

Purdue puts skin in the game with psoriasis deal



[Jonathan Gardner](#)

While the psoriasis space has seen the entry of more complex systemic biologicals, Purdue Pharma has made a bet on an antisense treatment delivered topically.

The Connecticut-based speciality pharma group signed a deal with Exicure that gives it an option to license in the phase I agent AST-005 and three additional projects emerging from its antisense technology. Valued at \$790m in total, the deal shows that Purdue wants to migrate, albeit slowly, from its pain medicine franchise centred on Oxycontin.

Scaling up

The deal consists of an undisclosed up-front payment, equity investment and milestones for up to four programmes including AST-005, an antisense topical gel that targets expression of TNF-alpha.

In psoriasis, this inflammation-inducing cytokine is blocked by antibodies and fusion proteins in the forms of Humira and Enbrel, to name two, but Exicure is seeking to reduce the expression of TNF RNA inside the cells. Exicure calls its technology “spherical nucleic acid”, which it says can penetrate the skin and has superior cellular binding properties.

In October, the privately held Exicure [announced](#) that AST-005 had passed phase I safety and tolerability tests, and at the highest dose, resulted in statistically significant decrease in TNF mRNA in psoriatic skin. The group did not disclose detailed results, and the study does not have a clinicaltrials.gov listing, although Purdue surely got a good look at the numbers.

Other assets in Exicure's pipeline that could be covered by the deal include IL-17 and IL-4-targeting agents in skin disease, toll-like receptor 9 candidates in oncology, and early-stage projects in ophthalmic, respiratory and gastrointestinal diseases. AST-005 so far is the only one that has been tested in humans.

The Illinois-based group has previously secured venture backing from Abbvie, so interest from another big group no doubt ought to inspire others in big pharma and biotech to take a closer look at its offerings.

Pain relief

Meanwhile, Purdue is in need of some relief as its flagship drug, Oxycontin, is under pressure from lookalike competitors and government authorities looking to crack down on opioid abuse.

It has partnerships on the insomnia project lemborexant and new pain programmes from the Spanish company Esteve, and in addition has signed drug development partnerships with the University of Texas and University of Nebraska.

Given the very early stage of these new assets, Purdue obviously cannot expect a payoff for several years should the Exicure pipeline succeed. However, it looks like a company that knows it is in need of innovation. An option on an interesting new technology looks like a low-risk approach, although it might need more of these to ensure that at least one bet pays off.

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