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Onyx Public Offering Will Beef Up Kyprolis Marketing Push

By Catherine Shaffer
Staff Writer

Onyx Pharmaceuticals Inc.'s new multiple myeloma drug Kyprolis (carfilzomib) will get a $358.6 million boost following a new public offering of stock from the South San Francisco-based company.

The offering of 4.4 million shares will fund clinical development of carfilzomib and oprozomib, as well as sales and marketing of Kyprolis, which gained accelerated approval as a third-line treatment in patients with relapsed and refractory disease last year.

Proceeds from the large offering may also be used to make milestone payments to Proteolix Inc., to pay some or all of its $230 million in debt or to acquire businesses or products to supplement its peptide.

Onyx's business is based on two franchise platforms: kinase inhibitors and proteasome inhbitors. Nexavar

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Washington Roundup

OMB to Agencies: Prepare For the Chopping Block

By Mari Serebrov
Washington Editor

With the clock ticking away on a two-month reprieve from the deficit-reducing sequestration, the White House is warning the FDA, National Institutes of Health (NIH) and other government agencies to prepare to be chopped.

Although it's still hoping Congress will avert the budget axe, the Office of Management and Budget (OMB) issued a memo this week directing agencies on how to prepare for sequestration, as well as the expiration of the continuing resolution that's been funding the government since Oct. 1 in lieu of a 2013 budget.

Unless Congress comes up with and agrees to solutions soon, the 8.2 percent cuts of sequestration will hit March 1. The FDA could end up losing $319 million, including $112 million in user fees, according to an OMB

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NewCo News

EnBiotix Inc.: Antibiotic Helpers For Resistant, Persistent Bugs

By Anette Breindl
Science Editor

It may be a bad environment for early stage deals for most companies. But not for start-up EnBiotix Inc., according to its CEO Jeffrey Wager.

The company, which was founded in 2012, is "in discussions with multiple pharma companies" for partnering opportunities.

The reason, Wager told *BioWorld Today*, lies in the company's approach. EnBiotix is not trying to develop standalone antibiotics. Instead, its technologies "could be potentiating a significant proportion of the antibiotics that are currently out there."

Such helpmates are certainly needed. Increases in drug-

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Financings Roundup

Calling Interference: Alnylam Stock Offering Garners $150M

By Randy Osborne
Staff Writer

Riding high after laying to rest its patent skirmish, Alnylam Pharmaceuticals Inc. priced its public offering of 8 million shares without a discount, selling them at Tuesday's closing price of $21.32, for net proceeds of about $151.1 million, or about $173.8 million if the underwriters exercise their full overallotment option of 1.2 million shares.

Cambridge, Mass.-based RNA interference (RNAi) specialist Alnylam in November paid $65 million to bury the hatchet in its battle with Tekmira Pharmaceuticals Corp., of Vancouver, British Columbia. Under the terms, Alnylam granted five more nonexclusive therapeutic licenses to Tekmira, paying $35 million to end the previous arrangement and forking over another $30 million to

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INSIDE:

Other News To Note

• **Amarantus BioScience Inc.**, of Sunnyvale, Calif., said scientists connected with the firm published a paper in the *Journal of Biological Chemistry* describing the mchanisms of neuroprotection by mesencephalic astrocyte-derived neurotrophic factor (MANF). The data showed that MANF reduces apoptosis in the cell in which it originates, the cells it interacts with and in cells that receive externally manufactured MANF. Amarantus is developing MANF as a potential therapy for Parkinson's disease and other disorders characterized by stress to the endoplasmic reticulum and protein misfolding.

• **Biogen Idec Inc.**, of Weston, Mass., and **Elan Corp. plc**, of Dublin, Ireland, submitted applications to the FDA and European Medicines Agency requesting an expanded indication for first-line use of Tysabri (natalizumab) in relapsing forms of multiple sclerosis that have tested negative for antibodies to the JC virus. Risk of an opportunistic viral infection, progressive multifocal leukoencephalopathy, limits use of Tysabri to patients who cannot be treated with alternative therapies. However, the companies are providing risk stratification data and a risk algorithm for physicians to address the risk of infection supporting their application.

• **Cardium Therapeutics Inc.**, of San Diego, said the NYSE Amex LLC accepted an exchange listing compliance plan from the company after it was notified that it was not in compliance with one of the exchange's listing requirements based on its third-quarter 2012 report.

• **Galapagos NV**, of Mechelen, Belgium, identified a second preclinical compound in its alliance with **Janssen Pharmaceutica NV**, of Beerse, Belgium, part of Johnson & Johnson, triggering a milestone payment of €4 million (US$5.3 million). The rheumatoid arthritis deal, inked in 2007, provided Galapagos with €17 million initially, including €15 million up front and a €2 million milestone payment for the selection of GTI46 as part of the alliance. Janssen Pharmaceutica holds option rights to acquire global commercial licenses to additional internal programs at Galapagos, which stands to receive up to €1 billion in up-front payments, license fees and milestones associated with as many as 15 to 19 targets. (See *BioWorld Today*, Oct. 25, 2007.)

• **Genoa Pharmaceuticals Inc.**, of San Diego, said it is collaborating with researchers at McMaster University to characterize the in vivo advantages and potential clinical impact of Genoa's lead program, inhaled GP-101 (aerosol pirfenidone), in idiopathic pulmonary fibrosis (IPF). The research will combine Genoa's expertise in aerosol drug delivery with McMaster's experience in exploring mechanisms of pulmonary fibrosis and managing patients with IPF.

Stock Movers

1/16/13

Company	Stock Change	
Nasdaq Biotechnology	-$16.97	-1.11%
Alnylam Pharmaceuticals Inc.	+$2.01	+9.99%
Hyperion Therapeutics Inc.	+$2.32	+19.33%
Telik Inc.	-$0.24	-12.06%
Zalicus Inc.	-$0.07	-10.01%

(Biotechs showing significant stock changes Wednesday)

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AHC Media

Onyx

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(sorafenib) is its lead product on the kinase inhibition side. Onyx markets the drug for unresectable liver cancer and advanced kidney cancer with Bayer HealthCare Pharmaceuticals Inc.

Onyx also receives a 20 percent royalty on Bayer's oral multikinase inhibitor, Stivarga (regorafenib), which is marketed for metastatic colorectal cancer, and is also under review for the additional indication of gastrointestinal stromal tumors.

Bayer has submitted marketing applications in Europe and Japan for Stivarga, and the drug is under priority review in Japan.

Kyprolis leads Onyx's proteasome inhibitor franchise. It won a unanimous 11-1 vote in favor of approval from the FDA's Oncologic Drugs Advisory Committee (ODAC) in June 2012, and was approved soon after, in spite of concerns by some reviewers of severe cardiac toxicities and questions about its superiority to existing myeloma therpies. (See *BioWorld Today*, Dec. 13, 2011, June 19, 2012, June 21, 2012, and July 23, 2012.)

Kyprolis is indicated for patients who have received at least two prior therapies, including Velcade (bortezomib, Millennium: The Takeda Oncology Co.) and an immunomodulatory therapy, and have demonstrated disease progression on or within 60 days of completion of last therapy.

Kyprolis has its own sales group separate from Onyx's sales team for the kinase inhibitor franchise. Cowen and Co. analyst Phil Nadeau projected 2013 Kyprolis sales of as much as $200 million, with U.S. sales reaching $750 million in 2016.

Onyx acquired Kyprolis through its 2009 acquisition of Proteolix, in a deal worth up to $851 million. Onyx paid $276 million up front, with the rest in milestones, including $170 million that was due to Proteolix shareholders upon accelerated FDA approval. (See *BioWorld Today*, Oct. 13, 2009.)

Ligand Pharmaceuticals Inc. also is entitled to milestone payments and royalties on Kyprolis sales, having contributed its Captisol technology to the product.

In a Phase IIb trial in 266 heavily pretreated patients with relapsed or refractory multiple myeloma, the overall response rate was 24 percent, and median duration of response was 7.8 months.

Onyx continues to study Kyprolis. It has completed enrollment in the Phase III ASPIRE trial, testing the drug in combination with Revlimid (lenalidomide, Celgene Corp.) and low-dose dexamethasone vs. Revlimid and dexamethasone alone in relapsed multiple myeloma patients who have received one to three prior therapies. That trial is being carried out under a special protocol assessment with the FDA.

Another study, ENDEAVOR, is testing Kyprolis plus low-dose dexamethasone against Velcade plus low-dose dexamethasone, and Onyx's FOCUS trial will evaluate Kyprolis as a single agent in patients with relapsed and refractory disease who have received one to three prior therapies.

Onyx has two other proteasome inhibitors in development: oral proteasome inhibitor oprosomib (ONX 0912) and immunoproteasome inhibitor (ONX 0914).

Underwriters may exercise an option to purchase an additional 660,000 shares of common stock to cover overallotments.

BofA Merrill Lynch and Barclays were joint book-running managers for the offering.

Onyx reported cash, cash equivalents and marketable securities of $573 million as of Sept. 30.

Onyx's stock (NASDAQ:ONXX) lost $4.15, to close at $79.28 Wednesday. ■

Other News To Note

• **Hyperion Therapeutics Inc.**, of South San Francisco, said the FDA advised the company not to expect a final action on its new drug application (NDA) for Ravicti (glycerol phenylbutyrate) by the PDUFA date of Jan. 23. The agency said it is continuing to work on label and postmarketing requirements in connection with the NDA for the drug, which has orphan designation in the U.S. and Europe for the maintenance treatment of urea cycle disorders. In September, the FDA extended the PDUFA date for its review of Ravicti by three months, citing the need to provide time for a full review of the submission. The company's shares (NASDAQ:HPTX) rose 19.3 percent Wednesday on the news, gaining $2.32 to close at $14.32.

• **MonoSol Rx LLC**, of Warren, N.J., licensed Zuplenz (ondansetron) to **Vestiq Pharmaceuticals Inc.**, of Research Triangle Park, N.C. The oral soluble formulation, which incorporates MonoSol Rx's PharmFilm technology, is designed to prevent chemotherapy-induced, radiotherapy-induced and postoperative nausea and vomiting. The agreement included an undisclosed up-front payment to MonoSol and double-digit royalty payments from sales of Zuplenz, which Vestiq relaunched in the U.S. in the fourth quarter of 2012.

• **NanoSmart Pharmaceuticals Inc.**, of Laguna Hills, Calif., entered a research collaboration with the University of California Los Angeles to continue the development of the firm's drug delivery platform for treating cancer and other diseases. NanoSmart's platform uses human antibodies that target different types of tumors. When combined with an FDA-approved cancer drug, the technology is designed to allow for the creation of a range of next-generation drug products.

Washington Roundup

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report released last year, and NIH would lose about $2.4 billion. (See *BioWorld Today*, Sept. 21, 2012.)

The continuing resolution, which continues most government spending at fiscal 2012 levels, will die a few weeks later on March 27. If Congress fails to extend the resolution or approve a 2013 budget by then, the government would shut down.

"In light of persistent budgetary uncertainty," OMB said in its latest memo, "all agencies . . . should intensify efforts to identify actions that may be required should sequestration occur." The memo lists a number of steps agencies should be taking now, including:

• using available flexibility to reduce operational risks and minimize the impacts of potential cuts on the agency's core mission;

• identifying and addressing operational challenges that could have a significant effect on the agency's mission, or raise life, safety or health concerns;

• reviewing grants and contracts for savings;

• identifying ways to reduce work force costs. That could include hiring freezes, termination of temporary employees, or authorization of voluntary early retirements or administrative furloughs.

Part of the 2011 bipartisan Budget Control Act (BCA), sequestration was triggered by Congress' failure to pass legislation in January 2012 to trim $1.2 trillion from the federal deficit by 2021. Originally, the sequestration cuts were supposed to begin this month, but Congress passed a temporary reprieve at the 11th hour. (See *BioWorld Today*, Sept. 10, 2012.)

Sequestration, designed to reduce the deficit by about $109 billion in fiscal 2013, was included in the BCA to force Congress to deal with the nation's burgeoning debt. Sticking to 2012 spending levels, as the continuing resolution calls for, actually adds to the debt. According to the Congressional Budget Office, the deficit grew by another $1.1 trillion last year, making it the fourth consecutive year with a deficit of more than $1 trillion. (See *BioWorld Today*, Sept. 17, 2012.)

Generic Facility Fees Set

The first user fees for facilities that make active pharmaceutical ingredients (APIs) for generic drugs or finished dosage form (FDF) generics are due by March 4.

The FDA set the fiscal 2013 generic facility fees at $175,389 for each of the 325 domestic FDF facilities that self-identified and $26,458 for the 122 domestic API facilities. The fees for foreign plants – of which there are 433 FDF and 763 API facilities – are $15,000 higher, according to a notice to be published in the *Federal Register* Thursday.

In comparison, makers of brand drugs and biosimilars had to pay a 2013 establishment fee of $526,500. (See *BioWorld Today*, Aug. 2, 2012.)

In establishing the first generic drug user fees, the FDA Safety and Innovation Act (FDASIA) authorized the agency to collect a total of $249 million in generic fees in 2013, plus $50 million to clear up a backlog of abbreviated new drug applications.

By law, the FDF facility fee must generate 56 percent of the generic fee revenue, or about $139.4 million this year. And the API fee must generate 14 percent of the total, or nearly $34.9 million.

In the future, the generic fees will be due in October at the start of the fiscal year, along with brand and biosimilar user fees. ■

Other News To Note

• **NeoStem Inc.**, of Allendale, N.J., and subsidiary Progenitor Cell Therapy (PCT) LLC signed an agreement for PCT to provide services supporting the NYESO-1c259-T cell therapy product under development for multiple oncology indications by **Adaptimmune Ltd.**, of Oxford, U.K., and subsidiary Adaptimmune LLC. PCT will provide the transfer and qualification of Adaptimmune's manufacturing process for the T-cell therapy candidate at its facility in Allendale and subsequent manufacturing of the product for Adaptimmune's clinical trials. Last fall, Adaptimmune reported encouraging preliminary results from its expanded multiple myeloma trial in *Blood* and at the American Society of Hematology meeting in Atlanta. (See *BioWorld International*, Nov. 21, 2012.)

• **Omeros Corp.**, of Seattle, said its Cellular Redistribution Assay technology identified small molecules that interact with a Class B G protein-coupled receptor. Class B receptors are players in a range of disorders, including various types of cancer, multiple sclerosis, attention deficit hyperactivity, learning and memory impairments, neuropsychiatric disorders and metabolic disorders.

• **Oxigene Inc.**, of South San Francisco, said Nasdaq informed the company it had regained compliance with the minimum $1 bid price requirement for continued listing.

• **Paladin Labs Inc.**, of Montreal, said it entered an exclusive licensing deal with **Apeiron Biologics AG**, of Vienna, Austria, for APN311, an antibody-based immunotherapy for children with high-risk neuroblastoma. Under the terms, Paladin gets rights to market and sell the drug in Canada and Sub-Saharan Africa (including South Africa). Financial terms were not disclosed.

• **PsiOxus Therapeutics Ltd.**, of Oxford, UK, said it received a three-year $3.3 million contract from the Defense Threat Reduction Agency to develop biodefense vaccine adjuvants using its PolyMAP technology to improve the safety and efficacy of two vaccine candidates: the recombinant protective antigen for anthrax and the Venezuelan equine encephalopathy virus. PolyMAP is an immunotherapeutic platform designed to combine polymers with synthetic adjuvants to enhance the effectiveness of vaccines.

EnBiotix

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resistant infections and the spread of such bugs from hospitals to communities have not, in recent decades, been matched by the development of novel antibiotics and antifungals. As a result, infections that were once terrifying, and then routine, are coming full circle to be once more untreatable.

The idea that the war between drugs and bugs can be shifted by giving the former a boost is not new. Wager pointed to antibiotics such as Augmentin (GlaxoSmithKline plc) that combine penicillins with beta-lactamase inhibitors. Bacteria can develop resistance against penicillins by producing beta-lactamase, and adding the inhibitor can give them a second lease on life.

"Our product concept takes that example," Wager said. "But it extends and broadens it by being applicable to all major classes of antibiotics."

EnBiotix, whose name is meant to evoke the phrase "engineered antibiotics," is a start-up out of Boston University that aims to commercialize findings out of the laboratory of co-founder James Collins. Other co-founders include Apeiron Partners LLC, where Wager is a founder and managing director. Apeiron is a full-fledged investment bank in terms of its licenses, but in practice specializes in a few select areas, among them university spinouts and "select" new company formations such as EnBiotix, Wager said.

EnBiotix is in the process of licensing about half a dozen technology platforms out of Collins' laboratory whose overarching goal is to give existing antibiotics a boost in their fight against bacteria and fungi.

Collins and his team published data on one of their approaches in the Jan. 6, 2013, issue of *Nature Biotechnology*, where they described using a bioinformatics approach to look for metabolic genes that would boost the production of reactive oxygen species (ROS) in bacteria.

ROS are usually considered bad for cells, including bacteria. Previous work by Collins has shown that the situation is more complex. "Bugs use this stress response partly as escape strategy," Collins told *BioWorld Today*, developing resistance through an enhanced mutation rate caused by higher levels of ROS. (See *BioWorld Today*, Feb. 19, 2010.)

Nevertheless, his team also showed that the cell killing abilities of antibiotics were enhanced when the drugs were combined with compounds that could block bacteria from getting rid of ROS.

"In our new work, we wanted to see whether we could shift the other goalpost" by inducing bacteria to produce more ROS, Collins said.

His team began by using bioinformatics to identify more than 100 metabolic reactions in cells that can change ROS levels. "Many of these reactions," he said, "are not accounted for in typical genome scans," and their sheer number has led him to suspect that looking at ROS in greater detail would show that it is an important player in cell metabolism.

The team then validated some of the predicted targets by showing they could be used to manipulate ROS production, and that bacteria that produced higher levels of ROS were more susceptible to several major classes of antibiotics.

Putting a finger on the scale by targeting ROS production is one of the strategies that EnBiotix plans to pursue, but not its most advanced program. That distinction goes to the company's antipersisters platform.

Persistent infections are those that survive treatment with antibiotics to come back. Persistent lung infections are what ultimately kill many cystic fibrosis patients.

EnBiotix is developing a new treatment for such lung infections, which consists, Wager said, of "a marketed antibiotic with a marketed second agent" to enhance the antibiotics' killer instincts. Combining them both in a new formulation and delivery system, he added, would bring the product back under patent protection. EnBiotix hopes to be in the clinic testing that particular product within 12 months to 24 months. ■

Other News To Note

• **QRxPharma Ltd.**, of Sydney, Australia, said it clarified the steps necessary with the FDA for approval of pain candidate MoxDuo, with a new drug application resubmission expected this quarter and a new PDUFA date set for the third quarter. MoxDuo is an immediate-release formulation combining oxycodone and morphine.

Clinic Roundup

• **Cytos Biotechnology Ltd.**, of Zurich, Switzerland, said a technical issue was identified with the rubber stoppers used to close the injection vials containing clinical trial material for its Phase IIb study testing lead candidate CYT003 in allergic asthma. Cytos will replace that material with new material available at clinical sites in the second quarter. The firm expects overall guidance for the study, which will recruit about 360 adults with moderate to severe disease who are not sufficiently controlled on current standard therapy, to remain the same. Top-line data are expected in the first half of 2014.

• **Stealth Peptides Inc.,** of Boston, said the first patient was enrolled in a Phase II study of Bendavia for the treatment of acute kidney injury and renal microvascular dysfuction in hypertension. The study is intended to assess the drug's improvement of renal function in patients with hypertension and severe unilateral renal artery stenosis, after treatment with angioplasty. Bendavia is a compound designed to target mitochondria to restore bioenergetics and organ function in acute and chronic kidney diseases.

Financings Roundup

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buy out manufacturing rights for its own drugs based on the Lipid NanoParticle (LNP) platform. The arrangement let Alnylam keep rights to access the LNP technology, important to its research. (See *BioWorld Today*, Nov. 14, 2012.)

RNAi work, once considered doomed, has been on something of a roll lately. A recent entry to the space, Solstice Biologics LLC, garnered $18 million in its first round of financing earlier this month. The financing further lent potentially revenue-oriented credence to the scientific stamp of approval given RNAi in 2006, when pioneers Craig Mello and Andrew Fire won the Nobel Prize. (See *BioWorld Today*, January 7, 2013.)

Others to draw interest include Austin, Texas-based Mirna Therapeutics Inc., which closed a $34.5 million Series C round in October. Regulus Therapeutics Inc., of La Jolla, Calif., focused on microRNA, nailed down a pair of deals in August with London-based AstraZeneca plc and Biogen Idec Inc., of Weston, Mass. (See *BioWorld Today*, Aug. 16, 2012, and Oct. 25, 2012.)

As for Alnylam, its main value driver is ALN-TTR02, which uses an intravenous injection of lipid nanoparticles to target the transthyretin-mediated amyloidosis drug to the liver. Phase II data are expected in the middle of next year, and the pivotal Phase III trial likely will start in the second half. The compound also will be developed as a therapy for familial amyloidotic cardiomyopathy.

At the time of the Tekmira settlement, Leerink Swann analyst Marko Kozul assigned a 65 percent "risk-adjusted probability of success" for the AL-TTR02 program in its first indication.

Alnylam also is working on a subcutaneous formulation of ALN-TTR and a novel hemophilia therapy known as ALN-AT3, both of which should enter the clinic next year. Analysts expect the firm to put the wraps on new partnerships for three RNAi programs: ALN-PCS for hypercholesterolemia, ALN-HPN for refractory anemia and ALN-TMP for blood disorders.

J.P. Morgan Securities LLC and Morgan Stanley & Co. LLC are acting as joint book-running managers and representatives of the underwriters for the latest offering. Deutsche Bank Securities Inc., Piper Jaffray & Co., Leerink Swann LLC, Needham & Co. LLC and JMP Securities LLC are serving as co-managers.

Alnylam's stock (NASDAQ:ALNY) closed Wednesday at $22.14, up $2.01, or 10 percent.

In other financing news:

• **InterMune Inc.**, of Brisbane, Calif., agreed to sell an aggregate of $105 million principal amount of its 2.5 percent convertible senior notes due 2017 and 13.5 million shares of its common stock at a price to the public of $9.90 per share in concurrent underwritten public offerings. InterMune granted the underwriters 30-day options to purchase up to an additional $15.75 million aggregate principal amount of convertible senior notes and up to an additional 2 million shares of common stock in connection with the offerings. The company estimated aggregate net proceeds from the concurrent offerings to be about $228.1 million, not counting the exercise of underwriters' options. Proceeds will be used to repay at maturity or earlier repurchase its outstanding 5 percent convertible senior notes due in 2015.

• **Pacira Pharmaceuticals Inc.**, of Parsippany, N.J., proposed to offer $100 million of aggregate principal amount of its convertible senior notes due 2019, subject to market conditions and other factors. Pacira intends to use about $30 million of the net proceeds to pay off debt and advance the approved pain drug Exparel (bupivacaine liposomal injectable suspension).

• **Pharming Group NV**, of Leiden, the Netherlands, entered a financing of €16.35 (US$21.71 million) by means of a convertible bond with a syndicate of existing specialized and institutional investors led by Kingsbrook Opportunities Master Fund LP. The financing is subject to shareholder approval to be requested at an upcoming extraordinary meeting of shareholders on Feb. 28. The proceeds from the facility, which follows the receipt in November of a $10 million milestone payment from **Santarus Inc.**, of San Diego, related to the positive readout of the pivotal U.S. Phase III study of Ruconest (conestat alfa), will further strengthen the balance sheet and is foreseen to secure Pharming's cash runway throughout the upcoming regulatory approval process in the U.S. ■

Clinic Roundup

• **Stratatech Corp.**, of Madison, Wis., reported top-line data from a proof-of-concept trial testing StrataGraft, a universal human skin substitute in development for treating severe burns. Enrollment of all 20 subjects is complete, and 19 of those avoided the need for autograft surgery and regrafting at their StrataGraft-treated sites. The one subject regrafted by day 28, a primary endpoint, also experienced graft failure at the control autograft site and other nonstudy sites. Seventeen of the remaining 19 evaluable patients progressed to complete wound closure by three months, the trial's secondary endpoint. Analysis of the StrataGraft sites at three months also showed no evidence of residual DNA from the StrataGraft tissue in any of the 20 patients. The study is being conducted in collaboration with the Department of Defense, Armed Forces Institute of Regenerative Medicine.

• **ViroPharma Inc.**, of Exton, Pa., said data published in *The Journal of Pediatrics* showed that use of Cinryze (C1 esterase inhibitor [human]) in pediatric patients provided relief from symptoms of hereditary angioedema attacks and reduced the rate of attacks.

Pharma: Other News To Note

• **Astellas Pharma Inc.**, of Tokyo, said the FDA accepted for filing a supplemental new drug application for Tarceva (erlotinib) for first-line use in patients with locally advanced or metastatic non-small-cell lung cancer whose tumors have epidermal growth factor receptor (EGFR)-activating mutations. The application was granted priority review status, and an FDA decision is expected in the second quarter. A premarket approval application for a companion diagnostic, the cobas EGFR Mutation Test, developed by Roche Molecular Diagnostics, a division of Basel, Switzerland-based **Roche AG**, also was submitted for approval.

• **Johnson & Johnson**, of New Brunswick, N.J., said unit Janssen R&D Ireland reported that the European Commission approved Prezista (darunavir) 800-mg tablet, allowing HIV patients once-daily darunavir treatment. The drug is indicated in combination with other antiretrovirals in HIV-1-infected patients with no darunavir resistance-associated mutations.

U.S. Patent Disclosures

• **Allon Therapeutics Inc.**, of Vancouver, British Columbia, was issued U.S. composition-of-matter patents for a family of peptides being developed for the treatment of neurological and neurodegenerative diseases.

• **Aphios Corp.**, of Woburn, Mass., received a notice of allowance for its U.S. Patent, "Polymer Microspheres/ Nanospheres and Encapsulating Therapeutic Proteins Therein," for delivering insulin orally.

• **ArGen-X BV**, of Rotterdam, the Netherlands, received a notice of allowance for U.S. Patent application No. 12/497,239 in regard to its arGEN-X SIMPLE Antibody technology.

• **Curis Inc.**, of Lexington, Mass., was issued U.S. Patent No. 8,324,240, "Fused Amino Pyridine as HSP90 Inhibitors," for a genus of compounds, which include Debio 0932, a heat-shock protein 90 inhibitor.

• **MediciNova Inc.**, of San Diego, received a notice of allowance for its pending U.S. Patent application covering use of MN-221 (bedoradrine), which treats acute asthma exacerbations, in combination with a standard of care regimen.

• **MiMedx Group Inc.**, of Kennesaw, Ga., was issued U.S. Patent No. 8,323,701, "Placental Tissue Grafts," relating to its AmnioFix allografts.

• **Rexahn Pharmaceuticals Inc.**, of Rockville, Md., was issued a continuation U.S. Patent No. 8,314,123 for No. 8,034,829. The continuation patent covers more isoquinolinamine compounds as well as the pharmaceutical composition and method to produce an antitumor effect in several different kinds of cancer.

• **Sequenom Inc.**, of San Diego, was issued U.S. Patent No. 8,340,916, "Diagnosing Fetal Chromosomal Aneuploidy Using Massively Parallel Genomic Sequencing."