UNITED GUARDIAN INC
Form 10-K
March 21, 2019

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2018

OR

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

For the transition period from __________ to ____________

Commission file number 1-10526

UNITED-GUARDIAN, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	11-1719724 (I.R.S. Employer Identification No.)
230 Marcus Blvd., Hauppauge, NY (Address of principal executive offices)	11788 (Zip Code)

Registrant's telephone number, including area code: (631) 273-0900

Securities registered pursuant to Section l2(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $.10 par value	The NASDAQ Global Market

Securities registered pursuant to Section 12(g) of the Act:

None

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Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data file required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer		Accelerated filer
Non-accelerated filer	(Do not check if a smaller reporting company)	Smaller reporting company
		Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.)
Yes No

As of June 29, 2018, the last business day of the Registrant's most recently completed second fiscal quarter, the aggregate market value of the Registrant's common stock held by non-affiliates (based on the closing sales price of such shares on The NASDAQ Global Market ("NASDAQ") on such date) was approximately $ 61,483,641. (For the purpose of this report it has been assumed that all officers and directors of the Registrant, as well as all stockholders holding 10% or more of Registrant's stock, are affiliates of the Registrant).

As of March 1, 2019, the Registrant had issued and outstanding 4,594,319 shares of Common Stock, $.10 par value per share ("Common Stock").

DOCUMENTS INCORPORATED BY REFERENCE:

Certain information required by Part III (portions of Item 10, as well as Items 11, 12, and 13) is incorporated by reference to the Registrant's definitive proxy statement for the 2019 annual meeting of stockholders ("2019 Proxy Statement"), which, pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is to be filed with the Securities and Exchange Commission (the "SEC") no later than 120 days after Registrant's fiscal year end.

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This Annual Report on Form 10-K (“Annual Report”) contains both historical and forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, which provides a safe harbor for forward-looking statements by the Registrant about its expectations or beliefs concerning future events, such as financial performance, business prospects, and similar matters. The Registrant desires to take advantage of such "safe harbor" provisions and is including this statement for that express purpose. Words such as "anticipates", "believes", "expects", "intends", "future", and similar expressions identify forward-looking statements. Any such forward-looking statements in this report reflect the Registrant's views as of the date of filing of this report with the United States Securities and Exchange Commission (the “SEC”) with respect to future events and financial performance, and are subject to a variety of factors that could cause the Registrant's actual results or performance to differ materially from historical results or from the anticipated results or performance expressed or implied by such forward-looking statements. Because of such factors, there can be no assurance that the actual results or developments anticipated by the Registrant will be realized or, even if substantially realized, that they will have the anticipated results. The risks and uncertainties that may affect the Registrant's business include, but are not limited to: economic conditions, governmental regulations, technological advances, pricing and competition, acceptance by the marketplace of new products, retention of key personnel, the sufficiency of financial resources to sustain and expand the Registrant's operations, and other factors described in this report and in prior filings with the SEC. Readers should not place undue reliance on such forward-looking statements, which speak only as of the date hereof, and should be aware that except as may be otherwise legally required of the Registrant, the Registrant undertakes no obligation to publicly revise any such forward-looking statements to reflect events or circumstances that may arise after the date hereof.

PART I

Item 1. Business.

(a) **Introduction**

United-Guardian, Inc. ("United", "Registrant", or “Company”) is a Delaware corporation that, through its Guardian Laboratories Division ("Guardian"), manufactures and markets cosmetic ingredients, personal care products, pharmaceuticals, medical lubricants, health care products, and specialty industrial products. It also conducts research and product development, primarily related to the development of new and unique cosmetic and personal care products. The Company’s research and development department also modifies, refines, and expands the uses for existing products, with the goal of further developing the market for the Company's products.

United's predecessor, United International Research, Inc. ("UIR"), was founded and incorporated in New York in 1942 by Dr. Alfred R. Globus, United's Chairman and Director of Research until his death on April 9, 2009. On February 10, 1982, a merger took place between UIR and Guardian Chemical Corp. ("GCC"), an affiliate of UIR, whereby GCC was merged into UIR and the name was changed to United-Guardian, Inc., a New York corporation. On September 14, 1987, United-Guardian, Inc. (New York) was merged with and into a newly-formed Delaware corporation by the same name, United-Guardian, Inc., for the purpose of changing the domicile of the Company to Delaware.

The Company has a broad range of products, some of which are currently marketed and some of which are still in the research and development stage. Of the products being actively marketed, the two largest product lines are the LUBRAJEL® line of cosmetic ingredients and medical lubricants, which accounted for approximately 67% of the Company's sales in 2018, and RENACIDIN® IRRIGATION SOLUTION ("RENACIDIN"), a pharmaceutical product that accounted for approximately 27% of the Company's sales in 2018. All references in this Annual Report to “sales” or “Sales” shall mean Gross Sales.

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(b) **Description of Business**

The Company manufactures and markets cosmetic ingredients, personal and health care products, medical lubricants, pharmaceuticals, and specialty industrial products. It also conducts research and development, primarily related to the development of new and unique cosmetic and personal care products. The Company focuses on the development of products that fill unmet market needs, have unique properties, and use proprietary technology that it sometimes protects with patents. Many of the Company's products are marketed through collaborative agreements with larger companies. The personal care products manufactured by the Company, including the cosmetic ingredients, are marketed to end users through the Company's worldwide network of marketing partners and distributors, and are currently used by many of the major manufacturers of cosmetic and personal care products. The Company sells product outright to its marketing partners, Ex Works (EXW) the Company’s plant in Hauppauge, New York. Those marketing partners in turn resell those products to their customers, who are typically the manufacturers and marketers of cosmetic and personal care products, and who in turn utilize the Company’s products in their finished products. The products are not sold on a consignment basis, so unless a product is determined to be defective it is not returnable, except at the discretion of the Company.

The Company operates in one business segment. The Company’s products are separated into four distinct product categories: personal care products (including cosmetic ingredients), pharmaceuticals, medical products, and industrial products. Each product category is marketed differently.

The Company’s personal care products, including cosmetic ingredients, are marketed globally by six marketing partners, of which Ashland Specialty Ingredients (“ASI”), a business segment of Ashland, Inc., is the largest. ASI manufactures and markets globally an extensive line of personal care and pharmaceutical additives and various other specialty products. The Company’s personal care products are sold directly to those marketing partners, which in turn resell those products to their customers for use in the formulation of one or more of the customers’ personal care and cosmetic products. The Company’s non-pharmaceutical medical products (referred to hereinafter as “medical products”) and its specialty industrial products are sold directly by the Company to marketers of finished products or to the contract manufacturers utilized by those marketers. The Company’s pharmaceutical products are marketed primarily through its dedicated RENACIDIN web site and by online promotion, and are sold to hospitals and pharmacies primarily through full-line drug wholesalers, which purchase the Company’s products outright for resale to their customers. The Company also sells a small quantity of pharmaceutical products directly to hospitals and pharmacies. The Company's products are sold under trademarks or trade names owned by the Company, some of which are registered with the United States Patent and Trademark Office as well as with comparable regulatory agencies in some foreign countries.

PRODUCTS

As stated above, the Company operates in one business segment, and its product lines are separated into four distinct product categories:

PERSONAL CARE

LUBRAJEL® is an extensive line of water-based moisturizing and lubricating gel formulations that are used as ingredients in personal care (primarily cosmetic/skincare) products. In the personal care industry, they are used primarily as moisturizers and as bases for other cosmetic ingredients and can be found as an ingredient in skin creams, moisturizers, makeup, and body lotions. The largest product by sales in the LUBRAJEL personal care line in 2018 was LUBRAJEL OIL, followed by LUBRAJEL PF (also sold under the trade name "Norgel"). Some other formulations of LUBRAJEL that are sold for cosmetic use (all using the LUBRAJEL name), in descending order of sales, are CG, MS, DV, and NP. In addition, many of these products are available in equivalent formulations that do not contain parabens as the preservative, and instead use a different preservative system that is preferred by some customers. Those equivalent products are differentiated by adding the word "Free" after the name (for example, LUBRAJEL MS Free and DV Free), indicating that those formulations are free of parabens.

LUBRAJEL PF is different from the other products in the LUBRAJEL line in that it is a completely preservative-free form of LUBRAJEL. Tests have shown that this product self-preserves, and that it aids in the preservation of other cosmetic ingredients with which it is formulated. It is marketed under the LUBRAJEL PF tradename in all geographic markets other than France, where it is marketed under the tradename “Norgel” by Societe D'Etudes Dermatologiques ("Sederma"), a subsidiary of Croda International Plc (“Croda”). Sederma is the Company's exclusive marketing partner and distributor of the Company’s cosmetic ingredients in France and, along with its parent company, Croda, is a major supplier of specialty cosmetic ingredients to the personal care products industry. Purchases of this product by the company’s largest marketing partner, ASI, for distribution in China, increased significantly in 2018 compared with 2017.

LUBRAJEL NATURAL was the first product in a line of LUBRAJEL products for cosmetic use that are produced using only ingredients that are considered “natural”. This product, as well as the additional “natural” products under development (see “Development Activities” below) are based on natural polysaccharides, which contribute moisturization, emulsion stabilization, and emolliency to personal care products, particularly creams and lotions. Ecocert, one of the global organizations authorized to certify natural and organic products, has certified that LUBRAJEL NATURAL complies with the Cosmetic Organic and Natural Standard (“COSMOS”), indicating that the product is suitable for use in natural and organic cosmetic products. This product is now being actively marketed, but sales in 2018 decreased slightly from 2017.

LUBRASIL™ is a special formulation of LUBRAJEL in which silicone oil is incorporated into a LUBRAJEL base by microemulsification, thereby maintaining much of the clarity of regular LUBRAJEL. The product has a silky feel, and is water resistant while at the same time providing moisturization. The current LUBRASIL formulation is known as LUBRASIL II SB, which contains substantially higher levels of silicone than the original LUBRASIL formulation.

LUBRAJEL MARINE™: This is the second product that the Company developed for its new line of products that use only “natural” ingredients. It was formulated using naturally-derived polysaccharides, with some of the ingredients sourced from marine vegetation. This product was developed jointly with ASI, and for that reason is being marketed globally on an exclusive basis by ASI. Like the original LUBRAJEL NATURAL, this product has received COSMOS certification for use in natural and organic cosmetic products This product is being actively marketed by ASI, and the Company has begun to receive orders for it as companies begin to bring their formulations to market. The Company is hopeful that it will see steady growth in sales of this product during the coming years.

Total sales of the Company's personal care products increased by $661,260 (approximately 10%) for the year ended December 31, 2018 when compared with 2017, primarily due to the increase in sales of LUBRAJEL PF to ASI for distribution in China and sales of LUBRASIL II SB to ASI for sale to a new customer in Vietnam that started purchasing the product in 2018. LUBRAJEL personal care products represented 52% of the Company’s sales in 2018.

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Each of the following products accounted for less than 2% of the Company’s sales in 2018, listed in descending order of sales.

LUBRAJEL II XD is a version of LUBRAJEL that was developed to be a direct replacement for one of the competitive products to LUBRAJEL. There is also a paraben-free version of this product known as LUBRAJEL II XD Free. Sales of Lubrajel II XD and Lubrajel II XD Free increased by 69.9% in 2018 primarily due to ASI sales to new customers.

ORCHID COMPLEX™ is an oil-soluble base for skin creams, lotions, cleansers, and other cosmetics. It is an extract of fresh orchids modified by stabilizers and preservatives, and is characterized by its excellent lubricity, spreadability, light feel, and emolliency. Because of its alcohol solubility it may also be used in fragrance products, such as perfumes and toiletries. Its emolliency makes it an excellent additive to shampoos, bath products and facial cleansers. It is also a superior emollient for sunscreens, vitamin creams, toners and skin serums.

LUBRASLIDE™ and a related product, B-122™, are powdered lubricants used in the manufacture of cosmetics such as pressed powders, eyeliners, and rouges. The products act as binders, increasing water-repellency and drop strength and lowering the coefficient of friction in the products in which they are used. There are also some industrial applications for these products.

KLENSOFT™ is a surfactant (a surface-active agent, such as a soap or detergent) that can be used in shampoos, shower gels, makeup removers, and other cosmetic formulations. KLENSOFT sales have been highly variable due to the ordering patterns of the primary customers for the product.

The Company believes that its ability to maintain and/or increase sales of its cosmetic and other personal care products will depend on (a) the ability and determination of its marketing partners, especially its largest marketing partner, ASI, to continue to aggressively promote the Company’s products, particularly to new customers, and to find new marketing opportunities; (b) the Company's success in developing additional new products, including new varieties of LUBRAJEL, as well as new applications for existing products; and (c) the ability of the Company to find ways to compete with manufacturers of some lower-cost competitors to LUBRAJEL that have negatively impacted the sales of the Company’s personal care ingredients. In particular, the Company has experienced significant pricing pressure from competitive products being marketed in China by some Asian manufacturers. These lower-cost competitive products are likely to continue to negatively impact the Company’s profit margins on some of its products in certain geographic areas.

The Company believes that there is still potential to expand the sales of its LUBRAJEL line of products through new product development, modifications to make some of its current products more competitive, additional claim substantiation, and geographic expansion. The Company believes that its strong brand identity and reputation for supplying quality products will be advantageous in its efforts to compete with the growing number of lower-cost copies of its products, but that it will still be necessary to be more competitive with its product pricing in certain geographic areas in order to maintain and grow its market share.

MEDICAL

LUBRAJEL RR and **RC** are both water-based gels used primarily as lubricants for urinary catheters. They are special grades of LUBRAJEL that can withstand sterilization by gamma radiation, which is one of the methods of terminally sterilizing medical and hospital products. LUBRAJEL RR was the original radiation-resistant LUBRAJEL product. LUBRAJEL RC was developed as a lower-cost alternative to the LUBRAJEL RR for those customers who are in more cost-sensitive markets. Sales of LUBRAJEL RR were down by approximately 10% in 2018 compared with 2017 due to one of the customers for that product replacing LUBRAJEL RR with a different LUBRAJEL. Sales of LUBRAJEL RC were down by 21% for the year due to changes in the purchasing pattern of the primary customer for this product. The combined sales of both products accounted for approximately 9% of the Company’s sales in 2018.

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LUBRAJEL MG is the original form of LUBRAJEL, developed as a medical lubricant in the 1970s. It is used by many medical device manufacturers for lubricating urinary catheters, pre-lubricated enema tips, and other medical devices. Sales increased by approximately 6% in 2018 compared with 2017, which the Company believes was the result of fluctuations in the buying patterns of customers for this product. Sales of this product represented approximately 5% of the Company's sales in 2018.

LUBRAJEL LC, LUBRAJEL FA, and LUBRAJEL BA are LUBRAJEL formulations that were developed for use in oral care applications. Combined sales for these products increased by $39,263 (approximately 41%) compared with 2017 due primarily to sales to a new customer for LUBRAJEL BA. The combined sales of LUBRAJEL LC, LUBRAJEL FA and LUBRAJEL BA accounted for approximately $135,000 (approximately 1%) of Company sales in both 2018 and 2017.

LUBRAJEL FLUID is a very low viscosity form of LUBRAJEL that was developed to provide superior lubrication in water-soluble products. It was specifically developed, and is currently in limited use, as a replacement for silicone oils in pre-lubricated condoms. The Company has only one customer for this product, and sales of this product did not contribute significantly to the Company's overall sales.

Sales of all of the medical grades of LUBRAJEL decreased by approximately 6% in 2018 compared with 2017 and accounted for approximately 15% of the Company's sales in 2018 compared with approximately 18% in 2017. The Company believes that the decrease was due primarily to fluctuations in the purchasing patterns of its customers. The medical products also became a smaller percentage of total Company sales due to increased sales of the Company's personal care and pharmaceutical products relative to the medical products.

PHARMACEUTICAL

RENACIDIN® is a prescription drug product that is used primarily to prevent and to dissolve calcifications in urethral catheters and in the urinary bladder. It is currently marketed in a plastic 30 mL single-dose bottle. Sales of RENACIDIN increased by approximately 15% in 2018 compared with 2017 and represented approximately 27% of total Company sales.

CLORPACTIN® WCS-90 is an antimicrobial product used primarily in urology to treat infections in the urinary bladder. It is also used in surgery for treating a wide range of localized infections in the peritoneum (the lining of the abdominal cavity), as well as the eye, ear, nose and throat, and sinuses. The product is a powder that is mixed with water by the end user and used as a solution. It is also a powerful disinfectant, fungicide, and deodorizer. Sales of CLORPACTIN have been very consistent from year-to-year. In 2018, sales increased by approximately 3% and represented approximately 4% of the Company's sales. The Company believes that the increase was due to normal year-to-year fluctuations rather than any significant trend in sales.

The Company's pharmaceutical products are returnable only at the discretion of the Company unless (a) they are found to be defective; (b) the product is damaged in shipping; or (c) they are outdated (but not more than one year after their expiration date, which is a return policy that conforms to standard pharmaceutical industry practice).

INDUSTRIAL

DESELEX™ is a sequestering and chelating agent that is used primarily as a replacement for phosphates in the manufacture of detergents. It also has some use in personal care products as a chelating agent in shampoos and body washes. Sales of this product increased by $3,214 (approximately 4%) from $71,767 in 2017 to $74,981 in 2018.

THOROCLENS is a chlorine-based cleanser manufactured and packaged by the Company for a small company in New England that resells the product to its customers. Sales of this product decreased by $3,067 (approximately 4%) from $72,807 in 2017 to $69,740 in 2018.

DEVELOPMENT ACTIVITIES

In coordination with, and with input from, its marketing partners, the Company's research and development department has developed products that can be used in many different industries, including the personal care (including cosmetic), pharmaceutical, medical, health care, and specialty chemical industries. These products are in various stages of development, some currently marketable and some in the very early stages of development requiring a substantial amount of development work to bring them to market. Research is also being done on new uses for currently marketed products.

Prior to initiating research and development work on a product, market research is done to determine the marketability of the product, including the potential market size and the most effective method of marketing the product. After that, the research and development department will determine whether the product can be successfully developed, including (a) laboratory refinements and adjustments to suit the intended uses of the product; (b) stability studies to determine the effective shelf life of the product and suitable storage and transportation conditions; and (c) laboratory efficacy tests to determine the effectiveness of the product under different conditions. If development proves feasible, the Company will then determine whether production and sales costs make it feasible to bring the product to market.

If the initial development work is successful, and the estimated costs of further development are acceptable to the Company, further development work to bring the product to market will continue, including scaling up from laboratory production batches to pilot batches to full-scale production batches. In the case of drug products or medical devices, significant additional work would have to be done, including studies to determine safety and effectiveness, preparation of an Investigational New Drug (IND) Application, and finally the filing of an NDA. Due to the size of the Company and the costs involved in bringing new drugs or medical devices to market, the Company does not currently have plans to develop any new drugs or medical devices, and intends to focus its research and development efforts on the development of new and innovative products for the personal care and medical (non-drug) markets.

While there can be no assurance that any particular project will result in a new marketable product or a commercially successful product, the Company believes that a number of its development projects, including those discussed below, may have commercial potential if the Company's development efforts are successful.

The Company's major research focus is on the development of new and unique ingredients for cosmetic and other personal care products. The following are some of the projects that the Company is either working on or intends to work on in the near future:

LUBRAJEL OIL NATURAL: This will be the third product in the “Natural” line of Lubrajel products. Like LUBRAJEL MARINE, this product is based on naturally derived polysaccharides. It is being developed to provide lubricating properties and viscosity similar to the Company’s regular LUBRAJEL OIL, but utilizing only natural ingredients. The polymer network in this product is based solely on vegetable feedstock. The Company is working with ASI to fine tune this formula and is awaiting the results of some testing ASI is doing to make sure that the Company has the best possible formulation to take to market. Like the Company’s other “Natural” products, this product has been certified by Ecocert to comply with the COSMOS standards for use in natural and organic cosmetic products. The Company is working closely with its marketing partners to determine the primary benefits of this product, and hopes to obtain feedback soon so that it can begin marketing this product by the third quarter of 2019.

Lubrajel Terra™: This is intended to be the fourth product in the LUBRAJEL “Natural” line. It is based on polysaccharides from plant-based materials. The preliminary formula has been sent to ASI for feedback and testing. The Company plans to submit this product to Ecocert for certification under COSMOS standards for use in natural and organic cosmetic products. This will enable the Company to have a broad range of “Natural” products to offer its customers. The Company continues to believe that there is a growing demand for natural products, especially in personal care products, and expects to add additional products to this line in the future if these initial products are successful.

LUBRAJEL OIL PF: This product was developed as a result of the high demand for the Company’s very popular LUBRAJEL OIL. The benefit of this product would be to enable formulators to use their own preservative systems without having to account for preservatives that the Company already incorporated. This approach has been very successful with the Company’s LUBRAJEL PF, and the Company is hopeful that a preservative-free LUBRAJEL OIL will also be successful. The Company has been fine-tuning this formula to replicate the characteristics of its existing LUBRAJEL OIL, and is awaiting feedback from the Company’s marketing partners. The Company hopes to launch this product sometime in 2019.

OIL/WAX HYDRATION: This product concept was developed at a meeting between United-Guardian and ASI at the end of 2018. The concept for this product is an anhydrous textured gel that can be added to the oil phase of a cosmetic formula. Like many of the Company’s other “natural” products this product would be formulated to comply with the COSMOS standard for natural products. This product is in the early stages of development and the Company hopes to have prototype formulas later this year.

LUBRAJEL 24: This is another product concept that came out of a development meeting between the Company and ASI. The idea is to produce a product with 24-hour hydration. While the Company’s current water-based moisturizing products provide excellent hydration, the goal is to build upon this to produce a product with superior hydration that will last a full 24 hours. This product is in the early stages of development and the Company hopes to have prototype formulas later this year.

It should be emphasized that some of the projects listed above are in the very early stages of research and development, and there can be no guarantee that any particular development project will result in a marketable product or in significant sales if it is marketed.

The Company’s research and development expenses in 2018 were $399,517 as compared with $646,079 in 2017. The Company expects its research and development expenses in 2019 to be comparable to those of 2018. Any additional increase in development and/or production costs will depend on whether capital investments are required in order to continue development work on, or to manufacture, any of the new products under development.

The Company requires all employees and consultants who may receive confidential and proprietary information to agree in writing to keep such information confidential.

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TRADEMARKS AND PATENTS

The Company strongly believes in protecting its intellectual property and intends, whenever reasonably possible and economically practical, to obtain patents in connection with its product development program. The Company currently holds several trademarks relating to its products. In recent years the Company has relied more on trade secrets and proprietary formulations and manufacturing methods to protect its intellectual property rather than patents, since under current patent law the filing of a patent now provides detailed proprietary information that can be copied by companies in other countries where enforcement would be difficult and expensive, such as in China. The Company believes that in many cases it is better to protect its intellectual property in other ways that do not require the disclosure of proprietary information. All of the patents that had previously been issued to the Company have expired. The Company will continue to file patent applications in situations where it believes that relying on trade secrets would be insufficient protection.

The various trademarks and trade names owned or used by the Company in its business are of varying Importance to the Company. The most significant trademarks are LUBRAJEL®, RENACIDIN®, and CLORPACTIN®.

DOMESTIC SALES

In the United States the Company's cosmetic ingredient products are marketed and distributed exclusively by ASI in accordance with a marketing agreement entered into in 1996 with its predecessor company, International Specialty Products (“ISP”), for the marketing of the Company’s cosmetic ingredients in North, Central, and South America. Since that time this initial agreement has been modified and expanded multiple times (see “Marketing Agreements” below). ASI also has a non-exclusive right to sell certain of the Company's other industrial and medical products. It was also granted the exclusive right to market globally an oral care product, LUBRAJEL BA, which was specifically developed for ASI in 2012 but which, to date, has not had significant sales, and LUBRAJEL MARINE, the second product in the Company’s LUBRAJEL NATURAL line of products. The current agreement with ASI automatically renewed on January 1, 2018 and will automatically renew again on January 1, 2020 unless either party chooses to terminate, which can be done by giving 60 days’ notice prior to the then expiration date.

Revenue from domestic sales of all Company products accounted for approximately 83% of the Company’s total sales revenue in 2018, compared with 81% in 2017. Sales to the Company’s largest marketing partner, ASI, accounted for approximately 42% of total Company sales in 2018 and 40% in 2017. Although a significant percentage of ASI’s purchases from the Company are ultimately sold to foreign customers, all sales to ASI are included in domestic sales revenue because all shipments to ASI are delivered to ASI’s warehouses in the U.S.

The Company's pharmaceutical products are marketed only in the United States and are sold primarily through full-line drug wholesalers and accounted for approximately 31% of Company sales in 2018, and approximately 30% in 2017. Domestic sales of the Company's medical (non-pharmaceutical) products accounted for approximately 8% of Company sales in 2018 and 10% in 2017. Although all shipments of medical products to U.S. locations are considered " Domestic Sales", a certain percentage of those shipments are subsequently shipped by some customers to foreign manufacturing facilities which then produce finished products that are marketed globally.

Domestic sales of the Company's specialty industrial products accounted for approximately 1% of Company sales in both 2018 and 2017. The medical and industrial products are sold directly to customers or their contract manufacturers, who incorporate these products into their finished products.

FOREIGN SALES

In 2018 and 2017 approximately 17% and 19%, respectively, of the Company's sales revenue was from foreign sources and was derived from (a) sales of its personal care products to the Company's foreign marketing partners, which accounted for approximately 10% of Company sales in 2018 and 11% in 2017, and (b) sales of some of the Company's medical products directly to certain customers in foreign countries, which accounted for approximately 7% of Company sales in 2018 and 8% in 2017.

Because all shipments to the Company's largest marketing partner, ASI, are delivered to ASI's warehouses in the U.S., all sales to ASI are included in "Domestic Sales", even though a significant percentage of ASI's sales of the Company's products are to customers in foreign countries. Based on sales information provided to the Company by ASI, in 2018 approximately 75% of ASI's sales were to customers in foreign countries, compared with 72% in 2017. ASI's largest foreign market in both 2018 and 2017 was China, which accounted for approximately 55% of ASI's sales of Company products in 2018 and 2017.

Since the Company sells its products in U.S. Dollars, the Company's selling prices are not affected by fluctuations in foreign currency exchange rates, except to the extent that a stronger dollar compared with foreign currencies can make the Company's products less competitive in foreign markets, sometimes requiring the Company to adjust its prices in order be more competitive. In recent years sales have been negatively impacted by the strength of the U.S. Dollar relative to other currencies, particularly the Euro, which has resulted in some of the Company's products being more price sensitive than they had been in the past. It has also enabled some of the Company's competitors to take some market share from the Company in those markets. The Company is also closely monitoring the current trade negotiations with China and other foreign markets, and when necessary will set aside reserves to account for any possible import duties that appear likely to be imposed.

SALES AND MARKETING

The Company markets its products through marketing partners and distributors, promotion on the Company's web sites, and by internet advertising. The cosmetic ingredients and other personal care products are sold outright (not on consignment) to the Company's marketing partners, which in turn market and resell the products to cosmetic and other personal care manufacturers for use in the formulation of one or more of their products. The pharmaceutical products are sold in the United States primarily to drug wholesalers, which in turn distribute and resell those products to drug stores, hospitals, physicians, long-term care facilities, the U.S. Department of Veterans Affairs, and other government agencies. The medical and specialty industrial products are sold by the Company directly to the end users. The industrial products are older products that have limited marketability, but are still being sold to some long-time customers. They are not actively marketed, but are available for sale to any new customers.

MARKETING AGREEMENTS

The Company has a written marketing agreement only with ASI; all other marketing arrangements are subject to cancellation at any time by either the Company or the distributor. The marketing agreement with ASI gives it exclusive foreign marketing rights with the exception of the following territories, where the Company's other marketing partners have exclusive marketing rights: the United Kingdom (by The Azelis Group); France (by Sederma SAS, a subsidiary of Croda International Plc.); Italy (by Luigi & Felice Castelli S.R.L.); Switzerland (by Azelis Cosmetics GmbH.); and South Korea (by C&M International). The Company also has significant sales of one of its medical lubricants to the manufacturing plant in India of a multi-national medical products customer.

The marketing agreement with ASI was entered into in 1994 with ISP, the predecessor company of ASI. That agreement set forth provisions under which ISP/ASI would market and distribute the Company's personal care products, as well as some medical and specialty industrial products, in certain parts of Europe, Asia, Australia, and Africa. In 1996, the parties entered into another agreement, extending ASI’s distribution rights to the United States, Canada, Mexico, and Central and South America. In July 2000, December 2002, December 2005, May 2010, November 2012, and November 2013 the parties entered into additional agreements that modified, extended, and consolidated the 1994 and 1996 agreements, and provided for automatic two-year renewals of ASI’s marketing rights unless either party terminated the arrangement upon 60 days’ notice. The agreement automatically renewed on January 1, 2012, 2014, 2016, and 2018 for additional two-year terms. The current contract ends on December 31, 2019.

The Company believes that in the event ASI were to cease marketing the Company's products alternative arrangements could be made with one of the other global marketers of personal care products to continue to supply products to customers currently using the Company's products, without any significant interruption of sales.

The Company has other marketing arrangements with marketing partners in the U.K., France, Switzerland, South Korea, and Italy, but all of these other arrangements are operating under either verbal agreements or expired written agreements, and are subject to termination at any time by either party.

RAW MATERIALS

The principal raw materials used by the Company consist of common industrial organic and inorganic chemicals. Most of these materials are available in ample supply from numerous sources. The Company has six major raw material vendors that together accounted for approximately 80% of the raw material purchases by the Company in 2018 and 88% in 2017.

INVENTORIES, RETURNS, and ALLOWANCES

The Company's business requires that it maintain moderate inventories of certain of its finished goods. Historically, sufficient inventory levels, returns and allowances have not been a significant factor in the Company's business.

BACKLOG

The Company currently does not have any significant backlog of orders.

SEASONALITY

Due to the nature of the Company's business and the types of products it markets it is not subject to any significant seasonal fluctuations in sales.

CUSTOMERS

The Company’s personal care/cosmetic ingredients are marketed and sold globally by six marketing partners. Those marketing partners in turn market and distribute those products to their customers. Although the Company depends on those marketing partners for the marketing and distribution of its personal care products, it is confident that if any of its marketing partners were to decide not to sell the Company’s products, or if the Company chose to replace one or more of those marketing partners, it would be able to put in place new marketing agreements to service its customers in all of the geographic areas affected. If necessary, the Company would also be able to sell directly to the end users of its products until such time as a new marketing partner is put in place.

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The Company’s pharmaceutical products are sold to, and distributed by, full-line drug wholesalers throughout the United States. Its medical and specialty industrial products are sold directly by the Company to the end users of those products or, in some cases, to contract manufacturers used by some of those end users.

COMPETITION

The Company has some products or processes that are either proprietary or have some unique characteristics, and its LUBRAJEL line of products is well known globally and has an excellent reputation for quality. The Company believes that these characteristics will be advantageous to the Company in its continuing efforts to compete effectively with other pharmaceutical companies and with suppliers of specialty chemicals used in personal care and healthcare applications. The pharmaceutical, health care, and cosmetic industries are all highly competitive, and the Company experienced a high level of competition for its cosmetic ingredients during 2018. During 2018 the U.S. dollar strengthened against many foreign currencies, which made the Company’s products less competitive in those markets. The Company believes that there will continue to be increased competition in coming years, especially from Asian competitors, and is working with ASI, its primary marketing partner, to address the issue and determine how the Company can make its products more competitive in the marketplace. The Company is aware that there are other domestic and foreign companies that are engaged in the same or similar areas of research as those in which the Company is engaged, some of which have substantially greater financial, research, manpower, marketing and distribution resources than the Company. In addition, there are many large, integrated and established pharmaceutical, specialty chemical, personal care and health care companies that have greater capacity than the Company to develop and to commercialize types of products upon which the Company's research and development programs are based. The Company intends to focus its research efforts on the development of new and innovative products for which there is not the same competitive situation as there is for some of the Company’s older products, and is optimistic that the development of unique products, such as its focus on the development of products made exclusively with natural ingredients, will enable it to continue to compete in a market in which competition has become more of a factor than it had been in the past.

ISO 9001:2015 REGISTRATION

On July 23, 2018 the Company was certified by Underwriters Laboratories, Inc. to be in compliance with the latest ISO standard, ISO 9001:2015, indicating that the Company's documented procedures and overall operations had attained the high level of quality needed to comply with this current ISO certification level. From October 2009 to July 2018 the Company had been registered under the ISO 9001:2008 standard; from December 2003 to October 2009 the Company had been registered under the ISO 9001:2000 standard; and between November 1998 and December 2003 the Company had been registered under the ISO 9002 standard. The Company has been in continuous compliance with ISO standards since November 1998.

GOVERNMENT REGULATION

Regulation by governmental authorities in the United States and other countries is a significant factor in the manufacturing and marketing of many of the Company's products. The Company and many of the Company's products are subject to certain government regulations. Products that may be developed and sold by the Company in the United States may require approval from federal regulatory agencies, such as the U.S. Food & Drug Administration ("FDA"), as well as state regulatory agencies. Products that may be developed and sold by the Company outside the United States may require approval from foreign regulatory agencies. Although the Company does not currently market any medical devices, if it were to do so a 510(k) pre-market notification to the FDA would be required to demonstrate that the device is at least as safe and effective as a legally marketed device. The Company would then need to receive clearance from the FDA prior to marketing the device. While the Company does not have any current plans to develop any new pharmaceutical products, any new drug product would require clinical evaluation under an Investigational New Drug Application, and the subsequent submission to the FDA of a New Drug Application.

The Company is required to comply with all pertinent current Good Manufacturing Practices of the FDA for medical devices and drugs. Accordingly, the regulations to which the Company and certain of its products may be subject, and any changes with respect thereto, may materially affect the Company's ability to produce and market new products developed by the Company.

The Company's present and future activities are, and will likely continue to be, subject to varying degrees of additional regulation under the Occupational Safety and Health Act, Environmental Protection Act, import, export and customs regulations, and other present and possible future foreign, federal, state and local regulations.

Portions of the Company's operating expenses are directly attributable to complying with federal, state, and local environmental statutes and regulations. In 2018 and 2017 the Company incurred approximately $43,000 and $37,000, respectively, in federal, state, and local environmental law compliance expenses. There was no material financial or other impact on the Company as a result of compliance with environmental laws.

EMPLOYEES

The Company presently has 29 employees, 4 of whom serve in an executive capacity, 17 in research, quality control and manufacturing, 5 in maintenance and construction, and 3 in office and administrative support services. Of the total number of employees, 23 work full time.

Item 1A. Risk Factors.

The information to be reported under this item is not required of smaller reporting companies.

Item 1B. Unresolved Staff Comments.

The information to be reported under this item is not required of smaller reporting companies.

Item 2. Properties.

The Company maintains its principal office and factory, and conducts its research, at a 50,000 square foot facility on a 2.7-acre parcel at 230 Marcus Boulevard, Hauppauge, New York 11788, which the Company owns. Of the 50,000 square feet, approximately 30,000 square feet is manufacturing space, 15,000 square feet is warehouse space, and 5,000 square feet is office and laboratory space. The Company has fully developed the 2.7 acres, and fully utilizes the building occupying the land. The Company believes that the aforementioned property is adequate for its immediately foreseeable needs. The property is presently unencumbered and, in the Company's opinion, is adequately insured.

Item 3. Legal Proceedings.

None.

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Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

The Common Stock of the Company has traded on the NASDAQ Global Market since March 16, 2009, under the symbol "UG". From December 1, 2008 through March 13, 2009, following the merger of the American Stock Exchange with the New York Stock Exchange, the Company's Common Stock was traded on the NYSE Amex Stock Exchange under the same symbol. Prior to December 1, 2008 its stock traded on the American Stock Exchange under the same symbol.

Holders of Record

As of March 1, 2019, there were 450 holders of record of Common Stock.

Cash Dividends

On May 16, 2018, the Company's Board of Directors declared a semi-annual cash dividend of $0.50 per share, which was paid on June 13, 2018 to all stockholders of record as of May 30, 2018. On November 28, 2018, the Company's Board of Directors declared a semi-annual cash dividend of $0.55 per share which was paid on December 17, 2018 to all stockholders of record as of December 10, 2018.

On May 17, 2017, the Company's Board of Directors declared a semi-annual cash dividend of $0.42 per share, which was paid on June 12, 2017 to all stockholders of record as of May 30, 2017. On November 29, 2017, the Company's Board of Directors declared a semi-annual cash dividend of $0.50 per share, and an additional special dividend of $0.50 per share, for a total dividend of $1.00 per share, which was paid on December 18, 2017 to all stockholders of record as of December 11, 2017.

Item 6. Selected Financial Data.

The information to be reported under this item is not required of smaller reporting companies.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Critical Accounting Policies

The Company's financial statements have been prepared in accordance with Generally Accepted Accounting Principles in the United States of America ("US GAAP"). Preparation of financial statements requires the Company to make estimates and assumptions affecting the reported amounts of assets, liabilities, revenues, and expenses and the disclosure of contingent assets and liabilities. The Company uses its historical experience and other relevant factors when developing its estimates and assumptions, which are continually evaluated. Note A, Nature of Business and Summary of Significant Accounting Policies, of the Notes to Financial Statements, included in Item 8, Financial Statements and Supplementary Data, of this Annual Report includes a discussion of the Company's significant accounting policies. The following accounting policies are those that the Company considers critical to an understanding of the financial statements because their application places the most significant demands on the Company's judgment. The Company's financial results might have been different if other assumptions had been used or other conditions had prevailed.

Marketable Securities

The Company’s marketable securities include investments in equity and fixed income mutual funds, and government securities. The Company’s marketable securities are reported at fair value with the related unrealized and realized gains and losses included in net income. Realized gains or losses on mutual funds are determined using the average cost method. The Company evaluates its investments periodically for possible other-than-temporary impairment by reviewing factors such as the length of time and extent to which fair value had been below cost basis, the financial condition of the issuer and the Company’s ability and intent to hold the investment for a period of time which may be sufficient for anticipated recovery of market value. The Company records an impairment charge to the extent that the cost of the available-for-sale securities exceeds the estimated fair value of the securities and the decline in value is determined to be other-than-temporary. During 2018 and 2017 the Company did not record an impairment charge regarding its investment in marketable securities because management believes, based on its evaluation of the circumstances, that the decline in fair value below the cost of certain of the Company’s marketable securities is temporary.

Revenue Recognition

The Company recognizes revenue from sales of its personal care, medical, and industrial products at the time the products are shipped, as long as a valid purchase order has been received and future collection of the sale amount is reasonably assured. These products are shipped “Ex-Works” from the Company’s facility in Hauppauge, NY, and it is at this time that risk of loss, control, and responsibility for the shipment passes to the customer. Sales of these products are deemed final, and there is no obligation on the part of the Company to repurchase or allow the return of these goods unless they are defective.

The Company’s pharmaceutical products are shipped via common carrier upon receipt of a valid purchase order, with, in most cases, the Company paying the shipping costs. Sales of pharmaceutical products are final, and revenue is recognized at the time of shipment. Pharmaceutical products are returnable only at the discretion of the Company unless (a) they are found to be defective; (b) the product is damaged in shipping; or (c) the product is outdated (but not more than one year after their expiration date, which is a return policy which conforms to standard pharmaceutical industry practice). The Company estimates an allowance for outdated material returns based on prior year historical returns of its pharmaceutical products.

The Company does not make sales on consignment, and the collection of the proceeds of the sale of any of the Company’s products is not contingent upon the customer being able to sell the goods to a third party.

Any allowances for returns are taken as a reduction of sales within the same period the revenue is recognized. Such allowances are determined based on historical experience. The Company has not experienced significant fluctuations between estimated allowances and actual activity.

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The timing between recognition of revenue for product sales and the receipt of payment is not significant. The Company's standard credit terms, which vary depending on the customer, range between 30 and 60 days. The Company uses its judgment on a case-by-case basis to determine its ability to collect outstanding receivables and provides allowances for any receivables for which collection has become doubtful. Prompt-pay discounts are offered to some customers; however, due to the uncertainty of the customers actually taking the discounts, the discounts are recorded when they are taken.

Gross revenues are subject to a variety of deductions, which generally are estimated and recorded in the same period that the revenues are recognized. Such variable consideration includes chargebacks from the United States Department of Veterans Affairs ("VA"), rebates, distribution fees, and sales returns. These deductions represent estimates of the related obligations and, as such, knowledge and judgment is required when estimating the impact of these revenue deductions on gross sales for a reporting period.

The Company has distribution fee contracts with certain distributors of the Company's pharmaceutical products that entitles those distributors to receive payment for distribution-related fees. The Company estimates and records distribution fees due to these customers in sales returns and allowances.

Accounts Receivable Allowance

The Company performs ongoing credit evaluations of the Company's customers and adjusts credit limits, as determined by a review of current credit information. The Company continuously monitors collection and payments from customers and maintains an allowance for doubtful accounts based upon historical experience, the Company's anticipation of uncollectible accounts receivable and any specific customer collection issues that have been identified. While the Company's credit losses have historically been low and within expectations, the Company may not continue to experience the same credit loss rates that have historically been attained. The receivables are highly concentrated in a relatively small number of customers. Therefore, a significant change in the liquidity, financial position, or willingness to pay timely, or at all, of any one of the Company's significant customers would have a significant impact on the Company's results of operations and cash flows.

Inventory Valuation Allowance

In conjunction with the Company's ongoing analysis of inventory valuation, management constantly monitors projected demand on a product-by-product basis. Based on these projections, management evaluates the levels of write-downs required for inventory on hand and inventory on order from contract manufacturers. Although the Company believes that it has been reasonably successful in identifying write-downs in a timely manner, sudden changes in buying patterns from customers, either due to a shift in product interest and/or a complete pull back from their expected order levels, may result in the recognition of larger-than-anticipated write-downs.

Results of Operations

Year ended December 31, 2018 compared with the year ended December 31, 2017:

Sales

Sales increased from $13,434,460 in 2017 to $14,458,055 in 2018, an increase of $1,023,595 (approximately 8%). The overall increase was due primarily to increases in sales of the Company's personal care products to its primary distributor, ASI, as well as an increase in sales of the Company's pharmaceutical products, primarily RENACIDIN. Those increases were partially offset by decreases in sales of the Company's medical (non-pharmaceutical) products.

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The net increase in sales was the result of the following specific changes in sales in the different product categories:

(a) **Personal care products**:

Sales of the Company's personal care products, including cosmetic ingredients, increased from $6,868,227 in 2017 to $7,529,487 in 2018, an increase of $661,260 (approximately 10%).The increase was attributable primarily to an increase in sales of the Company’s LUBRAJEL products to ASI, the Company’s largest marketing partner. Sales to ASI increased by $717,429 (approximately 13%) from $5,350,392 in 2017 to $6,067,821 in 2018. Aggregate sales to the Company’s other marketing partners decreased by $44,522 (approximately 3%) from $1,464,053 in 2017 to $1,419,531 in 2018. Sales in the United Kingdom, France and Switzerland increased in the aggregate by $190,206 (approximately 23%) from $831,399 in 2017 to $1,021,605 in 2018, while aggregate sales to the Company’s distributors in Italy and South Korea decreased by $234,728 (approximately 37%) from $632,654 in 2017 to $397,926 in 2018. There was a decrease of $11,646 in sales of personal care products to four other direct customers of the Company.

Although a significant percentage of ASI’s purchases from the Company are sold to foreign customers, all sales to ASI are considered U.S. sales for financial reporting purposes, since all shipments to ASI are shipped to ASI’s warehouses in the U.S. A certain percentage of those products are subsequently shipped by ASI to its foreign customers. Based on sales information provided to the Company by ASI, in 2018 approximately 75% of ASI’s sales were to customers in foreign countries, compared with 72% in 2017. ASI’s largest foreign market in both 2018 and 2017 was China, which accounted for approximately 55% of ASI’s sales in both 2018 and 2017. The increase in sales to ASI was primarily the result of an increase in ASI’s sales of one of the Company’s LUBRAJEL products in China and Vietnam.

Sales of the Company’s products in Europe decreased slightly in 2018 compared with 2017. There continues to be more competition in the European marketplace than there had been in previous years due to Asian competitors selling imitations of the Company’s products at much lower prices. The strengthening of the U.S. dollar relative to the Euro also contributed to the increasingly competitive situation in Europe. To offset this competitive disadvantage the Company from time to time offers additional volume discounts and more aggressive pricing in order to maintain and increase sales and bring in new customers. While this may result in lower margins on certain sales, the Company believes that the additional volumes that will be generated by this policy will more than offset the lower profit margins on those sales.

(b) **Pharmaceuticals**:

Sales of the Company’s two pharmaceutical products, RENACIDIN and CLORPACTIN, together increased by $529,461 (approximately 13%), from $3,987,076 in 2017 to $4,516,537 in 2018, with RENACIDIN accounting for most of the increase. Sales of RENACIDIN increased by $513,783 (approximately 15%) from $3,424,896 in 2017 to

$3,938,679 in 2018, and accounted for approximately 27% of the Company's sales in 2018, as compared with 25% in 2017. The increase was due to higher sales of the Company's 30mL single dose form of the product, which was introduced in April 2016 and has gradually been increasing in sales. The single-dose unit was engineered to be more patient friendly by being able to dispense the product directly into an indwelling catheter, eliminating the need to use a separate syringe to extract a small amount of product from the Company's previous 500mL glass bottle. The Company believes that this more user-friendly package is responsible for the increase in demand for the product. The Company has launched a web site dedicated to RENACIDIN, and beginning in the second half of 2018 began advertising the product on the internet. The Company is continuing to work with an internet marketing consultant to increase both patient and physician awareness of the product.

The increase in sales of the Company's pharmaceutical products was partially offset by an increase of $222,399 (approximately 48%) in allowances for distribution fees, outdated material returns, and rebates paid to the VA and the U. S. Department of Defense. This increase was primarily due to the higher sales of RENACIDIN.

(c) **Medical (non-pharmaceutical) products**:

Sales of the Company's medical products decreased by $185,626 (approximately 8%) from $2,424,439 in 2017 to $2,238,813 in 2018. The decrease was primarily the result of a $166,724 (approximately 21%) decrease in sales of LUBRAJEL RC, and a $73,654 (approximately 10%) decrease in sales of LUBRAJEL RR, which was partially offset by increases in sales of some of the Company's other medical products. The large percentage decrease in sales of LUBRAJEL RC and RR was primarily due to lower sales to two customers, both of which have purchasing patterns which can vary widely from year to year.

(d) **Industrial and other products:**

Sales of the Company's industrial products, as well as other miscellaneous products, increased by $18,500 (approximately 12%) from $154,718 in 2017 to $173,218 in 2018. The increase is primarily due to the increase in sales of one of the Company's industrial products by $5,185 (approximately 94%) in 2018 compared to 2017 combined with revenue derived from a research and development project conducted during 2018 for a new customer.

Gross Profit on Net Sales

Gross profit was approximately 59% in 2018 and 2017.

Operating Expenses

Operating expenses increased by $337,586 (approximately 19%) in 2018 compared with 2017, increasing from $1,785,160 in 2017 to $2,122,746 in 2018. The increase was mainly attributable to increases in computer services, consulting expenses, payroll and payroll related expenses.

Research and Development Expenses

Research and development expenses amounted to $646,079 and $399,517 in 2017 and 2018, respectively. The decrease of $246,562 was primarily related to a decrease in payroll and payroll related expenses resulting from the retirement of two of the Company’s highly-paid R&D chemists. The Company is currently working more closely than it has in the past with ASI’s R&D department to jointly develop and test new products, and as a result the Company has been able to continue its strong R&D efforts with a smaller in-house staff.

Investment Income

Investment income decreased by $49,882 (approximately 18%) from $281,868 in 2017 to $231,986 in 2018. The decrease was due to a decrease in investment income from both stock and bond mutual funds.

Net (Loss) Gain on Marketable Securities

In 2018, in accordance with ASU 2016-01, which requires all unrealized gains and losses on marketable securities to be recognized in net income, the Company recognized an unrealized loss of $337,342, which was netted with a realized gain of $4,204 for a net loss on marketable securities of $333,138. In 2017 the Company had a realized gain of $33,297 on the income statement, and an unrealized gain on marketable securities, net of taxes, of $255,796 in accumulated other comprehensive income in stockholders' equity.

Provision for Income Taxes

The provision for income taxes decreased by $592,966 (approximately 35%) from $1,706,489 in 2017 to $1,113,523 in 2018. This decrease was mainly due to a decrease in the federal statutory corporate income tax rate from 34% in 2017 to 21% in 2018. The Company's effective income tax rate was approximately 30% in 2017 and approximately 20% in 2018, and is lower than the federal statutory rate primarily due to the additional tax deduction for domestic production activities in 2017, and the utilization of research and development tax credits in both 2017 and 2018.

Liquidity and Capital Resources

Working capital decreased from $10,428,139 at December 31, 2017 to $10,320,949 at December 31, 2018, a decrease of $107,190 (approximately 1%). The current ratio increased from 8.3 to 1 at December 31, 2017 to 8.6 to 1 at December 31, 2018. The decrease in working capital and the increase in the current ratio were mainly due to a decrease in accounts receivable and a decrease in income taxes payable.

Accounts receivable (net of allowance for doubtful accounts) as of December 31, 2018 decreased by $232,848 (approximately 12%) from $1,905,415 in 2017 to $1,672,567 in 2018. The receivables turnover, or Days Sales Outstanding, for 2018 was 47 days, compared with 49 days in 2017. The decrease was mainly the result of increased collection efforts and implementing electronic payments from some larger customers. The Company has bad debt reserves of $16,895 and $21,220 for 2018 and 2017, respectively, and believes that the net balance of its accounts receivable is fully collectible as of December 31, 2018.

The Company generated cash from operations of $4,950,412 in 2018 compared with $3,992,287 in 2017. The increase in 2018 was primarily due to an increase in net income and a decrease in accounts receivable and an increase in deferred income taxes.

Net cash used in investing activities was $308,759 for the year ended December 31, 2018 compared with net cash provided by investing activities of $2,815,382 for the year ended December 31, 2017. This decrease in net cash was mainly due to an increase in purchases of marketable securities in 2018 compared with 2017.

Cash used in financing activities was $4,816,239 and $6,507,249 during the years ended December 31, 2018 and 2017, respectively. The decrease was due to the payment of lower dividends in 2018 compared with 2017.

The Company believes that its working capital is sufficient to support its operating requirements for the next fiscal year. The Company's long-term liquidity position will be dependent upon its ability to generate sufficient cash flow from profitable operations. The Company has no material commitments for future capital expenditures.

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Off Balance-Sheet Arrangements

The Company has no off balance-sheet transactions that have, or are reasonably likely to have, a current or future effect on the Company’s financial condition, changes in financial condition, revenues