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ASIA EDITION

AustinPx CEO Elizabeth Hickman on Scaling Complex Oral Drugs Through the Thermo Fisher KinetiSol Collaboration

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Following AustinPx's strategic agreement with Thermo Fisher Scientific's Patheon business to expand commercial access to KinetiSolâ?¢ Technology, CEO Elizabeth Hickman discusses how the partnership is accelerating late-stage manufacturing, enabling next-generation bioavailability solutions, and redefining oral drug formulation for increasingly complex molecules.

As the pharmaceutical industry advances towards increasingly complex, poorly soluble drug candidates, formulation has become one of the defining challenges in translating scientific innovation into commercially viable therapies. Against this backdrop, AustinPx recently announced a strategic agreement with Thermo Fisher Scientific's Patheon pharma services to install its proprietary KinetiSol™ Technology at commercial manufacturing facilities in Bend, Oregon, and Cincinnati, Ohio—creating an integrated pathway from formulation development to large-scale production for KinetiSol-enabled medicines.

The collaboration represents a significant commercial milestone for AustinPx and reflects growing industry demand for advanced bioavailability enhancement technologies capable of overcoming the limitations of conventional amorphous solid dispersion approaches. By extending KinetiSol into Thermo Fisher's commercial manufacturing network, the partnership aims to support pharmaceutical companies developing increasingly challenging small-molecule therapies while improving scalability, sustainability and speed to market.

At the BIO International Convention 2026 in San Diego, **BioSpectrum Asia spoke with Elizabeth Hickman, CEO of AustinPx, about the strategic importance of the Thermo Fisher collaboration,** the commercial evolution of KinetiSol Technology, and how AI-assisted formulation design, manufacturing readiness and sustainability are shaping the next generation of oral drug development.

What strategic factors led to AustinPx selecting Thermo Fisher's Patheon business to place your KinetiSol technology, and how does it strengthen your joint offering to pharmaceutical innovators?

The pharmaceutical and broader life sciences sector is highly regulated and risk-averse, so technological innovation has to demonstrate more than just technical promise. It must also give sponsors confidence that a formulation approach evaluated during clinical testing can support commercialization and regulatory scrutiny as the program advances to the market.

We view the Thermo Fisher agreement as meaningful external validation of KinetiSol's commercial relevance. It strengthens AustinPx's offering by expanding the KinetiSol ecosystem and giving sponsors greater confidence that they now have multiple paths to commercialize their KinetiSol-enabled candidates. This is crucial because many sponsors are not only asking whether a formulation can improve exposure; they are asking whether that formulation strategy can remain practical as the program advances.

AustinPx and Thermo Fisher are aligned on enabling solutions for challenging molecules and improving access to critical therapies for patients. That shared commitment makes the agreement meaningful for innovators working with complex, poorly soluble APIs.

Many drug developers continue to face challenges with poorly soluble and complex APIs. How does KinetiSol expand the formulation design space compared with conventional ASD approaches?

Many poorly soluble and complex active pharmaceutical ingredients (APIs) become difficult to develop when they do not fit neatly into the processing windows used for conventional ASD approaches. Spray drying and hot melt extrusion remain important and effective technologies, but each can be constrained by the physical properties of the molecule. Some APIs have poor solubility in organic solvents, high melting points, heat sensitivity, or stability limitations that narrow the available formulation path.

KinetiSol expands that design space through a solvent-free, fusion-based process that uses ultra-high-shear mixing to convert crystalline drug into an amorphous dispersion in a very short processing window, giving formulation scientists more flexibility when working with molecules that are difficult to solubilize and stabilize through other ASD routes.
The practical benefit is that KinetiSol can support a broader range of APIs, polymers, surfactants, stabilizers, and other excipients. This is especially important when formulation teams need a more tailored, multi-component system to improve exposure, stability, pill burden, manufacturability, and scale-up.

The integration with Patheon's Quadrant 2 AI/ML-driven predictive platform is particularly interesting. How do you see AI and advanced formulation technologies working together to accelerate drug development timelines?

AI can accelerate the "what" of discovery by helping teams identify, design, and prioritize promising molecules faster. The harder question is still the "how": how that molecule becomes bioavailable, stable, manufacturable, and ultimately viable as a drug product.

AI/ML-driven platforms can help identify potential risks earlier, narrow the formulation search space, and guide experimental work toward the most relevant questions, especially when API is limited. Integrating KinetiSol into existing AI/ML models and predictive formulation tools gives sponsors a broader set of enabling technologies to make stronger decisions earlier, conserve scarce API, reduce avoidable rework, and move promising molecules toward the clinic with greater confidence.

Sustainability is becoming an increasingly important consideration in pharmaceutical manufacturing. What advantages does the solvent-free KinetiSol process offer from an environmental and operational perspective?

Sustainability in pharmaceutical manufacturing is often viewed through an environmental lens, but in ASD development it also has a direct impact on cost, risk, timelines, and long-term asset value.

Solvent-based ASD technologies have enabled many poorly soluble molecules, but they can introduce operational complexity that becomes more challenging at scale. Solvent based spray drying requires solvent handling, recovery and disposal, secondary drying, and added infrastructure, all of which increase energy use, facility burden, process oversight, and supply chain dependencies. As programs move toward larger-scale manufacturing, those demands can compound, extending timelines and increasing the risk of variability, delay, and disruption.

KinetiSol offers a simpler, greener model. It eliminates solvent usage and the need for sourcing, recovery, secondary drying, and much of the supporting infrastructure required by solvent-based ASD processes. Due to its continuous manufacturing process, production can also be scaled on the same machine, creating a more flexible path to meet demand without the same scale-up burden associated with large solvent-based systems.

By reducing process complexity, infrastructure needs, energy demand, and solvent-related dependencies, KinetiSolsupports a smaller operational and environmental footprint while helping lower cost, reduce risk, improve predictability, and create a more efficient path to commercial manufacturing.

Looking ahead, how do you see the market for advanced bioavailability enhancement technologies evolving, and what role will AustinPx play in supporting next-generation oral therapeutics?

As drug discovery continues to push into more difficult chemical space, sponsors will need to understand much earlier whether a candidate can achieve meaningful exposure, remain stable, be manufactured reproducibly, and scale without creating avoidable risk later.

That shift is changing how advanced bioavailability enhancement technologies are evaluated. Historically, manufacturing challenges were often treated as problems to solve after a formulation technology wasselected. With the growing demand to reduce the cost of medicines and supply chain risk, and the expectation for more patient friendly dosage forms and environmentally friendly productions, that model is becoming harder to sustain. The question going forward will be less about whether an ASD technology can generate a prototype at the small scale and more about whether the full development path supports the molecule, the patient, and the long-term product strategy. In vivo performanceis still essential, but pill burden, process simplicity, supply resilience, sustainability, and commercial readiness must be considered earlier.

AustinPx's role is to help sponsors find the right bioavailability enhancement path earlier and with more confidence. Within ASD development, that includes the ability to screen all three leading ASD technologies, KinetiSol, hot melt extrusion, and spray drying, through one expert team, rather than forcing sponsors to evaluate options sequentially or across multiple vendors.

This broad toolbox allows us to remain focused on the best path for the program, not a one-size-fits-all answer. The goal is never to force every molecule into one technology, but to identify the formulation pathway that gives the program the strongest balance of performance, manufacturability, scalability, and long-term product value.

Looking ahead, the most successful oral therapeutics will come from teams that connect discovery, formulation, manufacturing, and commercial planning sooner. The Thermo Fisher agreement reinforces confidence in the KinetiSol commercial pathway, but the larger opportunity is helping more innovators preserve the value of complex molecules and turn them into scalable, patient-ready medicines.