Evaluate Vantage

August 17, 2015

KemPharm opioid project noses ahead

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KemPharm has made perhaps the best case so far in pursuit of abuse deterrence labelling for a next-generation opioid. The abuse liability programme for KP201/APAP has now returned two positive results, the more important of the two being an intranasal test that shows the project's active ingredient reached a lower peak hydrocodone exposure and takes longer to reach maximum levels compared with marketed extended-release hydrocodone.

The Iowa-based group hopes the data will build a successful case for a label showing it has less abuse potential than such recently launched products as Hysingla ER. The FDA has been extraordinarily cautious in granting such labels; data from a second trial testing intranasal use of the complete project, which includes acetaminophen, will need to be equally strong.

More data is better

The company said only oral abuse liability data was necessary to complete its new drug application with the FDA, and that the intranasal test was supplementary. But as a sign of how much more important investors viewed this test, shares jumped 26% to $21.45 on Friday following the announcement of positive results; by comparison, announcement of the oral abuse data triggered only an 8% rise.

Shares have now nearly doubled since the group's IPO in April.

Drugmakers have sought to reduce the potential for abuse of hydrocodone-containing pills by, for example, making them resistant to crushing or dissolution so it is much harder to inject or inhale them. Hysingla has qualities that helped it retain extended-release characteristics when crushed and prevented it from being passed through a syringe when dissolved – however, the labelling still warns of the risk of abuse. Pain Therapeutics has tested whether Remoxy can be chewed for up to five minutes as it tries to show its abuse-resisting qualities.

KemPharm's approach has been to create a prodrug by adding molecules – in this case, benzoic acid – that allows for metabolism in the gastrointestinal tract and also prevents the release of hydrocodone when common extraction techniques are used. In a conference call, company executives said the data suggest that when snorted, KP201 leads to lower peak hydrocodone concentration than when taken orally.

The company reported that compared to Zohydro ER – which got approval but without the abuse resistant label it's developer, Zogenix, sought – KP201 showed a 36% reduction in peak hydrocodone exposure, delayed the peak level by an hour, and reduced overall exposure to hydrocodone. The KemPharm project also significantly reduced "drug liking" and pupil dilation measures, although the company will not disclose the full data on those until they can be released at a medical meeting.

Abuse resistant

If these numbers are confirmed by the remaining trial of KP201 in its final formulation with acetaminophen, the company said the product may qualify for category 2 labelling under the FDA's guidelines on narcotics abuse. Executives also held out hope that the US Drug Enforcement Administration would give it friendly treatment, allowing it to be regulated as schedule III, like low-dose codeine products with a moderate risk of abuse, rather than like Vicodin and other opiates that earned a schedule II listing for their higher risk.

Such a scheduling decision would add six to nine months to the project's approval timeline, but it could improve its market potential. Right now, the company hopes to submit its NDA by the end of the year and would expect an approval decision in 2016.

The NDA submission should also be a trigger for partnering discussions; as a pain drug KP201/APAP is likely to be prescribed heavily by primary care physicians, and thus will require a larger sales force than KemPharm can muster. Opioids are largely in the hands of speciality pharma groups like Purdue, Endo and Hospira, so KemPharm's suitors would likely come from that universe.

The shrinkage in opioid sales in recent years is one part down to the loss of market exclusivity of dominant product Oxycontin and the other part attempted clampdowns on their sale to avoid abuse. Growing the market

requires projects like KemPharm’s living up to their hype and hope.

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