Table 1 Maturity model for breeding CRO platforms

Maturity Level	Standardization Capability	Compliance Capability	Intelligent Capability	Platform Feature
Level 1 Initial Stage	Fragmented SOPs	Manual Compliance	Isolated Data Analysis	Experience-Based Operations
Level 2 Defined Stage	Basic SOPs	Streamlined Compliance	Centralized Data Storage	Single Project Support
Level 3 Integrated Stage	SOPs+GLP Compliance	Embedded Compliance Workflow	Data-Driven Decision Hub	Concurrent Project Management
Level 4 Intelligent Stage	Cross-Institutional SOPs	Cross-Jurisdiction Compliance	AI-Enabled Decision Support	International Service Platform