

## Transcript for ENSYSCE-5-Minute-Cut-2.mp4

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Try to imagine a scenario where we could treat pain with an opioid that didn't lead to abuse

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or result in an overdose.

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Hard, isn't it?

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Well, at Ensysce we have imagined that scenario.

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And I'm happy to say today we can present some data to show that it may be a real possibility.

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Why are we still using opioids?

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Because they're one of the few drugs that actually works for chronic pain.

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So the focus of today's talk is, I'll pose it in a question, wouldn't it be great if we

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could delink the analgesic properties of opioids from the abuse potential of opioids?

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And I'll tell you about two products which are really sister products in development

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by Ensysce, which I think have the potential to do just that.

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So the products that have been formulated are not abuse deterrent formulations per se,

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like you've heard from many of the other classes of products.

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They really are a product that switches on or off the ability of the medicine to be active

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or inactive.

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I want you to open your brains for a second because the first time I heard this I had to

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hear it two or three times till it really sunk in.

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Because this is to me, cool science.

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This is the product that's called 614.

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It's an opioid pro drug.

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For those of you that don't remember what a pro drug is, it's activated only in the intestines.

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If that's not novel enough for you, we'll take it one step further.

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What if we could turn the drug off in face of an overdose?

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So now I told you, the only way to use this medicine or get it to work is to swallow the

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tablet to get it into the intestines.

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What if the more you took the less you got?

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Well, how would that be possible?

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If we prevent overdose, which really let's face it, that's what makes the news.

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First generation, you need trypsin the breakdown of the drug.

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Next generation is going to have a trips in inhibitor built in.

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The more you take, the more trips in gets inhibited and doesn't break down the molecule that

requires

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trips into breakdown.

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The first and only that I know of potential opioid with overdose protection.

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Nothing really has convinced me that we can get rid of opioids.

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We need to figure out how to make them safer so that we can continue to give our patients

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good relief.

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This could be a new class beyond abuse deterrent formulations.

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It could be the first overdose protection drug with MPAR, like I showed you the data a

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few moments ago.

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I'm the director of Rocky Mountain Poison Drug Center and you probably know what a poison

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center is, but I'm up here today because we have a national surveillance system for prescription

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opioids, stimulants, and psychedelics in the United States.

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I have a hundred drugs I would love to have the N-PAR technology used with because when

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people take an overdose of anything, see the medicine, an opioid, if I could have a drug

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that didn't release after they had ingested it, that would be great because I have many

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fewer poisonings, although I might be out of a job.

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This is, as Dr. Kirkpatrick said, a next generation solution.

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It is unlike any of the abuse deterrent formulations that are on the market because it's not a

formulation.

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It's chemistry.

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Internally, we call this clever chemistry.

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So what do we mean by a next generation solution?

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It's driven by chemistry.

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We want to be able to treat pain.

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We don't want to get into a situation where we have to say that we can no longer prescribe

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opioids because they're bad, because they're going to be abused.

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How about we make them safer?

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So we want to maintain the efficacy of oxycodone, one of the most popular prescription oral opioid

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products.

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But one of the ways that we've learned to reduce its abuse potential is to make it have a

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slower onset than immediate release oxycodone products.

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Now the overdose protection part is what I've always considered to be the real magic of

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this.

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This goes back to how does the product get activated?

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It requires trips and to begin the activation.

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We've already talked about that.

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PF614 alone dose response is shown doses of 15 milligrams up to 200 milligrams on the

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left hand curve.

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That was from our original dose response curve.

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But the new data is on the right and it shows that as we go from one dose unit, which is

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25 milligrams to two dose units up to eight dose units, 200 milligrams, there's a substantial

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reduction in the amount of oxycodone that's present in your plasma.

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So we now have PF614 with efficacy that we believe will be equivalent to that of oxycontin,

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pain relief equivalent to oxycontin, but a longer half life.

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And equivalent safety, it is still an opioid.

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It's going to have opioid related side effects.

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But unlike oxycontin, we can dissolve this in water.

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It's difficult to manipulate it.

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If you try to manipulate it, you don't get anything differently than taking PF614 in

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the intact form.

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If you snort it or try to inject it, it will have substantially less rewarding activity

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than oxycontin or in fact any other opioid product.

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And we have the first time ever overdose protection.

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This is the next generation analgesic and PF614-MPAR part could be the very first overdose

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protected opioid ever to would reach the market.