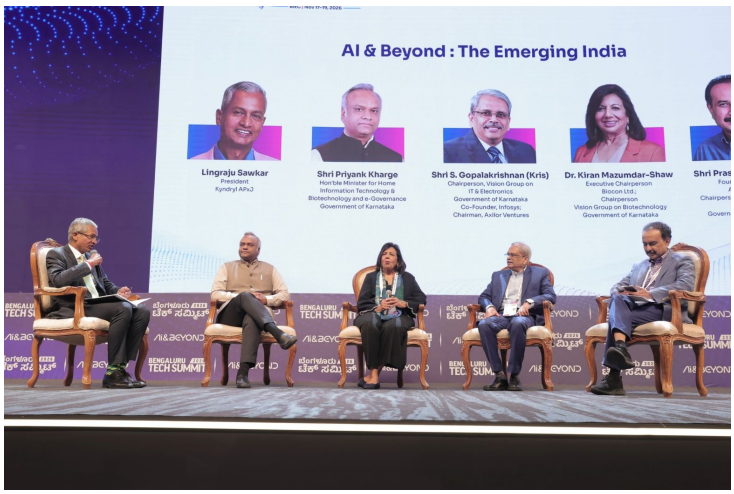
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BTS 2026: AI poised to transform drug discovery and biotechnology research

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Karnataka's technology leaders highlight AI's potential to accelerate drug discovery, strengthen diagnostics and advance personalised medicine, while emphasising the need for indigenous capabilities and human oversight



Artificial intelligence (AI) is emerging as a transformative force in biotechnology and pharmaceutical research, with the potential to accelerate drug discovery, strengthen diagnostic capabilities and advance personalised medicine. The opportunities and challenges of applying AI beyond productivity and automation, particularly in scientific research and healthcare, featured prominently in the discussion 'AI & Beyond: The Emerging India' at the 29th Bengaluru Tech Summit (BTS) 2026.

The discussion brought together Priyank Kharge, Karnataka Minister for Home, Information Technology & Biotechnology and e-Governance; Kris Gopalakrishnan, Chairperson, Vision Group on IT & Electronics, Government of Karnataka and Co-Founder of Infosys; Dr Kiran Mazumdar-Shaw, Executive Chairperson, Biocon and Chairperson, Vision Group on Biotechnology, Government of Karnataka; and Prashanth Prakash, Founding Partner, Accel India and Chairperson, Vision Group on Startups. The session was moderated by Lingaraju Sawkar, President, Kyndryl APxJ.

The panellists examined how AI could drive economic and societal transformation across governance, healthcare, scientific research, agriculture, enterprise services and entrepreneurship. For biotechnology and pharmaceutical companies, the discussion highlighted the growing relevance of AI in accelerating drug discovery, improving diagnostics and enabling personalised medicine.

AI's potential to support scientific research and healthcare innovation was discussed in the broader context of developing solutions that are scalable, accessible and affordable. The panellists also highlighted the opportunity for India to build indigenous AI capabilities rather than remain dependent on technologies developed elsewhere.

AI and the next phase of drug discovery

Drug discovery and biotechnology research are among the areas where AI is attracting increasing attention for its potential to support scientific advancement. The discussion at BTS 2026 brought these applications into the larger conversation on India's emerging AI ecosystem.

AI's role in accelerating drug discovery was identified alongside diagnostics and personalised medicine as an important area of application. These developments could contribute to a more technology-driven approach to scientific research and healthcare innovation.

For India's biotechnology and pharmaceutical ecosystem, the broader opportunity lies in connecting its research capabilities with indigenous AI technologies, data infrastructure and entrepreneurship. Such integration could strengthen the country's ability to develop and scale technology-led healthcare solutions.

However, the panellists stressed that the expansion of AI must be accompanied by human expertise in validation, critical thinking, integration and oversight. As AI automates more tasks, human judgement will remain essential to ensuring that technological capabilities translate into meaningful outcomes.

AI sovereignty and indigenous innovation

Another important theme was AI sovereignty, with the panellists emphasising the need for greater control over data, computing infrastructure and indigenous technological capabilities.

For biotechnology and pharmaceutical research, access to appropriate data and computing capabilities is an important part of building an indigenous innovation ecosystem. The discussion highlighted the opportunity for India to develop AI solutions tailored to its own economic and societal requirements, while creating technologies with global relevance.

The panellists also explored how AI could make essential services more accessible and affordable, particularly for underserved communities, reinforcing the importance of developing inclusive technology solutions.