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XtalPi and DoveTree announce landmark AI drug discovery collaboration worth $6 B

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Strategic partnership leverages AI and robotics for novel therapeutics

XtalPi, a China-based technology company in integrating artificial intelligence (AI) and robotics for drug and materials discovery, has announced a transformative strategic collaboration with DoveTree Medicines, a biotechnology pioneer founded by renowned drug developer D. Gregory Verdine. The collaboration, worth up to $5.99 billion, represents one of the largest commitments to date for AI- and robotics-driven pharmaceutical R&D.

Under the agreement, DoveTree gains exclusive global rights to develop and commercialise a portfolio of innovative therapeutics generated through the partnership.

XtalPi has received an upfront payment of $51 million and is eligible for $49 million in additional near-term payments, plus development and commercial milestones, as well as tiered royalties totaling up to $5.89 billion.

This collaboration merges XtalPi's integrated drug discovery capabilities with DoveTree's deep biological expertise in selecting and validating novel targets of high therapeutic potential.

Together, the companies will focus on developing first-in-class candidates across oncology, immunology and inflammatory diseases, neurological disorders, and metabolic dysregulation with significant unmet needs. The partnership will advance DoveTree's selected pipeline of projects targeting historically challenging mechanisms, with plans to expand joint R&D capabilities in emerging modalities like molecular glue.

XtalPi has developed an intelligent de novo drug discovery platform that spans small molecules, biologics, antibody-drug conjugates (ADCs), and molecular glues. This multimodal capability enables the efficient exploration of parallel drug development approaches against single targets and unlocks broader chemical space. By integrating quantum physics predictions, AI-driven molecular design, and a large-scale robotic lab-in-the-loop, XtalPi significantly accelerates the drug discovery workflow—from target analysis and molecular generation to affinity prediction, ADMET assessment, and synthesis design—with enhanced accuracy and efficiency.