WEEK OF MARCH 14, 2011

BioCentury

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Regulation

Chronically obstructed

BioCentury This Week

Cover Story

Chronically Obstructed — The FDA panel review of Novartis' Arcapta Neohaler for COPD has amplified perceptions that the gap between regulatory attitudes toward pulmonary drugs in the U.S. and the EU is only widening.

Marketing

LEAPing Forward — Gilead has successfully removed the boxed warning for hepatoxicity from Letairis in PAH, but will need to move fast to capture share from Actelion's market leading Tracleer./A6

Product Discovery & Development

Making Sense of CRP — Isis, the first company to test a compound against C-reactive protein in the clinic, is readying a Phase II study in multiple myeloma, and is looking to trials in RA and renal diseases as well./A8

Emerging Company Profile

Finding Nimo — Edge believes local delivery of its sustained-release nimodipine to prevent delayed complications of brain hemorrhage will provide greater efficacy and fewer safety risks than the generic oral formulation./A9

Regulation

History Lesson — An FDA panel's recommendation could make epilepsy monotherapy the only setting in which a drug can be approved using a historical-controlled trial./A10

Ebb & Flow

'Phenomenal' Bump — Pharmasset added more than a half billion dollars to its market cap on Phase I combination therapy data investors speculated will enable the compounds to become the backbone for treatment of HCV./A11

Still Some Pop — Seeing upside for Benlysta. Exelixis taps the excitement. Aerie has horsepower. IPOs: Tranzyme. Also: Elan; Salix; Sosei-Vectura; Amicus; Repligen; Bavarian Nordic; BTG; KV Pharma; SkyePharma, et al. /A12

BioCentury 100™ Indicators

Week ended 3/11/11

PRICES	VOLUME
2246.28	701.4M shrs
dn 0.2%	dn 6%

By Aaron Bouchie
Senior Writer

The **FDA** panel review of **Novartis AG**'s Arcapta Neohaler for COPD will amplify perceptions that the gap between regulatory attitudes toward pulmonary drugs in the U.S. and the EU is only widening.

FDA's approach has had the most profound impact on Novartis, which remains in the lead in the race to bring a once-daily long-acting adrenergic receptor beta 2 (ADRB2) agonist to the U.S. for chronic obstructive pulmonary disease.

But its indacaterol long-acting ADRB2 agonist monotherapy program has experienced delays because FDA wants lower doses than are acceptable to regulators elsewhere, with the result that the company's program to combine the LABA with a long-acting muscarinic

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Future Leaders

Only a month to go before the 18th annual Future Leaders in the Biotech Industry. Please see announcement following A17.

BIO Savings

Early bird registration rates still available for the 2011 BIO International Convention and the BIO Business Forum. Please see announcement following A17.

This Week in *SciBX*

KICk-Starting European Enterprise — After cutting its teeth with investments in energy and communications, the European Institute for Innovation and Technology is moving into the biopharmaceutical space with plans for a round of seed-stage financing. Please see Table of Contents on A5.

BioCentury TV This Week

Vaccines for the Poor -- Making the case when money is scarce. Please see the Program Notes on A7.

www.biocenturytv.com

Emerging Company Profile

Edge Therapeutics: Finding nimo

By Erin McCallister
Senior Writer

Oral generic nimodipine is the only drug approved to prevent delayed complications of brain hemorrhage. However, the calcium channel blocker must be given at suboptimal doses to reduce the risk of decreased blood pressure and heart rate. **Edge Therapeutics Inc.** believes its locally delivered, sustained-release NimoGel nimodipine will avoid these risks while improving outcomes.

For two weeks following a subarachnoid hemorrhage, patients are susceptible to cerebral vasospasm, which limits blood flow to the brain and can cause ischemic strokes and additional tissue damage. Nimodipine inhibits calcium ion transfer into smooth muscle, thus preventing contraction of smooth vascular muscle in the brain.

However, systemic delivery of nimodipine also affects smooth vascular muscle in the heart, and thus is associated with a decrease in blood pressure and heart rate. For this reason, the drug is given at doses that limit its efficacy.

According to co-founder and CSO R. Loch Macdonald, about 60% of patients die despite treatment with nimodipine.

"Of those remaining, most are still suffering from cognitive deficits due to cerebral vasospasms, as well as other problems that prevent them from going back to their previous way of life," he told BioCentury.

Edge believes delivering nimodipine directly to the site of injury will allow a more efficacious dose to be used. NimoGel (EG-1961) uses a biodegradable microparticle drug delivery system from **SurModics Inc.**

According to Edge President and CEO Brian Leuthner, the microparticle system allows sustained, consistent release of nimodipine over the 14 days following initial injury.

Edge Therapeutics Inc.

Newark, N.J.
Technology: NimoGel sustained-release formulation of nimodipine
Disease focus: Neurology, drug delivery
Clinical status: Preclinical
Founded: 2009 by R. Loch Macdonald, Brian Leuthner and Carl Soranno
University collaborators: None
Corporate partners: SurModics Inc.
Number of employees: 4
Funds raised: $2 million
Investors: Private
CEO: Brian Leuthner
Patents: None issued

NimoGel is injected through a microcatheter into the subarachnoid space. Because the initial hemorrhage often requires surgical intervention to clip the bleeding vessels, NimoGel can be injected into the site of injury during this operation.

Edge also is developing NimoVent nimodipine, which uses the SurModics technology and can be injected via an intraventricular catheter for patients who do not undergo surgery.

In February, Edge presented preclinical data at the **American Stroke Association**'s International Stroke Conference in Los Angeles showing that 30 mg NimoGel prevented cerebral vasospasm for up to 14 days in a canine model of subarachnoid hemorrhage.

In humans, nimodipine is administered orally or via a feeding tube at 60 mg every 4 hours for 21 days. It is not adjusted for weight.

"Doses of nimodipine when given orally can be very damaging to other tissue, Macdonald said. He said the company's work demonstrates it can deliver effective doses to the intracranial space without any "untoward side effects" such as hypotension.

Edge expects nimodipine's well-established safety profile will likely enable the company to advance from preclinical work straight into Phase II studies in 2012.

The company has not yet determined whether or when it will seek a partner for NimoGel. "Once we complete the Phase II study we will look at our options," Leuthner said.

SurModics is eligible for undisclosed development and commercialization milestones, plus royalties, on NimoGel. Details related to NimoVent are not disclosed.

Edge has three other preclinical candidates to prevent complications of brain hemorrhage or rebleeding after head trauma: EG-1964, EG-1960 and EG-1967.

All three programs are focused on local delivery to the brain of FDA-approved, off-patent drugs. They do not use the SurModics technology.

Leuthner said that Edge "is in the process of raising additional funds," to complete IND-enabling toxicology tests and manufacturing scale-up to produce enough NimoGel for Phase II trials.

COMPANIES AND INSTITUTIONS MENTIONED

American Stroke Association, Dallas, Texas
Edge Therapeutics Inc., Newark, N.J.
SurModics Inc. (NASDAQ:SRDX), Eden Prairie, Minn.