REGENICIN, INC.

FORM 8-K
(Current report filing)

Filed 04/07/11 for the Period Ending 03/14/11

Address	10 HIGH COURT LITTLE FALLS, NJ 07424
Telephone	646-403-3581
CIK	0001412659
Symbol	RGIN
SIC Code	3564 - Industrial and Commercial Fans and Blowers and Air Purification Equipment
Industry	Biotechnology & Drugs
Sector	Healthcare
Fiscal Year	09/30

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): March 14, 2011

REGENICIN, INC.
(Exact name of registrant as specified in its charter)

Nevada	333-146834	27-3083341
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

10 High Court, Little Falls, NJ 07424
Address of principal executive offices

Registrant's telephone number, including area code: (973) 557-8914

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

[ ] Written communications pursuant to Rule 425 under the Securities Act (17CFR 230.425)
[ ] Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
[ ] Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
[ ] Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Section 8 – Other Events

Item 8.01 Other Events

On March 14, 2011, the Food and Drug Administration (FDA) issued a letter in response to the Request for Designation of PermaDerm ™ explaining that PermaDerm ™ has been designated as a combination product. A combination product is comprised of two or more regulated components which, in the case of PermaDerm ™ , includes a biologic component and a drug component. The FDA based their determination on the fact that PermaDerm ™ consists in part of autologus skin cells (specifically epidermal keratinocltes and dermal fibroblasts), which are biological product components and Chondroitin-6-Sulfate (C-6-S) which is a drug component. C-6-S is a critical part of PermaDerm ™ as it helps support the collagen matrix on which the engineered skin is grown.

The FDA assigned the Center for Biologics Evaluation and Research (CBER) as the lead agency center for premarket review and regulation based on CBER's expertise in evaluating the most significant safety and effectiveness questions presented by a combination product.

A copy of the FDA's March 14, 2011 letter is attached to this Current Report as Exhibit 99.1

Section 9 – Financial Statements and Exhibits

Item 9.01 Financial Statements and Exhibits

Exhibit No.	**Description**
99.1	FDA letter dated March 14, 2011

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

REGENICIN, INC.

/s/ Randall McCoy
Randall McCoy
CEO and Director
Date: April 6, 2011

DEPARTMENT OF HEALTH &. HUMAN SERVICES

Office of Combination Products
WO 32,Room 5129
10903 New Hampshire Avenue,
Silver Spring, MD 20993

March 14, 2011

Kirstin Powel
Director, Quality Assurance/Regulatory Affairs
Lonza Walkersville, Inc
8830 Biggs Ford Road
Walkersville, MD 21793

Re: Request for Designation
PermaDerm
Our file: RFD11003
Dated: January 10, 2011
Received: January 10, 2011
Filed: January 14, 2011

Dear Ms. Powel:

The Food and Drug Administration (FDA) has completed its review of the request for designation (RFD) for the PermaDerm™ product ("PermaDerm" or "product") that you submitted. We have determined that the product is a combination product, and we have assigned it to the Center for Biologics Evaluation and Research (CBER) as the lead agency center for premarket review and regulation based on CBER's expertise in evaluating the most significant safety and effectiveness questions presented by the combination product.

Description of the Product

According to the RFD, PermaDerm (also called Autologous Engineered Skin Substitute) is indicated for the treatment of deep partial thickness and full-thickness injuries involving greater than 50% of the total body surface area. The RFD states that the product consists of an absorbable biopolymer substrate or matrix comprised of Type I bovine collagen and chondroitin-6-sulfate (C-6-S), which is populated with cultured autologous skin cells, specifically epidermal keratinocytes and dermal fibroblasts. The cells are combined with the biopolymer matrix, cultured in vitro to promote cell growth, differentiation, and maturation, and then packaged in a nutrient medium. The product is generally applied to the patient twice, on separate and distinct wound areas, usually on opposite sides of the body. After the wound bed is prepared, PermaDerm is applied to the wound bed and secured with surgical staples. A non-adhesive porous wound dressing is used to cover the grafts, and then they are saturated with solutions of non-cytotoxic antimicrobial agents and nutrients for 5 days. After 5 days, dry dressings are used for an additional 2 days. The sites are then cleansed, rinsed, and allowed to dry. Open wound areas are treated with a non-adherent dressing and an antimicrobial ointment. Dry, keratinized areas are treated with a moisturizing lotion and covered with gauze.

You recommend that the product be classified as "a combination product comprising a collagen/chondroitin sulfate biopolymer sponge matrix and autologous skin cells" and assigned to the Center for Devices and Radiological Health (CDRH) for premarket review and regulation. You acknowledge that a primary mode of action (PMOA) "has not been definitively determined," but you claim that the biopolymer matrix is "a key component" that "functions as a defined field for cellular organization and the ultimate redevelopment of connective tissue." You assert that the autologous skin cells have a secondary function to accelerate permanent wound closure. Additionally, you note that some other skin substitutes indicated for wound healing are currently regulated by CDRB, though you recognize that PermaDerrn is "the only known [ESS for this indication] that combines a bioabsorbable polymeric substrate with autologous skin cells."

C-6-S Component

Under the Federal Food Drug and Cosmetic Act (FDCA), the term "drug" means articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; and articles (other than food) intended to affect the structure or any function of the body of man or other animals. [1]

Under the FDCA, the term "device" means an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including any component, part, or accessory, which is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or intended to affect the structure or any function of the body of man or other animals, and which does not achieve its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized fell' the achievement of its primary intended purposes. [2]

You claim that the biopolymer matrix component of your product, comprised of Type I bovine collagen and C-6-S, meets the statutory definition of a device. We disagree. You have not demonstrated that the C-6-S component of the product meets the definition of a device under section 201(h) of the Act (21 U.S.C. § 321(h)). Specifically, you have not demonstrated that it does not achieve its primary intended purposes through chemical action within or on the body of man. Published literature indicates that glycosaminoglycans like C-6-S have a number of chemical mechanisms of action, including anti-inflammatory activity (binding cytokines and affecting their production by the tissues to which they are applied), anti-infective properties, and anti-oxidant properties. [3] Moreover, you acknowledge in your RFD that the biopolymer matrix component of PermaDerrn possesses “biological properties and activities.” [4]

Consequently, we have determined that the C-6-S component of your product meets the definition of a drug, but not the definition of a device under the FDCA. We have determined that the C-6-S component is a drug within the meaning of section 201(g) of the Act (21 D.S.C. § 321 (g)) because it is an article intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man; and/or an article intended to affect the structure or any function of the body.

1 Section 201(g) of the Act, 21 U.S.C & 321(g)
2 Section 201(h) of the FD&C Act, 21 U.S.C & 321(h)
3 Lauder, R.M *Complement Ther Med* (2009) 17(1): 56-52
4 See for instance, page 8 of your RFD.

Product Classification: Combination Product

We have considered the information in the RFD and discussed the issues with staff in CBER, CDRH, the Center for Drug Evaluation and Research (CDER), and the Office of General Counsel. Based on the information provided in your RFD and otherwise available to the agency at this time, we have determined that PermaDerm is a combination product within the meaning of section 503(g) of the FD&C Act and Title 21 of the Code of Federal Regulations (CFR) section 3.2(e)(1) because PermaDerm consists in part of autologous skin cells (specifically epidermal keratinocytes and dermal fibroblasts), which are biological product components, and C-6-S, which as described above is a drug component. Assignment of a lead Center to conduct the review of a combination product is made in accordance with section 503(g)(1) of the Act and 21 CFR section 3.4.

You assert that the biopolymcr matrix's action, which consists of both the C-6-S and Type I bovine collagen, provides the primary mode of action and that the action by the autologous skin cells is secondary. However, you did not provide any specific data to allow for the quantification of the relative contributions of each of the components in your product. You describe that the biopolymer matrix covers and protects the wound, aids in angiogenesis and neovascularization in *vivo* , and helps to limit inflammation. [5] Similarly, it appears that the autologous skin cells may also cover and protect the wound (via the stratum corneum), aid in angiogenesis and neovascularization in *vivo* by providing a continuous supply of secreted growth factors to promote vascularization, and accelerate wound closure and tissue remodeling. Based all the information provided in the RFD and the information otherwise available to the agency, it is unclear which component provides the primary mode of action.

You claim that without the 3-dimensional structure of the biopolymer matrix, effective cellular remodeling would not be accomplished. This argument is unpersuasive because the cellular component of the product (i.e., the autologous skin cells) also produces its own collagen and other extracellular matrix proteins, further building the "scaffold" beyond that provided by the biopolymer matrix. It is difficult to determine whether the scaffold effect provided by the original matrix component alone, the scaffold effect provided by the both the original matrix and the collagen and extracellular matrix produced by the autologous skin cells, or the stimulation of cell migration and growth by the release of growth factors and cytokines provide the most imp0l1ant therapeutic action of the combination product. Additionally, we note that the biopolymer matrix component of the product degrades rapidly, with full bioabsorption within a few weeks, while the autologous skin cells appear to remain for at least several months. Consequently, the autologous skin cells, unlike the biopolymer matrix, may have a long-term therapeutic effect on the treatment of the burns.

In short, you have not provided adequate data to support your contention that the biopolymer matrix provides the most important therapeutic effect of PermaDerm. Based on the information you provided, the published literature, and other information available to FDA, we cannot determine, with reasonable certainty, which component provides the primary mode of action for the combination product.

5 We acknowledge your assortion that one of the essential activities of the matrix is to “promote the organization of the individual cell populations in vitro.” However, this activity of the product takes place during its manufacture, rather than during the therapeutic application of the product, so we do not consider it here.

In accordance with 21 CFR 3.4(b), we next considered whether there is an agency component that regulates other combination products that present similar questions of safety and effectiveness with regard to the combination product as a whole. We are not aware of any combination product previously reviewed by the agency that presents similar questions of safety and effectiveness as those raised by your product because the agency has not yet reviewed a product for this indication that combines a bioabsorbable polymeric substrate consisting of Type I bovine collagen and C-6-S with autologous skin cells.

We distinguish PermaDerm from the other products you describe in your RFD that are regulated by CDRH. First, Apligraf consists of allogeneic donor cells, which studies indicate do not persist at the wound site long-term. [6] Your product, on the other hand, consists of autologous skin cells, which appear to remain at the wound site over many months (see RFD Figure 5). Second, Dermagraft does not contain a biopolymer matrix comprised of Type I collagen and C-6S, nor does it contain keratinocytes. Moreover, its fibroblasts are allogeneic, similar to those in Apligraf, and are also not cxpected to persist at the wound site, unlike the autologous cells of your product. Third, Epicel does not contain either a biopolymer matrix or autologous fibroblasts like your product. Finally, though Integra contains a biopolymer matrix comprised of Type I bovine collagen and C-6-S, cellular products are not used during the manufacturing process or as part of the final product. The biopolymer matrix of PermaDerm, on the other hand, is cultured with autologous skin cells prior to its delivery to the patient. During this culture/manufacture period, the bovine collagen becomes a substrate that is degraded and supplemented with "newly synthesized human collagen, glycosaminoglycans, and other extracellular matrix molecules." Consequently, as stated above, these products raise different questions of safety and effectiveness than those raised by PermaDerm. For instance, the combination of this type of biopolymer matrix with the autologous skin cells may raise questions not previously addressed in these other products.

Because we are not aware of a combination product previously reviewed by the agency that presents similar questions of safety and effectiveness as your product, in accordance with 21 CFR 3.4(b), we have assigned your product to the agency component with the most expertise related to the most significant safety and effectiveness questions presented by the combination product. We have concluded that the most significant safety and effectiveness questions presented by your product are those related to the reproducibility of the manufacturing process for the autologous skin cells, including the characterization and evaluation of hazards for cells that will be from a unique donor (i.e., patient) for each product, their potency, and their complex actions to accelerate wound closure and promote tissue formation. We have determined that CBERs expertise with these safety and effectiveness issues makes it the appropriate Center to lead the premarket review and regulation of this combination product. [7]

6 Griffiths et al. Tissue Eng (2004) Jul-Aug: 10(7-8):1180-95

7 Your RFD incorrectly asserts the Intercenter Agreement (ICA) between CBER and CDRH designates jurisdiction to CDRH for products like PermaDerm. However, the specific language from section V(C)(3)(a) applies only to automated cell seperators and other blood processing equipment. Therefore, the provision is inapplicable to PermaDerm.

Assignment of Lead Center: CBER

Accordingly, for the reasons explained above, we are assigning the combination product to CBER for premarket review and regulation. CBER will consult with other agency components as appropriate regarding the review of your application. We encourage you to discuss these and other regulatory requirements applicable to your combination product with CBER. CBER's Office of Cells, Tissue, and Gene Therapy (OCTGT) will have lead responsibility for the product's premarket review and regulation. For further information about review requirements and how to proceed, please contact Dr. Patrick Riggins, Supervisory Project Manager, OCTGT, at (301) 827-5366 or at patlick.riggins@fda.hhs.gov. Please include a copy of this letter with your initial submission to CDER.

You may submit a written request for reconsideration of the classification or assignment of your product within 15 days of receipt of this letter in accordance with 21 CFR 3.8(c). If you wish to request reconsideration, or have any other questions about this letter, please contact me at (301) 796-8938 or at leigh.hayes@fda.hhs.gov. Finally, OCP is available to you as a resource for questions or issues that may arise throughout the development of your product. You may reach us at the above address or by email at eombination@fda.gov.

Sincerely,

/s/Leigh Hayes
Leigh Hayes
Product Assignment Officer

CC: Patrick Riggins