access and accelerate study timelines, helping to position the country as a prominent global hub for clinical research.

“Foundational to this will be to tap into the country’s rapidly growing digital ecosystem. In particular, mobile-first approaches help bridge infrastructure gaps by allowing patients to engage with trials from their own devices, wherever they are. Tools like electronic clinical outcome assessment (eCOA) and eConsent will facilitate real-time data collection and ensure patients receive comprehensive trial information from their own devices, promoting inclusive participation, including in areas such as central nervous system (CNS) and rare diseases. These tools will also ultimately improve accessibility by making trial participation less disruptive to daily life, which will in turn improve patient retention and data quality,” said **Santhosh A F, Vice President, Asia Pacific South & India, Medidata.**

AI will also continue to be a game changer. Morgan Stanley estimates that AI could help bring 50 new treatments to market within a decade, cutting drug discovery timelines from years to months, and reducing development costs. Beyond discovery, AI-driven study feasibility will be critical in 2026 to help sponsors and CROs identify optimal, high-performing sites across the globe. This precision in planning will significantly support study conduct and reduce overall development costs.

“In India, we expect to see AI playing a pivotal role in decentralised clinical trials (DCTs), improving oversight and treatment adherence through the processing of real-time information from wearables and digital health tools, and enabling remote patient monitoring and the creation of synthetic control arms,” said Santhosh.

He added, “To capitalise on these trends, India must address some existing challenges, including skill gaps and strengthen public trust in clinical research, particularly in tier-2 and tier-3 cities. It must also navigate regulatory and ethical considerations, while providing careful oversight over patient consent and data privacy to build trust. Looking into 2026, the future of clinical trials in India is not just about technology; it is about making trials safer, more inclusive, and more efficient for all stakeholders.”

CDMOs

Digital Transformation of CDMOs

As pharmaceutical operations grow more complex, the integration of technology into quality systems is setting a new benchmark. Paperless workflows, real-time monitoring, predictive analytics, and remote oversight are embedding compliance into daily execution. For Indian CDMOs, this shift is already underway. At Syngene, for example, these efforts are visible in the use of secure remote inspection technologies such as RealWear, digitised checklists, and electronic batch records. Together, they help sustain a state of continuous audit readiness. These digital initiatives are reinforced by a broader shift toward decentralised accountability, ensuring that quality is embedded across teams and processes rather than being managed in isolation.

This evolution signals both progress and opportunity for Indian CDMOs. By combining a strong quality culture with digital tools, organisations can go beyond meeting today’s compliance requirements to proactively shaping tomorrow’s standards. Those that see quality not just as a safeguard but as a strategic advantage will build stronger partnerships, operate with greater efficiency, and secure a lasting place for India in the global pharmaceutical supply chain, as highlighted by **Alok Mehrotra, Chief Quality Officer, Syngene International**, in an earlier op-ed with BioSpectrum India.

Rise of Gene Therapy specific CDMOs

Following a highly volatile period of investment peaks between 2020 and 2022, the global Cell and Gene Therapy (CGT) sector, and its associated Contract Research, Development, and Manufacturing Organisations (CRDMOs), have entered a phase of turbulence, marked by significant consolidation. Despite recent heightened regulatory scrutiny across the US and European Union (EU) and a year of leadership shifts, a robust pipeline of CGT candidates, coupled with a highly selective yet recovering venture capital (VC) landscape, still indicates substantial potential for emerging Indian CGT CRDMOs. If Indian CRDMOs can swiftly establish specialised manufacturing capacity, maintain rigorous international quality standards, and secure strategic global alliances, 2026 is poised to confirm India's trajectory towards capturing a significant, high-value portion of the worldwide CGT development and manufacturing market.

“While overall biopharma VC funding remains stable, the competitive CGT space is seeing capital deployed more selectively toward companies with a clear path to commercial scalability. This targeted investment drives predictable manufacturing demand, presenting a significant opportunity for Indian CDMOs to engage early with VC-backed biotech companies and offer essential services like process development, scale-up, and GMP capacity. With US and EU CGT approvals continuing to rise and therapies expanding from rare disorders to more prevalent conditions such as cancers, autoimmune, and neurological diseases, Indian CDMOs are well-positioned to capture upstream demand and support global clinical trials and manufacturing,” said **Dr Raghu Malapaka, Chief Business Officer, Nucelion Therapeutics,** a wholly owned subsidiary of Bharat Biotech International Ltd.

Healthcare

Accelerated Adoption of AI in India’s Public Health System

Building on significant initiatives launched in 2025, India is set to expand the use of AI across its public health system in 2026. With All India Institute Of Medical Sciences (AIIMS) Delhi, Postgraduate Institute of Medical Education and Research (PGIMER) Chandigarh, and AIIMS Rishikesh designated as Centres of Excellence for AI, and solutions like Media Disease Surveillance, Clinical Decision Support Systems in eSanjeevani, and AI tools for TB screening and outcome prediction already deployed, 2026 is expected to see broader integration of AI for disease surveillance, early diagnosis, and improved treatment outcomes.

India’s inclusion in the HealthAI Global Regulatory Network positions the country as a global leader in responsible AI deployment, enabling the sharing of best practices and fostering safer, more effective healthcare applications. The year ahead is expected to see AI increasingly driving disease surveillance, early diagnosis, and improved treatment outcomes nationwide.

Digital Health, Telemedicine, and Virtual Hospitals

“The evolution from telemedicine to virtual hospitals is transforming healthcare delivery. Digital platforms incorporating AI-powered chatbots, such as Wysa for mental wellbeing, and remote monitoring tools, like Beato for diabetes management in India, are improving patient access and outcomes, especially in chronic disease management. Virtual hospitals, such as Saudi Arabia’s SEHA Virtual Hospital, which serves 400,000 patients annually across 130 centres, exemplify this shift, meeting the rising demand driven by aging populations and healthcare workforce shortages,” said Mahipal.

Expanding on this, **Sagar Sen, Senior Vice President – Global Life Sciences and Strategic Alliances at Qure.AI,** noted that by 2026 the true impact of digital health will emerge from deeper system integration. “In 2026, digital healthcare will create a more connected ecosystem where information flows seamlessly between patients and primary health systems. It will support earlier intervention through predictive technologies that identify risks before illness becomes severe. As adoption grows, digital tools will help India build a stronger and more resilient health system capable of responding quickly to emerging challenges. The transition will simplify clinical workflows, improve data movement across EMRs and lead to a more coordinated care experience. As outcome-driven digital tools gain wider acceptance, AI will become a central part of everyday care delivery, enabling earlier diagnosis, ultimately improving health outcomes at scale.”

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