# PROTOKINETIX, INC.

## FORM 10-K
(Annual Report)

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|---|---|
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**U. S. SECURITIES AND EXCHANGE COMMISSION**
**WASHINGTON, D.C. 20549**

**FORM 10-K**

[**X**] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

**For the fiscal year ended December 31, 2019**

[_] 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: **000-32917**

# PROTOKINETIX, INCORPORATED

(Name of small business issuer as specified in its charter)

| **Nevada** | **94-3355026** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |

**412 Mulberry Street**
**Marietta, Ohio 45750**
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: **740-434-5041**

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

| Title of each class | Trading Symbol(s) | Name of each exchange on which registered |
|---|---|---|
| N/A | | |

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

**$.0000053 par value common stock**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act: ☐ Yes [X] 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 [X] 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. [X] 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 and post such files). [X] Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Securities Exchange Act of 1934.

Large accelerated filer ☐ Accelerated filer ☐
Non-accelerated filer ☐ Smaller reporting company [X]

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 Securities Exchange Act of 1934). Yes ☐ No [X]

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately $40,250,581.77 based upon the closing price of our common stock which was $0.21 as of June 28, 2019, the last business day of the Company's most recently completed second fiscal quarter. Shares of common stock held by each officer and director and by each person or group who owns 10% or more of the outstanding common stock amounting to shares have been excluded in that such persons or groups may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 18, 2020, there were 275,400,259 shares of our common stock that were issued and outstanding.

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**FORM 10-K ANNUAL REPORT**

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**PROTOKINETIX, INCORPORATED**

## PART I

### ITEM 1. BUSINESS

ProtoKinetix, Incorporated ("ProtoKinetix," "we," "us," "our," or the "Company") is a research and development stage bio-technology company focused on scientific medical research of AFGPs (Anti-Freeze Glycoproteins) or anti-aging glycoproteins, trademarked as AAGPs®. The Company has recently been in the process of directing major efforts to the practical side of commercial validation. The commercial applications for AAGPs® in large markets such as targeted health care solutions are numerous, and ProtoKinetix is currently working with researchers, business leaders and advisors and commercial entities to bring AAGP® to market.

ProtoKinetix was incorporated as RJV Network, Inc. under the laws of the State of Nevada on December 23, 1999 for the primary purpose of developing an internet-based listing site that would provide detailed commercial real estate property listings and related data. In July 2003, the Company entered into an assignment of license agreement with BioKinetix Research, Incorporated for the assignment of rights relating to proprietary technologies of BioKinetix Research, Incorporated for the creation and commercialization of "superantibodies." On July 8, 2003, the Company changed its name to "ProtoKinetix, Incorporated."

The Company's executive (or corporate) offices are located at 412 Mulberry Street, Marietta, Ohio 45750. Our telephone number is (740) 434-5041 and our website is www.protokinetix.com .

***Cautionary Note Regarding Forward-Looking Statements***

The information discussed in this Annual Report on Form 10-K for the fiscal year ended December 31, 2019 as well as some statements in press releases and some oral statements of the Company's officers during presentations about the Company include "forward looking statements" within the meaning of Section 27A of the Securities Act of 1933 (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934 (the "Exchange Act"). All statements, other than statements of historical facts, included herein and therein concerning, among other things, planned capital expenditures, future cash flows and borrowings, pursuit of potential acquisition opportunities, our financial position, business strategy and other plans and objectives for future operations, are forward looking statements. These forward looking statements are identified by their use of terms and phrases such as "may," "expect," "estimate," "project," "plan," "believe," "intend," "achievable," "anticipate," "will," "continue," "potential," "should," "could," and similar terms and phrases. Although we believe that the expectations reflected in these forward looking statements are reasonable, they do involve certain assumptions, risks and uncertainties and are not (and should not considered to be) guarantees of future performance. Our results could differ materially from those anticipated in these forward looking statements as a result of certain factors, including, among others:

- Our capital requirements and the uncertainty of being able to obtain additional funding on terms acceptable to us;
- Our plans to develop and commercialize products from the AAGP® molecule;
- Ongoing testing of the AAGP® molecule;
- Our intellectual property position;
- Our commercialization, marketing and manufacturing capabilities and strategy;
- Our ability to retain key members of our senior management and key scientific consultants;
- The effects of competition;
- Our potential tax liabilities resulting from conducting business in the United States and Canada;
- The effect of further sales or issuances of our common stock and the price and volume volatility of our common stock; and our common stock's limited trading history.

Finally, our future results will depend upon various other risks and uncertainties, including, but not limited to, those detailed in the section entitled "Risk Factors" included elsewhere in this Annual Report. All forward looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements in this section and elsewhere in this Annual Report. Other than as required under securities laws, we do not assume a duty to update these forward looking statements, whether as a result of new information, subsequent events or circumstances, changes in expectations or otherwise.

**BACKGROUND**

**Native AFGP Compound**

AFGP (Anti-Freeze Glycoprotein) is found in nature as a compound produced by some fish, insects, reptiles, bacteria and plants that enable survival in freezing temperatures.

One of the many accomplishments from pioneering research of the U.S. Antarctic Program was the discovery, in the early sixties, that fish living year-long in subzero temperature are extremely resistant to freezing. The substances that prevent these fish from freezing were isolated, characterized and designated as AFGP. Various kinds of AFGP were isolated from many species of fishes, and in some amphibians, plants and insects. All of the AFGPs share a common characteristic that prevents ice crystals from growing and connecting to each other. Research has also confirmed a cell membrane stabilizing characteristic of native AFGP.

There has been much scientific research done in an attempt to synthetically replicate AFGPs in research institutions because the protective properties of AFGPs could have commercial applications, primarily in food and crop preservation at freezing temperatures. The native antifreeze glycoproteins are very large molecules that are often made up of a repeating series of smaller molecules, glycoproteins. Glycoproteins are often very biologically active, but they are inherently unstable. The oxygen-glycosidic link is readily cleaved by glycosidases, resulting in a low bio-availability of these glycoconjugate based molecules.

Scientific research prior to AAGP® has focused on building a stable and more efficient compound with a strong bond.

**AAGP® – The Core Technology of ProtoKinetix**

AAGP® Invention

Dr. Geraldine Castelot-Deliencourt, along with Dr. Jean-Charles Quirion at the Research Institute of Organic Chemistry in Rouen, France, developed a patented process to stabilize the oxygen-glycosidic bond in these sugar based molecules. This patented process replaces the weaker oxygen bond with a C-F 2 mimetic. The resultant molecules are biologically active and stable over a pH range of 2 to 13. They are not broken down by glycosidases.

AAGP® Toxicity Tests

Tests have shown that cells exposed to AAGP® at low and high concentrations have remained viable. A common viability test used on cell cultures using trypan blue dye exclusion method has been used to show AAGP® non-toxicity.

AAGP® Stability Tests

AAGP® molecules have remained stable when subjected to three tests:

1. pH ranging from a strong acid level of 1.8 (stronger than stomach acid) to a strong alkali level of 13.8. (the pH scale is calibrated from 1, highly acidic, to 14, highly alkali);

2. Enzymatic action using protease, which targets the amino acid bonds, and glycosidase, which targets the amino acid bonds, and glycosidase, which targets the sugar molecules; and

3. Temperatures ranging from -196°C (cryopreservation) to +37°C (body temperature).

Stress Tests on 12 Different Cell Lines

Cell lines are selected for their high level of sensitivity. Cell lines are also selected for their potential role in adding value in medical applications, enhancing health and extending life. All tests are designed to explore how cells from different cell lines act biologically in the presence of AAGP® when subjected to health and life threatening inflammatory stress conditions and agents.

Cell Lines Tested

- Stem cells (human)
- Whole blood cells
- Blood Platelet cells
- Heart tissue
- Hela (cancer) cells
- Kidney (vero) cells
- Adult skin fibroblast cells
- Heart cells (cardiac myocytes)
- Liver cells (hepatocytes)
- Embryonic skin fibroblast cells
- Islet cells (pancreatic)
- Stem cells (mouse)

Stress Conditions and Agents

Temperature
- temperatures ranging from -80° C to +37° C

UV-C Radiation
- harsh sterilizing radiation
- 254 nanometer wavelength

Oxidation
- hydrogen peroxide (H2O2)
- powerful oxidant

Starvation
- serum free culture media
- food/growth/nutrients factors (fetal bovine serum) withheld

Inflammation
- Interleukin 1 Beta, a standard agent for stimulating inflammation in cell testing

Nonclinical Efficacy Testing (Human Islets)

For the last six years, AAGP® testing has been conducted pursuant to a comprehensive transplantation testing program in conjunction with the University of Alberta transplant research team. The Company entered into a consulting agreement in May 2015 with Dr. James Shapiro to collaborate with the James Shapiro Laboratory at the University of Alberta in Edmonton, Alberta, Canada. Dr. Shapiro directs the largest clinical islet transplantation program in the world. Dr. Shapiro and his team have conducted extensive testing with our AAGP® molecule using human islet cells in transplantation, investigating its effect on engraftment, insulin production, protective effect against anti-rejection drugs and investigation of the mechanism of action. The results provided consistent encouragement to continue testing to develop protocols that can be applied to transplantation medicine. In December of 2016, the Governors of the University of Alberta submitted an Investigational Testing Authorization Application To Health Canada to evaluate the safety and efficacy of transplantation of AAGP® treated human islets as an addition to the already established Edmonton Protocol for the treatment of Type 1 Diabetes.

Additional studies will be expanded to include whole organ transplantation and other cell therapies used in regenerative medicine.

AAGP® testing is conducted to international standards in outsourced research laboratories in North America and Europe. All tests are designed to explore both the safety and effectiveness of AAGP® when challenged to enhance the health and extend the life of cells.

Allogeneic transplantation is the transplanting of cells, tissues or organs from the same species, but from a donor different than the recipient. Serious issues that have to be addressed are the engraftment of the transplanted organ or cells and the subsequent protection against the immune rejection of the foreign organ or cells. The protection, in the form of anti-rejection drugs, is toxic and causes damage to the graft. AAGP® has been shown in these nonclinical studies to increase engraftment and reduce the toxicity damage.

Dr. Shapiro and his team are developing further testing based on two primary activities:

1. The ongoing testing and refinement of cellular transplantation using human islet cells as the demonstrated model. In particular, AAGP® may provide powerful protection against hostile agents that severely inhibit engraftment success. Cell therapies are currently being developed in the industry around the world for the treatment of spinal cord injury, damaged heart tissue, stroke, diabetes as well as many other conditions.

2. Human organ preservation. The program will assess the effect of AAGP® in extending the transplant viability of donor organs. The Canadian National Transplant Research Program is a major national initiative involving the Federal Institutes of Health, all Provinces and the private sector (see http://www.cntrp.ca/ ). The first testing will be conducted on livers to determine whether AAGP® can extend the ex-vivo functionality of the organ.

The Governors of the University of Alberta submitted an Investigator Sponsored Clinical Trial Application to Health Canada. This trial will be conducted by Dr. Shapiro and his team at the University of Alberta on the well-established, Edmonton Protocol used for treatment of Type 1 Diabetes through islet cell transplants. Subsequent to December 31, 2016, the Investigator Sponsored Clinical Trial Application was approved by Health Canada. In preparation for the Phase 1 / 2 clinical trials as well as for the Clinical Trial Application, ProtoKinetix has:

- Completed the production of AAGP® under strict GMP (Good Manufacturing Practice) standards as required by Health Canada and US FDA (United States Food and Drug Administration) for human use;

- Completed the validated sterilization and vialing of AAGP® to become the drug product, designated PKX-001, that will be used in the clinical trials at the University of Alberta.

- Completed stability tests on AAGP® at different temperature ranges.

- Completed genotoxicity studies under GLP (Good Laboratory Practice) at ITR Laboratories Canada, Inc..

- Completed carryover studies, to comply with the clinical test protocols, at BRI Pharmaceutical Research, Inc..

- Competed PK (Pharmacokinetics) studies at BRI Pharmaceutical Research, Inc. in Vancouver.

- In 2019 Competed manufacturing of additional AAGP® molecule for expanded clinical trials to begin in 2020. Sterilization and vialing of AAGP® drug product designated PKX-001 is anticipated to be completed in the first quarter of 2020.

The Company entered into a Clinical Supply Agreement (the "CSA") on January 14, 2020 with Alberta Health Services and the Governors of the University of Alberta (the "Institution") and Dr. James Shapiro. The agreement requires Protokinetix to supply PKX-001 free of charge and in sufficient quantity to conduct the clinical study by Dr. James Shapiro. The delivery date is estimated to be late February 2020.

Nonclinical Efficacy Testing (Neuronal Retinal Cells)

During the year ended December 31, 2016, ProtoKinetix entered into a Collaborative Research Agreement with the University of British Columbia, under the guidance of Dr. Gregory-Evans, to commence testing of neuronal retinal cells in living tissue for the treatment of Macular Degeneration. AAGP® has been tested previously in tissue culture in the lab and was found to improve the survival of cells. Dr. Gregory-Evans is taking those results and applying them to living tissue. He has established a new type of model for retinal degeneration in rabbits and is currently working on injecting neuronal stem cells plus AAGP® to test for long term improvements in cell survival and integration into the retina that should ultimately lead to vision restoration in the animals. Final testing on this project was completed in March 2018. Based on the positive results of the 2018 project, we have entered into a third phase program with two animal models for a definitive determination of functionality of transplanted cells.

Interim results completed in August of 2019 showed very positive results and showed no adverse effects in animals when using AAGP®. Although results are in relatively small numbers of animals this bodes exceptionally well for any proposed future clinical trial work and the *in vivo* study was expanded to a six-month time period. In December of 2019 the Company announced the completion of the *in vivo* study to assess the effect of AAGP® on the long-term survival and functional activity of photoreceptor precursor cells (PPCs) in the animal ocular model of genetic retinal degeneration. *In vivo* tests demonstrated that transplantation of PPCs pre-treated with AAGP® (PKX-001) resulted in statistically significant improvements in both the visual behavioral (optokinetic tracking test) and functional analysis (electroretinogram test) responses as compared with PPCs without pre-treatment. At the 6-month time point, the AAGP®-treated cells acquired the ability to express retinal and synaptic proteins, confirming that AAGP® had no adverse effect on precursor cells' maturation.

**AAGP® Commercial Applications**

Health Care

Acute medical problems are increasingly reliant on, and benefit from, solutions that can deal with the fundamental factors of inflammation and oxidation. Both are well-known causes of life-threatening conditions and diseases, and accelerated aging. In addition, many acute medical problems are benefiting from cell therapies and transplantation of cells, tissues and time sensitive organs.

Health Care Applications of AAGP® fall into two main categories: (i) harvesting, storage and transplanting cells, tissues and organs; and (ii) treatments for conditions and diseases caused by stress factors, including UV radiation, oxidation and inflammation. These are all areas that expand into many sub-categories of existing and future health care solutions.

In November of 2019, the Company announced the initiation of a program testing AAGP® to develop a potential therapy to treat Dry Eye Disease (DED). AAGP® has repeatedly demonstrated anti-inflammatory and cytoprotective properties, and also exhibits pharmaceutical properties beneficial for topical formulations. The eye is extremely sensitive, so before efficacy testing can commence, an eye irritation study will be conducted in accordance with both industry and regulatory requirements. This testing has been contracted to ITR Laboratories of Montreal which is a well-recognized CRO in this area. This testing is scheduled to commence in early December with results anticipated in the first quarter of 2020

In anticipation of a successful result from ITR Laboratories, the Company contracted with EyeCRO, from Oklahoma City, to conduct the efficacy testing. This testing will involve topical application of AAGP® and evaluations of its effects on ocular inflammation. EyeCRO is a world-recognized, specialized CRO in the field of pre-clinical ocular drug research and development. This program is expected to commence in early 2020 and run for 3-4 months.

**Patents**

On or about January 5, 2015, the Company entered into an Assignment of Patents and Patent Application (the "Patent Assignment") between the Company and Institut National des Sciences Appliquées de Rouen ("INSA") for the assignment of certain patents and all rights associated therewith (the "Patents"). The Company and INSA had previously entered into a licensing agreement for the Patents in August 2004. The Patent Assignment transferred all of the Patents and rights associated therewith to the Company upon payment to INSA of the sum of 25,000 Euros.

Through this assignment, ProtoKinetix is the sole owner of all issued patents of the "Gem difluorinated C-glycopeptides, their preparation and their use for the preservation of biological materials and/or in cryosurgery" family, and all the rights associated therewith. Importantly, this family includes issued patents in Canada (Patent No. CA2,558,801), England, France, and Germany (Patent No. EP1,817,329) and the United States (Patent No. US8,394,362).

On or about April 8, 2015, ProtoKinetix entered into a Royalty Agreement (the "Agreement") between the Company and the Governors of the University of Alberta ("UAB") for the assignment of UAB's portion of certain patent applications and all rights associated therewith (the "Patent Rights"). The Agreement also grants UAB a royalty of 5% of the gross revenue from the assignment, manufacturing, sale, distribution, or licensing of the Patent Rights and any commercial products generated from the Patent Rights. The Company had a now expired irrevocable option to purchase the royalty for CAD $5,000,000 (approximately US $4,000,000) for two years from the earlier of September 1, 2015 or the first date UAB publishes its research related to the Patent Rights. UAB published its research related to the Patent Rights on November 18, 2015. The Company's option to purchase the royalty from UAB expired on September 1, 2017.

Through this assignment, the Company has gained UAB's portion of US provisional patent application no. 62/007,626, and International Patent Application no. PCT/CA2015/050509, and corresponding patent applications filed in Australia, Canada, China, Europe, India, Japan, Korea and New Zealand, as well as U.S. Patent Application no. US 14/728,535, all of which claim priority from said provisional patent application related to the use of anti-aging glycopeptides to enhance beta cell health, survival and improve transplant outcomes.

On or about April 22, 2015, ProtoKinetix entered into a Technology Transfer Agreement with Grant Young for the assignment of Mr. Young's portion of certain patent applications and all rights associated therewith. In exchange for these rights, Mr. Young was paid $10,000 in cash and a five-year warrant to purchase 6,000,000 shares of the Company's common stock at an exercise price of $0.10 per share.

Through this assignment, the Company has gained Mr. Young's portion of US provisional patent application no. 62/007,626 and applications claiming priority therefrom as well as patent issuing therefrom, related to the use of anti-aging glycopeptides to enhance beta cell health, survival and improve transplant outcomes.

On or about May 20, 2016, Grant Young assigned his intellectual property rights associated with US provisional patent application no. 62/287,657, and future applications to be derived therefrom to ProtoKinetix, thus gaining Mr. Young's rights to inventions related to the use of anti-aging glycopeptides to enhance survival of neurosensory precursor cells, and all patents issuing from and claiming priority to such application. These patent rights secure, amongst other things, key intellectual property rights to the Company's use of the AAGP® lead compound in regenerative medicine.

The patents from INSA and patent rights from UAB and Mr. Young secure, amongst other things, key intellectual property rights to the Company's use of the AAGP® lead compound in regenerative medicine.

Consistent with our agreements with the licensors of various technologies we license, we have no finished commercial product or products, and have received no FDA approvals for any product or diagnostic procedures. We are focused on the research and development of one lead compound known as AAGP®.

**Trademarks**

We filed a trademark application with the United States Patent & Trademark Office on September 15, 2005 with a registration date of August 7, 2007 for the mark AAGP®. The application was subsequently cancelled on March 14, 2014 because we did not file a renewal declaration. We filed a new application for registration of the mark and received approval of registration on November 7, 2017.

We are currently in the process of obtaining trademark protection for AAGP® in Canada, as well as filing our trademark application for ProtoKinetix with the Canadian Intellectual Property office in February 2019. On September 10, 2019 the Company was granted trademark registration #5,856,730 for the trademark name ProtoKinetix®, protecting the name in Canada and allowing the name to be marked with the registration symbol.

Subject to our available financial resources, our intellectual property strategy is to continue testing of the AAGP® lead compound and develop marketable applications of the compound.

**Trade Secrets and Know-How**

The Company has developed a substantial body of trade secrets and know-how relating to the development, use and manufacture of AAGP®, including but not limited to the optimization of materials for efforts, and how to maximize sensitivity, speed-to-result, specificity, stability, purity and reproducibility.

**Competition**

The markets that the Company is focusing on are multi-billion dollar international industries which are intensely competitive. Many of the Company's competitors are substantially larger and have greater financial, research, manufacturing, and marketing resources.

Industry competition in general is based on the following:

- Scientific and technological capability;
- Proprietary know-how;
- The ability to develop and market products and processes;
- The ability to obtain FDA or other required regulatory approvals;
- The ability to manufacture products that meet applicable FDA requirements, (i.e. FDA's Quality System Regulations) see also Governmental Regulation section;
- Access to adequate capital;
- The ability to attract and retain qualified personnel; and
- The availability of patent protection.

The Company's ability to develop its research is in large measure dependent on having sufficient and additional resources and/or collaborative relationships.

The Company's access to capital is more challenging, relative to most of its competitors. This is a competitive disadvantage. The Company believes however that its access to capital may increase as it gets closer to the development of a commercially viable product.

The Company believes that its research has enabled it to attract and retain qualified consultants. Because of the greater financial resources of many of its competitors, the Company may not be able to complete effectively for the same individuals to the extent that a competitor uses its substantial resources to attract any such individuals.

**Governmental Regulation**

The Company's AAGPs® have commercial applications in markets and circumstances that fall under government regulations ranging from none to limited to extensive.

Although there is no such immediate need to make any regulatory filing in the United States, the Company has limited or no experience with regard to obtaining FDA or other required regulatory approvals. In February 2015, the Company appointed Dr. Julia Levy to its Business and Scientific Advisory Board and intends to retain the services of additional appropriately experienced consultants. For this reason, should our research efforts continue to show promise, we will need to hire consultants to assist the Company with such governmental regulations.

As the Company continues to conduct research and testing programs, in collaboration with commercial entities, to expand and confirm the potential medical applications of AAGP® in a number of fields, including regenerative medicine, cell therapy, blood products, and transplants, the Company intends to utilize the regulatory expertise of others, whether they are consultants or commercial entities involved on collaborative development programs with the Company.

The following discussion relates to factors that may come into play when and if the Company has a commercially viable product in an area which requires regulatory approval. These products may be regulated by the European regulatory agencies, FDA, U.S. Department of Agriculture, certain state and local agencies, and/or comparable regulatory bodies in other countries (collectively, these agencies shall be referred to as the "Agencies"). Government regulation affects almost all aspects of development, production, and marketing, including product testing, authorizations to market, labeling, promotion, manufacturing, and record keeping. The products regulated by FDA and U.S. Department of Agriculture require some form of action by such agency before they can be marketed in the United States, and, after approval or clearance, the products must continue to comply with other FDA requirements applicable to marketed products. Both before and after approval or clearance, failure to comply with the FDA's requirements can lead to significant penalties. The Company's proposed AAGP® products will require government regulatory approval as a biologic agent. Such regulatory approval will be granted only after the appropriate preclinical and clinical studies are conducted to confirm efficacy and safety.

Every company that manufactures biologic products or medical devices distributed in the United States must comply with the FDA's Quality System Regulations. These regulations govern the manufacturing process, including design, manufacture, testing, release, packaging, distribution, documentation, and purchasing. Compliance with the Quality System Regulations is required before the FDA will approve an application. These requirements also apply to marketed products. Companies are also subject to other post-market and general requirements, including compliance with restrictions imposed on marketed products, compliance with promotional standards, record keeping, and reporting of certain adverse reactions or events. The FDA regularly inspects companies to determine compliance with the Quality System Regulations and other post-approval requirements. Failure to comply with statutory requirements and the FDA's regulations can lead to substantial penalties, including monetary penalties, injunctions, product recalls, seizure of products, and criminal prosecution.

The Clinical Laboratory Improvement Act of 1988 prohibits laboratories from performing in vitro tests for the purpose of providing information for the diagnosis, prevention or treatment of any disease or impairment of, or the assessment of, the health of human beings unless there is in effect for such laboratories a certificate issued by the U.S. Department of Health and Human Services applicable to the category of examination or procedure performed. Although a certificate is not required for ProtoKinetix, the Company considers the applicability of the requirements of the Clinical Laboratory Improvement Act in the potential design and development of its products.

The Company is also subject to regulations in foreign countries governing products, human clinical trials and marketing, and may need to obtain approval or evaluations by international public health agencies, such as the World Health Organization, in order to sell products in certain countries. Approval processes vary from country to country, and the length of time required for approval or to obtain other clearances may in some cases be longer than that required for U.S. governmental approvals. The extent of potentially adverse governmental regulation affecting ProtoKinetix that might arise from future legislative or administrative action cannot be predicted.

**Research and Development**

Our business depends on our ability to sponsor research and development activities. For the year ended December 31, 2018, the Company incurred total research and development expenses of $337,067. For the year ended December 31, 2019, the Company incurred total research and development expenses of $369,520. In order to reach the Company's goals of developing a marketable product, we will need to increase the funding of our research and development activities which at this time is limited by our ability to raise money to fund the Company.

**Environmental Laws**

To date, the Company has not encountered any costs relating to compliance with any environmental laws.

**Employees**

To date, the Company does not have any employees. The Company's President and Chief Executive Officer and the Chief Financial Officer are both engaged as consultants to the Company.

## ITEM 1A. RISK FACTORS

The Company's securities are highly speculative and involve a high degree of risk, including among other items the risk factors described below. The below risk factors are intended to generally describe certain risks that could materially affect the Company and its current business operations and activities.

*You should carefully consider the risks described below and elsewhere herein in connection with any decision whether to acquire, hold or sell the Company's securities. If any of the contingencies discussed in the following paragraphs or other materially adverse events actually occur, the business, financial condition and results of operations could be materially and adversely affected. In such case, the trading price of our common stock could decline, and you could lose all or a significant part of your investment.*

***Our Company has a lack of operating history and lack of revenues from operations.*** Our Company has no revenues and very limited operating history. As of the date of this Annual Report, our most significant assets are cash and our intellectual property. Our ability to successfully generate revenues from our intellectual property is dependent on a number of factors, including availability of funds to complete development efforts, to adequately test and refine our products, and to commercialize our products. There can be no assurance that we will not encounter setbacks with our products, or that funding will be sufficient to bring our products to the point of commercialization.

***We are dependent on our key personnel, and the loss of such personnel could adversely affect our business.*** We depend on the continued performance of the members of our management team and our Business and Scientific Advisory Board who have contributed to the expertise of our team and the position of our business. If we lose the services of members of our management teams, and are unable to locate a suitable replacement in a timely manner, it could have a material adverse effect on our business. We do not expect to obtain key man life insurance for any members of management in the foreseeable future.

***We may experience difficulty implementing our business plan.*** Our business plan is to continue with the development of the Company's intellectual property and to develop a product for sale commercially. We may require additional capital in order to develop our products for sale commercially. There can be no assurance that we would be able to obtain additional capital on reasonable terms, or at all.

***We have been and expect to be significantly dependent on our collaborative agreements for the research, development and testing of AAGP®, which exposes us to the risk of reliance on the performance of third parties.*** In conducting our research and development activities, we currently rely, and expect to continue to rely, on numerous collaborative agreements with third parties such as contract research organizations, commercial partners, universities, governmental agencies and not-for-profit organizations for both strategic and financial resources. The loss of, or failure to perform by us or our partners (who are subject to regulatory, competitive and other risks) under any applicable agreements or arrangements, or our failure to secure additional agreements for our product candidates, would substantially disrupt or delay our research and development and commercialization activities. Any such loss would likely increase our expenses and materially harm our business, financial condition and results of operations.

***We may have difficulty raising any needed additional capital.*** We may have difficulty raising needed capital in the future as a result of, among other factors, our lack of revenues from operations, as well as the inherent business risks associated with our Company and present and future market conditions. Our business currently generates no revenue from operations. We will likely require additional funds to conduct research and development, establish and conduct non-clinical and clinical trials, secure clinical and commercial-scale manufacturing arrangements and provide for marketing and distribution. If adequate funds are unavailable, we may be required to delay, reduce the scope of or eliminate one or more of our research, development or commercialization programs, product launches or marketing efforts, any of which may materially harm our business, financial condition and results of operations.

***We are a research and product development stage company that has not yet developed or sold <u>any</u> products.*** To date, we have not yet developed nor marketed a product. Ongoing testing of the AAGP® molecule with three amino acids joined to a monosaccharide by a gemdiflouride bond continues to show that there is significant promise in the field of medicine of preserving cells, tissue and organs from various stresses. Tests have confirmed that the AAGP® molecule improves the harvest of cells from cryopreservation by 30% to 120%. We believe there is a market for AAGP® to preserve cells, particularly various stem cells, and we will continue testing with potential customers. At the same time, we are taking steps to improve the manufacturing process to reduce costs and improve purity and biochemical activity.

***Even if we develop product candidates which obtain regulatory approval they may never achieve market acceptance or commercial success.*** Even if we develop products and obtain FDA or other regulatory approvals, our products may not achieve market acceptance among physicians, patients and third party payors and, ultimately, may not be commercially successful. Market acceptance of our product candidates for which we receive approval depends on a number of factors. Any failure by our product candidates that obtain regulatory approval to achieve market acceptance or commercial success would adversely affect our financial results.

The potential widespread acceptance of therapies that are alternatives to ours may limit market acceptance of our formulations or products, even if commercialized. Many of our targeted diseases and conditions can also be treated by other medication or technologies. These treatments may be widely accepted in medical communities and have a longer history of use. The established use of these competitive drugs may limit the potential for our technologies, formulations and products to receive widespread acceptance if commercialized.

***The market for our product candidates is rapidly changing and competitive, and new technologies treatments which may be developed by others could impair our ability to maintain and grow our business and remain competitive.*** The pharmaceutical and biotechnology industries are subject to rapid and substantial technological change. Developments by others may render our technologies and our product candidates noncompetitive or obsolete, or we may be unable to keep pace with technological developments or other market factors. Technological competition from pharmaceutical and biotechnology companies, universities, governmental entities and others now existing or diversifying into the field is intense and is expected to increase. Many of these entities have significantly greater research and development capabilities, human resources and budgets than we do, as well as substantially more marketing, manufacturing, financial and managerial resources. These entities represent significant competition for us.

**Risks Related to Product Development and Regulation**

***Our ability to generate revenues will be dependent on our ability to develop a product that complies with legal requirements.*** Although the laws and regulations of the various jurisdictions in which we may operate vary in their technical requirements and are subject to amendment from time to time, virtually all of these jurisdictions require licenses, permits, and other forms of approval. We will have to apply for, and obtain, all requisite government licenses, registrations, findings of suitability, permits and approvals necessary for us to do business in these new markets. We cannot offer any assurance that we will be able to obtain all necessary licenses, registrations, findings of suitability, permits, or approvals.

***Our failure to obtain costly government approvals, including required FDA approvals, or to comply with ongoing governmental regulations relating to our technologies and product candidates could delay or limit introduction of our products and result in failure to achieve revenues or maintain our ongoing business.*** Our research and development activities and the manufacture and marketing of our product candidates are subject to extensive regulation for safety, efficacy and quality by numerous government authorities in the United States and abroad. Before receiving FDA or foreign regulatory clearance to market our proposed formulations and products, we will have to demonstrate that our formulations and products are safe and effective in the population. Clinical trials, manufacturing and marketing of drugs are subject to the rigorous testing and approval process of the FDA and equivalent foreign regulatory authorities. The Federal Food, Drug and Cosmetic Act and other federal, state and foreign statutes and regulations govern and influence the testing, manufacture, labeling, advertising, distribution and promotion of drugs and medical devices. As a result, regulatory approvals can take a number of years or longer to accomplish and require the expenditure of substantial financial, managerial and other resources.

***Conducting and completing the clinical trials necessary for FDA and/or Health Canada approval is costly and subject to intense regulatory scrutiny as well as the risk of failing to meet the primary endpoint of such trials.*** We will not be able to commercialize and sell our proposed products and formulations without completing such trials. In order to conduct clinical trials that are necessary to obtain approval by the FDA and/or Health Canada to market a formulation or product, it is necessary to receive clearance from the FDA and/or Health Canada to conduct such clinical trials. The FDA and/or Health Canada can halt clinical trials at any time for safety reasons or because we or our clinical investigators did not follow the FDA's and/or Health Canada requirements for conducting clinical trials. If we are unable to receive clearance to conduct clinical trials or the trials are permanently halted by the FDA and/or Health Canada, we would not be able to achieve any revenue from such product as it is illegal to sell any drug or medical device for human consumption or use without FDA and/or Health Canada approval.

***We could be exposed to significant drug product liability claims which could be time consuming and costly to defend, divert management attention and adversely impact our ability to obtain and maintain insurance coverage.*** The testing, manufacturing, marketing and sale of our proposed products involve an inherent risk that product liability claims will be asserted against us. Product liability insurance may prove inadequate to cover claims and/or litigation costs. Product liability claims or other claims related to our products, regardless of their outcome, could require us to spend significant time and money in litigation or to pay significant settlement amounts or judgments. Any successful product liability or other claim may prevent us from obtaining adequate liability insurance in the future on commercially desirable or reasonable terms. An inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of our products and product candidates. A product liability claim could also significantly harm our reputation and delay market acceptance of our proposed formulations and products.

**Risk Factors Related to Intellectual Property and Obsolescence**

***We rely on patents and other intellectual property to protect our business interests.*** We have attempted to protect our products and will attempt to protect other products through a combination of trade secrets, confidentiality agreements, patents and other contractual provisions. Patents only provide a limited protection against infringement, and patent infringement suits are complex, expensive, and not always successful. Although the Company believes its patents will provide significant protection, there can be no assurance that they will be issued and if they are, that they will provide enough protection.

***Because it is difficult and costly to protect our proprietary rights, we may not be able to ensure their protection.*** Our commercial success will depend in part on maintaining patent protection and trade secret protection for our products, as well as successfully defending these patents against third-party challenges. We will only be able to protect our technologies from unauthorized use by third parties to the extent that valid and enforceable patents or trade secrets cover them.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in pharmaceutical or biotechnology patents has emerged to date in the United States. The patent situation outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents.

***Our competitive position could be harmed if we are unable to enforce confidentiality agreements.*** Our proprietary information is critically important to our competitive position and is a significant aspect of our business plan. We generally enter into confidentiality agreements with most of our employees and consultants, and control access to, and distribution of, our documentation and other proprietary information. Despite these precautions, we cannot assure you that these strategies will be adequate to prevent misappropriation of our proprietary information. Therefore, we could be required to expend significant amounts to defend our rights to proprietary information in the future if a breach were to occur.

**General Corporate Risk Factors**

***Insiders continue to have substantial control over the Company.*** As of February 18, 2020, the Company's directors and executive officers hold the current right to vote approximately 36.5% of the Company's outstanding voting stock; of which 31.4% is owned or controlled, directly or indirectly by the Company CEO, Clarence Smith. In addition, the Company's directors and executive officers have the right to acquire additional shares which could increase their voting percentage significantly. As a result, Mr. Smith acting alone, and/or many of these individuals acting together, may have the ability to exert significant control over the Company's decisions and control the management and affairs of the Company, and also to determine the outcome of matters submitted to stockholders for approval, including the election and removal of a director, the removal of any officer and any merger, consolidation or sale of all or substantially all of the Company's assets. Accordingly, this concentration of ownership may harm a future market price of the Company's common stock by:

- Delaying, deferring or preventing a change in control of the Company;
- Impeding a merger, consolidation, takeover or other business combination involving the Company; or
- Discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of the Company .

***The Company may not be able to continue as a going concern.*** Our independent public accountants noted that our recurring losses from operations ($4,197,897 and $1,216,343 for the years ended December 31, 2019 and 2018, respectively) and negative net operating cash flow ($850,658 and $453,493 for the years ended December 31, 2019 and 2018, respectively) raise substantial doubt about our ability to continue as a going concern. This may hinder our future ability to obtain financing or may force us to obtain financing on less favorable terms than would otherwise be available.

***The Company is dependent upon additional financing which it may not be able to secure in the future.*** As it has in the past, the Company will likely continue to require financing to address its working capital needs, continue its development efforts, support business operations, fund possible continuing operating losses, and respond to unanticipated capital requirements. There can be no assurance that additional financing or capital will be available and, if available, upon acceptable terms and conditions. To the extent that any required additional financing is not available on acceptable terms, the Company's ability to continue in business may be jeopardized and the Company may need to curtail its operations and implement a plan to extend payables and reduce overhead until sufficient additional capital is raised to support further operations. There can be no assurance that such a plan will be successful. Such a plan could have a material adverse effect on the Company's business, financial condition and results of operations, and ultimately the Company could be forced to discontinue its operations, liquidate and/or seek reorganization in bankruptcy.

***The Company has been delinquent in filing certain income tax and information reporting returns.*** The Company was delinquent in filing certain income tax returns with the U.S. Internal Revenue Service and reports disclosing its interest in foreign bank accounts on form TDF 90-22.1, "Report of Foreign Bank and Financial Accounts" ("FBARs"). In September 2015, the Company filed the delinquent income tax returns and has sought waivers of any penalties under the IRS Offshore Voluntary Disclosure Program for late filing of the returns and FBARs. Under the program, the IRS has indicated that it will not impose a penalty for the failure to file delinquent income tax returns if there are no underreported tax liabilities. On November 30, 2017, the Company received a letter from the IRS concluding their review of the Company's tax returns under the program and accepting the returns as filed. No penalties have been assessed by the IRS to date, and management does not believe that the Company will incur any penalties relating to the tax years submitted under the program.

***Our management is relatively inexperienced with running a public company and could create a risk of non-compliance.*** Management's inexperience may cause us to fall out of compliance with applicable regulatory requirements, which could lead to enforcement action against us and a negative impact on our stock price.

***Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses and could create a risk of non-compliance.*** Changing laws, regulations and standards relating to corporate governance and public disclosure have created uncertainty for public companies and significantly increased the costs and risks associated with accessing the public markets and public reporting. These corporate governance standards are the product of many sources, including, without limitation, public market perception, stock exchange regulations and SEC disclosure requirements. Our management team expects to invest significant management time and financial resources to comply with both existing and evolving standards for public companies, which will lead to increased general and administrative expenses and a diversion of management time and attention from revenue generating activities to compliance activities. Management's inexperience may cause us to fall out of compliance with applicable regulatory requirements, which could lead to enforcement action against us and a negative impact on our stock price.

***As a company with a class of securities registered pursuant to the Exchange Act the Company has significant obligations under the Exchange Act.*** Having a class of securities registered under the Exchange Act is a time consuming and expensive process and subjects the Company to increased regulatory scrutiny and extensive and complex regulation. Complying with these regulations is expensive and requires a significant amount of management's time. For example, public companies are obligated to institute and maintain financial accounting controls and for the accuracy and completeness of their books and records. These requirements could necessitate additional corporate spending on procedures and personnel requiring us to reallocate funds from other business objectives.

**Risk Factors Related to Our Common Stock**

***The Company will face significant regulation by the SEC and state securities administrators.*** The holders of shares of the Company's common stock and preferred stock may not offer or sell the shares in private transactions or (should a public market develop, of which there can be no assurance) public transactions without compliance with regulations imposed by the SEC and various state securities administrators. To the extent that any holder desires to offer or sell any such shares, the holder must prove to the reasonable satisfaction of the Company that he has complied with all applicable securities regulations, and the Company may require an opinion of the holder's legal counsel to that effect. Thus, there can be no assurance that the holder will be able to resell the shares or any interest therein when the holder desires to do so.

***Our existing shareholders could experience further dilution if we elect to raise equity capital to meet our liquidity needs or finance a strategic transaction.*** As part of our growth strategy we may desire to raise capital and or utilize our common stock to effect strategic business transactions. Either such action will likely require that we issue equity (or debt) securities which would result in dilution to our existing stockholders. Although we will attempt to minimize the dilutive impact of any future capital-raising activities or business transactions, we cannot offer any assurance that we will be able to do so. If we are successful in raising additional working capital, we may have to issue additional shares of our common stock at prices at a discount from the then-current market price of our common stock.

***Because we have no plans to pay dividends on our common stock, investors must look solely to stock appreciation for a return on their investment in us.*** We do not anticipate paying any cash dividends on our common stock in the foreseeable future. We currently intend to retain all future earnings to fund the development and growth of our business. Any payment of future dividends will be at the discretion of our board of directors and will depend on, among other things, our earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends and other considerations that the board of directors deems relevant. Investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize a return on their investment. Investors seeking cash dividends should not purchase our common stock.

***As our stock is not listed on a national securities exchange, trading in our shares will be subject to rules governing "penny stocks," which will impair trading activity in our shares.*** Our stock is not on a national securities exchange. Therefore, our stock is subject to rules adopted by the SEC regulating broker dealer practices in connection with transactions in "penny stocks." Those disclosure rules applicable to "penny stocks" require a broker dealer, prior to a transaction in a "penny stock" not otherwise exempt from the rules, to deliver a standardized list disclosure document prepared by the SEC. That disclosure document advises an investor that investment in "penny stocks" can be very risky and that the investor's salesperson or broker is not an impartial advisor but rather paid to sell the shares. The disclosure contains further warnings for the investor to exercise caution in connection with an investment in "penny stocks," to independently investigate the security, as well as the salesperson with whom the investor is working and to understand the risky nature of an investment in this security. The broker dealer must also provide the customer with certain other information and must make a special written determination that the "penny stock" is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. Further, the rules require that, following the proposed transaction, the broker provide the customer with monthly account statements containing market information about the prices of the securities.

***The over-the-counter market for stock such as ours is subject to extreme price and volume fluctuations.*** You may not be able to resell your shares at or above the public sale price. The securities of companies such as ours have historically experienced extreme price and volume fluctuations during certain periods. These broad market fluctuations and other factors, such as new product developments and trends in the industry and in the investment markets generally, as well as economic conditions and quarterly variations in our operational results, may have a negative effect on the market price of our common stock.

## ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

## ITEM 2. PROPERTIES

The Company's principal executive office, for all operations, is located at 412 Mulberry Street, Marietta, Ohio 45750. The Company currently does not have a lease for its principal executive office but rents month to month. A lease on the space is held by the CFO's, company, The Guzzetta Company LLC. The Company pays $1,050 per month for the office. ProtoKinetix does not own any real property.

## ITEM 3. LEGAL PROCEEDINGS

The Company and its management are not aware of any regulatory or legal proceedings or investigations pending involving the Company, any of its subsidiaries or affiliates, or any of their respective officers, directors or employees.

**ITEM 4. MINE SAFETY MATTERS**

Not applicable.

## PART II

## ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is currently quoted on OTCQB tier of the OTC Markets under the symbol "PKTX". The table below sets forth the high and low bid prices of the Company's common stock during the periods indicated as reported on OTC Markets Inc. (www.otcmarkets.com). The quotations are inter-dealer prices without retail markups, markdowns or commissions, and may not necessarily represent actual transactions.

| 2019 | Low | High |
|---|---|---|
| First Quarter | $ 0.050 | $ 0.088 |
| Second Quarter | 0.058 | 0.319 |
| Third Quarter | 0.080 | 0.289 |
| Fourth Quarter | 0.081 | 0.143 |

| 2018 | Low | High |
|---|---|---|
| First Quarter | $ 0.040 | $ 0.070 |
| Second Quarter | 0.030 | 0.120 |
| Third Quarter | 0.059 | 0.130 |
| Fourth Quarter | 0.050 | 0.130 |

**Holders**

As of February 18, 2020, there were approximately 89 shareholders of record of the Company's common stock. This does not include an indeterminate number of persons who hold our Common Stock in brokerage accounts and otherwise in "street name."

**Dividends**

We have never paid cash dividends and have no plans to do so in the foreseeable future. Our future dividend policy will be determined by our board of directors and will depend upon a number of factors, including our financial condition and performance, our cash needs and expansion plans, income tax consequences, and the restrictions that applicable laws, our current preferred stock instruments, and our future credit arrangements may then impose.

**Adoption of the 2015 Stock Option and Stock Bonus Plan**

On July 1, 2015, the Board of Directors of the Company adopted the 2015 Stock Option and Stock Bonus Plan (the "2015 Plan").

All awards granted under the 2015 Plan will continue forward under the 2015 Plan until expired or exercised pursuant to the terms of each individual award agreement, however, no new awards shall be granted under the 2015 Plan.

As of both December 31, 2019 and February 18, 2020, no options and 2,000,000 shares of fully vested common stock remained as granted under the 2015 Plan.

**Adoption and Amendment of the 2017 Stock Option and Stock Bonus Plan**

On December 30, 2016, the Board of Directors of the Company the ("Board") adopted the 2017 Stock Option and Stock Bonus Plan (the ""2017 Plan"). The Board adopted the 2017 Plan as it anticipates utilizing equity compensation as part of its ongoing standard corporate operations and in connection with its contemplated activities going forward.

On November 9, 2018, the Board amended the 2017 Stock Option and Stock Bonus Plan to increase the aggregate number of shares that may be issued under the 2017 Plan from 30,000,000 to 50,000,000 shares subject to adjustment as provided therein to continue to incentivize contractors and future employees (if any) of the Company (the amended 2017 Plan is hereinafter referred to as the "Amended 2017 Plan"). On July 15, 2019, the Board again amended the Amended 2017 Plan to increase the aggregate number of shares that may be issued under the 2017 Plan from 50,000,000 to 89,700,000 shares.

The Amended 2017 Plan also provides for the ability of the Board to extend the exercise period of an option and provides for flexibility in the event of a change in control of the Company or consolidation or merger.

The Amended 2017 Plan is administered by the Board, or a committee appointed by the Board. In addition to determining who will be granted options or bonuses, the committee has the authority and discretion to determine when options and bonuses will be granted and the number of options and bonuses to be granted. The committee also may determine a vesting and/or forfeiture schedule for bonuses and/or options granted, the time or times when each option becomes exercisable, the duration of the exercise period for options and the form or forms of the agreements, certificates or other instruments evidencing grants made under the Amended 2017 Plan. The committee may determine the purchase price of the shares of common stock covered by each option and determine the fair market value per share. The committee also may impose additional conditions or restrictions not inconsistent with the provisions of the Amended 2017 Plan. The committee may adopt, amend and rescind such rules and regulations as in its opinion may be advisable for the administration of the Amended 2017 Plan.

The committee also has the power to interpret the Amended 2017 Plan, and the provisions in the instruments evidencing grants made under it, and is empowered to make all other determinations deemed necessary or advisable for the administration of it.

Participants in the Amended 2017 Plan may be selected by the committee from employees, officers, consultants and advisors (including board members) of ProtoKinetix. The committee may take into account the duties of persons selected, their present and potential contributions to the success of ProtoKinetix and such other considerations as the committee deems relevant to the purposes of the Amended 2017 Plan.

In the event of a change, such as a stock split, is made in the Company's capitalization which results in an exchange or other adjustment of each share of common stock for or into a greater or lesser number of shares, appropriate adjustments will be made to unvested bonuses and in the exercise price and in the number of shares subject to each outstanding option. The committee also may make provisions for adjusting the number of bonuses or underlying outstanding options in the event the Company effects one or more reorganizations, recapitalizations, rights offerings, or other increases or reductions of shares of its outstanding common stock. Options and bonuses may provide that in the event of the dissolution or liquidation of ProtoKinetix, a corporate separation or division or the merger or consolidation of ProtoKinetix, the holder may exercise the option on such terms as it may have been exercised immediately prior to such dissolution, corporate separation or division or merger or consolidation; or in the alternative, the committee may provide that each option granted under the 2017 Plan shall terminate as of a date fixed by the committee.

The exercise price of any option granted under the Amended 2017 Plan must be no less than 100% of the "fair market value" of ProtoKinetix's common stock on the date of grant. Any incentive stock option granted under the Amended 2017 Plan to a person owning more than 10% of the total combined voting power of the common stock must be at a price of no less than 110% of the fair market value per share on the date of grant.

The exercise price of an option may be paid in cash, in shares of ProtoKinetix common stock or other property having a fair market value equal to the exercise price of the option, or in a combination of cash, shares, other securities and property. The committee determines whether or not property other than cash or common stock may be used to purchase the shares underlying an option and shall determine the value of the property received.

As of both December 31, 2019 and February 18, 2020, 89,450,000 options remain as granted under the Amended 2017 Plan.

As of both December 31, 2019 and February 18, 2020, 2,000,000 options remain as granted not pursuant to any stock option plan.

**Securities Authorized for Issuance Under Equity Compensation Plans**

The following table sets forth securities authorized for issuance under equity compensation plans, including but not limited to the the Amended 2017 Plan and individual compensation arrangements as of December 31, 2019:

| Plan category | Number of securities to be issued upon exercise of outstanding options, warrants and rights | Weighted-average exercise price of outstanding options, warrants and rights | Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) |
|---|---|---|---|
| | (a) | (b) | (c) |
| Equity compensation plans approved by security holders | — | — | — |
| Equity compensation plans not approved by security holders | 92,450,000 | $ 0.15 | 250,000 |
| Total | 92,450,000 | $ 0.15 | 250,000 |

During the year ended December 31, 2019, warrants to purchase 6,000,000 shares of common stock of the Company were outstanding (see Note 8 of the notes to the financial statements). As of the year ended December 31, 2019, there were warrants and options outstanding representing a total of 8,500,000 and 91,450,000 shares of common stock respectively to be issued upon exercise, of which: (i) options to purchase no shares of common stock were outstanding under the 2015 Plan; (ii) options to purchase 89,450,000 shares of common stock were outstanding under the Amended 2017 Plan; and (iii) warrants outstanding to purchase 8,500,000 shares of common stock not pursuant to any plan and options outstanding to purchase 2,000,000 of common stock not pursuant to any plan.

To management's knowledge, there are no outstanding options, warrants or other rights to acquire the common stock of the Company that were issued pursuant to the Company's 2003, 2004 or 2005 Stock Incentive Plans (the "Old Plans") for the year ended December 31, 2019. To management's knowledge, the Old Plans have expired and terminated.

**Recent Sales of Unregistered Securities and Use of Proceeds**

On January 22, 2019, the Company issued 250,000 shares of common stock at a price of $0.06 per share for gross proceeds of $15,000 to an accredited investor and on February 4, 2019 Clarence E. Smith, CEO of the Company, was issued 500,000 shares of common stock at a price of $0.06 per share for gross proceeds of $30,000 pursuant to a private placement. No solicitation was used in this offering. For both sales of securities, the Company relied on the exemption from registration available under Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D promulgated under the Securities Act with respect to transactions by an issuer not involving any public offering. No commissions were paid in connection with this issuance of securities. A Form D was filed on January 14, 2019.

Between April 1, 2019 and May 9, 2019, the Company sold 10,000,000 shares of common stock for gross proceeds of $500,000 to accredited investors (one of which was the Company's President & CEO, Clarence E. Smith) in a private placement. No solicitation was used in the offering. The Company relied on the exemption from registration available under Section 4(a)(2) of the 1933 Act and Rule 506(b) of Regulation D promulgated under the 1933 Act with respect to transactions by an issuer not involving any public offering. No commissions were paid in connection with these issuances of securities. A Form D was filed on April 8, 2019.

Between June 14, 2019 and June 18, 2019, the Company sold 2,266,667 shares of common stock for gross proceeds of $272,000 to accredited investors in a private placement. No solicitation was used in the offering. The Company relied on the exemption from registration available under Section 4(a)(2) of the 1933 Act and Rule 506(b) of Regulation D promulgated under the 1933 Act with respect to transactions by an issuer not involving any public offering. No commissions were paid in connection with these issuances of securities. A Form D was filed on July 2, 2019.

On July 15, 2019, the Board of Directors of the Company canceled a total of 16,000,000 options previously granted to its CEO, a director, and a consultant and granted a total of 16,000,000 new options under the Amended 2017 Plan at an exercise price of $0.26 per share as follows: Clarence Smith, President, CEO & Director (options to purchase 5,000,000 shares); Edward McDonough, Director (options to purchase 1,000,000 shares); and Grant Young, a consultant (options to purchase 10,000,000 shares). Twenty-five percent of the shares vest on October 13, 2019 and 25% vest every three months thereafter. The options expire on July 14, 2024. Prior to a change in control of the Company, the vesting schedule of the option shall immediately accelerate so that the option is fully vested and available for exercise.

Also on July 15, 2019, in connection with the continued service of certain directors, officers and consultants, the Board granted options pursuant to the Amended 2017 Plan to acquire shares of common stock of the Company at an exercise price of $0.26 per share as follows: Mr. Smith (an option to purchase 5,000,000 shares); Mr. McDonough (an option to purchase 2,000,000 shares); Michael Guzzetta, CFO (an option to purchase 4,000,000 shares); and Mr. Young (options to purchase 5,000,000 shares). Twenty-five percent of the shares vest on October 13, 2019 and 25% vest every three months thereafter. The options expire on July 14, 2024. Prior to a change in control of the Company, the vesting schedule of the option shall immediately accelerate so that the option is fully vested and available for exercise. The Company also issued an option under the Amended 2017 Plan to a consultant to acquire 500,000 shares at an exercise price of $0.26 per share. The option is identical to the others issued by the Board except that 250,000 shares vest on October 13, 2019 and 250,000 vest three months thereafter.

For these grants of options, no solicitation was used and the Company relied on the exemption from registration available under Section 4(a)(2) of the Securities Act of 1933, as amended (the "1933 Act") and/or Rule 506(b) of Regulation D promulgated under the 1933 Act with respect to transactions by an issuer not involving any public offering. No commissions were paid in connection with these issuances of securities.

On September 24, 2019, the Company's CFO exercised an option to purchase 250,000 shares of common stock of the Company at $0.07 per share through a cashless exercise. The CFO received 97,826 shares and the Company received 152,174 as consideration for the exercise. The Company relied on the exemption from registration under Section 4(a)(2) of the Securities Act of 1933, as amended (the "1933 Act") and/or Rule 506(b) of Regulation D promulgated under the 1933 Act with respect to transactions not involving a public offering. No commissions were paid in connection with the issuance of these securities.

On November 18, 2019, in connection with the continued service of certain directors, officers and consultants, the Board granted options pursuant to the Amended 2017 Plan to acquire shares of common stock of the Company at an exercise price of $0.11 per share as follows: Mr. Smith (an option to purchase 5,000,000 shares); Mr. McDonough (an option to purchase 1,000,000 shares); Michael Guzzetta, CFO (an option to purchase 4,000,000 shares); and Mr. Young (options to purchase 5,000,000 shares). Twenty-five percent of the shares vest on February 18, 2020 and 25% vest every three months thereafter. The options expire on November 17, 2024.

For these grants of options, no solicitation was used and the Company relied on the exemption from registration available under Section 4(a)(2) of the Securities Act of 1933, as amended (the "1933 Act") and/or Rule 506(b) of Regulation D promulgated under the 1933 Act with respect to transactions by an issuer not involving any public offering. No commissions were paid in connection with these issuances of securities.

Between October 16, 2019 and December 19, 2019, the Company sold 2,500,000 Units (each Unit comprised of one common share and one warrant to purchase one common share at $0.12) for gross proceeds of $300,000 to accredited investors (one of which was the Company's President & CEO, Clarence E. Smith) in a private placement. The warrants were immediately vested and expire three years from the date of issuance. No solicitation was used in the offering. The Company relied on the exemption from registration available under Section 4(a)(2) of the 1933 Act and Rule 506(b) of Regulation D promulgated under the 1933 Act with respect to transactions by an issuer not involving any public offering. No commissions were paid in connection with these issuances of securities. A Form D was filed on October 31, 2019, an amended Form D was filed on each of November 4, 2019, December 17, 2019, and December 30, 2019.

## ITEM 6. SELECTED FINANCIAL DATA

As a smaller reporting company, we are not required to provide the information required by this item.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion provides information regarding the results of operations for the years ended December 31, 2019 and 2018, and our financial condition, liquidity and capital resources as of December 31, 2019 and 2018. The financial statements and the notes thereto contain detailed information that should be referred to in conjunction with this discussion.

The following discussion and analysis should be read in conjunction with and our historical financial statements and the accompanying notes included elsewhere in this Annual Report on Form 10-K, as well as the Risk Factors and the Cautionary Note Regarding Forward-Looking Statements included above.

**Results of Operations**

| | For the Years Ended | |
|---|---|---|
| | **2019** | **2018** |
| **Operating Expenses** | | |
| Amortization | $ 3,000 | $ 3,000 |
| General and Administrative | 280,438 | 78,074 |
| Interest Expense | — | 306 |
| Professional Fees | 149,619 | 149,123 |
| Research and Development | 369,520 | 337,067 |
| Share-Based Compensation | 3,395,319 | 648,773 |
| Total operating expenses | 4,197,897 | 1,216,343 |
| **Loss from Operations** | (4,197,897) | (1,216,343) |
| | | |
| **Other Income** | | |
| Gain on Settlement of Short-Term Loans | — | — |
| Total other income | — | — |
| **Net Loss** | $ (4,197,897) | $ (1,216,343) |

*Revenues*

We had no revenues for the years ended December 31, 2019 and 2018.

*Gross profit and expenses*

The Company's net loss was $4,197,897 for the year ending December 31, 2019 compared to $1,216,343 for the year ending December 31, 2018. These expenses were primarily incurred for professional fees, share-based compensation related to the operations of the Company's business, research and development and other general and administrative expenses. Significant changes from the prior year include:

- Professional fees remained flat year over year going to $149,619 from $149,123 as legal, accounting and auditing activity all remained relatively unchanged over prior year totals.

- Share-based compensation increased sharply by $2,746,546 from $648,773 to $3,395,319 primarily as a result of the sharp increase of stock price at grant date of certain options and a change in accounting based on new FASB guidance for valuation of share based payments to non-employees. Additionally, we granted a higher number of stock options in 2019.

- Research and development increased by $32,453 from $337,067 to $369,520 primarily as a result of management's current year investment in further testing and development of the AAGP® molecule and expanded study lines.

- General and administrative expenses increased by $202,364 from $78,074 to $280,438 due to the engagement of two investor relations firms and the engagement of a marketing firm to build a new website and expand public awareness of the Company through new social media applications.

Our expenses in 2019 were $4,197,897 which included $149,619 in professional fees. We operate the Company by hiring outside consultants to assist us with management, strategic planning, organization and daily operations. This resulted in $3,395,319 in share-based compensation recognized based on the fair value of equity instruments granted as compensation. These professional consulting services related to marketing and accounting, capitalization and merger opportunities as well as research development services. The Company also incurred total research and development expenses of $369,520 and general and administrative costs of $280,438 during the year ended December 31, 2019.

**Liquidity and Capital Resources**

| | As at December 31, | |
|---|---|---|
| | **2019** | **2018** |
| Cash | $ 377,349 | $ 136,029 |
| Working Capital | $ 352,879 | $ 58,194 |

At December 31, 2019, we had $377,349 in cash and $378,399 in total current assets. As of December 31, 2018, we had a working capital equity position of $58,194. Although as of the date of this Annual Report we believe we have sufficient capital to meet cash flow projections and carry forward our business objectives in the short-term, the Company needs additional working capital to continue its medical research or to be successful in any future business activities and continue to pay its liabilities. There can be no assurance that in the future we will be able to raise capital from outside sources in sufficient amounts to fund our business.

The failure to secure adequate outside funding would have an adverse effect on our plan of operation and results therefrom and a corresponding negative impact on stockholder liquidity.

***Sources and Uses of Cash for the Years ended December 31, 2019 and 2018***

*Net Cash Used in Operating Activities*

During the year ended December 31, 2019, net cash used in operating activities increased $397,165 from $453,493 to $850,658 for the years ended December 31, 2018 and 2019, respectively. This increase was predominantly due to the increased spending on marketing and investor relations. Additionally, new research and development contributed to the year-over- year increase of cash used in operations.

*Net Cash Used in Investing Activities*

During the year ended December 31, 2019, net cash used in investing activities decreased by $10,436 primarily due to lower costs of patent maintenance and patent application spending. Net cash from investing activities for the year ended December 31, 2018 was $35,458. Net cash used for investing activities for the year ended December 31, 2019 was $25,022.

*Net Cash Provided by Financing Activities*

During the year ended December 31, 2019, net cash provided by financing activities increased by $794,962 from $322,038 to $1,117,000 for the years ended December 31, 2018 and 2019, respectively. This increase was predominantly due to an increase in private placements completed.

**Going Concern**

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States ("U.S. GAAP"), which contemplate continuation of the Company as a going concern. The history of losses and the potential inability for the Company to make a profit from selling a good or service has raised substantial doubt about our ability to continue as a going concern. In spite of the fact that the current cash obligations of the Company are relatively minimal, given the cash position of the Company, we have very little cash to operate. We intend to fund the Company and attempt to meet corporate obligations by selling common stock. However, the Company's common stock is at a low price and trading is not consistent.

**Off-Balance Sheet Arrangements**

None.

**Contractual Obligations**

As a smaller reporting company, we are not required to provide the information required by paragraph (a)(5) of this Item.

**Critical Accounting Policies**

The preparation of financial statements in conformity with U.S. GAAP requires management to make a variety of estimates and assumptions that affect (i) the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements, and (ii) the reported amounts of revenues and expenses during the reporting periods covered by the financial statements.

Our management routinely makes judgments and estimates about the effect of matters that are inherently uncertain. As the number of variables and assumptions affecting the future resolution of the uncertainties increase, these judgments become even more subjective and complex. Although we believe that our estimates and assumptions are reasonable, actual results may differ significantly from these estimates. Changes in estimates and assumptions based upon actual results may have a material impact on our results of operation and/or financial condition. Our significant accounting policies are disclosed in Note 2 to the Financial Statements included in this Form 10-K.

While all of the significant accounting policies are important to the Company's financial statements, the following accounting policies and the estimates derived there from have been identified as being critical.

**Share-Based Compensation**

The Company has granted warrants and options to purchase shares of the Company's common stock to various parties for consulting services. The fair values of the warrants and options issued have been estimated using the Black-Scholes Option Pricing Model.

The Company accounts for stock compensation with persons classified as employees for accounting purposes in accordance with ASC 718 "Compensation – Stock Compensation", which recognizes awards at fair value on the date of grant and recognition of compensation over the service period for awards expected to vest. Cliff Vesting is used and awards vest on the last day of the vesting period. The fair value of stock options is determined using the Black-Scholes Option Pricing Model. The fair value of common shares issued for services is determined based on the Company's stock price on the date of issuance.

The Company accounts for stock compensation arrangements with persons classified as non-employees for accounting purposes in accordance with ASC 505-50 "Stock-Based Transactions with Nonemployees", which requires that such equity instruments are recorded at their fair value on the measurement date. The measurement of share-based compensation is subject to periodic adjustment as the underlying instruments vest. The fair value of stock options is estimated using the Black-Scholes Option Pricing Model and the compensation charges are amortized over the vesting period.

**Intangible Assets – Patent and Patent Application Costs**

The Company owns intangible assets consisting of certain patents and patent applications. Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses. Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures are recognized in profit or loss as incurred.

As at December 31, 2019, the Company does not hold any intangible assets with indefinite lives.

Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization method and amortization period of an intangible asset with a finite life is reviewed at least annually.

Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates.

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives of the Company's patents, whereas no amortization has been recognized on the patent application costs as at December 31, 2019.

**Sales and Marketing**

The Company is currently not selling or marketing any products.

**Inflation**

Although management expects that our operations will be influenced by general economic conditions, we do not believe that inflation had a material effect on our results of operations during the year ending December 31, 2018.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company, we are not required to provide the information required by this item.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item begins on page F-1 of this Annual Report on Form 10-K and is incorporated into this part by reference.

## ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

## ITEM 9A. CONTROLS AND PROCEDURES

### Disclosure Controls and Procedures

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the 1934 Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in our reports filed under the 1934 Act is accumulated and communicated to management, including our principal executive officer and our principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, under the direction of our Chief Executive Officer (who is our principal executive officer), and Chief Financial Officer (who is our principal accounting officer) has evaluated the effectiveness of our disclosure controls and procedures as required by 1934 Act Rule 13a-15(b) as of December 31, 2019 (the end of the period covered by this report). Based on that evaluation, our principal executive officer and our principal accounting officer concluded that these disclosure controls and procedures are effective to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosure and are effective to provide reasonable assurance that such information is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms.

The Company, including its Chief Executive Officer and Chief Financial Officer, does not expect that its internal controls and procedures will prevent or detect all error and all fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

### Management's Annual Report on Internal Control Over Financial Reporting

In accordance with Item 308 of SEC Regulation S-K, management is required to provide an annual report regarding internal controls over our financial reporting. This report, which includes management's assessment of the effectiveness of our internal controls over financial reporting, is found below. Inasmuch as the Company is neither an accelerated filer nor a large accelerated filer, the Company is not obligated to provide an attestation report on the Company's internal control over financial reporting by the Company's registered public accounting firm.

### Internal Control Over Financial Reporting

Our management is also responsible for establishing and maintaining adequate internal control over financial reporting ("ICFR") as defined in Rules 13a-15(f) and 15d-15(f) under the 1934 Act. Our ICFR are intended to be designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Our ICFR are expected to include those policies and procedures that management believes are necessary that:

(1) Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
(2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that receipts and expenditures of the Company are being made only in accordance with proper authorizations of management and our directors; and
(3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Management recognizes that there are inherent limitations in the effectiveness of any system of internal control, and accordingly, even effective internal control can provide only reasonable assurance with respect of financial statement preparation and may not prevent or detect misstatements. In addition, effective internal control at a point in time may become ineffective in future periods because of changes in conditions or due to deterioration in the degree of compliance with our established policies and procedures.

As of December 31, 2019, management (with the participation of the Chief Executive Officer and the Chief Financial Officer) conducted an evaluation of the effectiveness of the Company's ICFR based on the framework set forth in Internal Control--Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and SEC guidance on conducting such assessments by smaller reporting companies and non-accelerated filers. Based on that assessment, management (with the participation of the Chief Executive Officer and the Chief Financial Officer) concluded that, during the period covered by this report, such internal controls and procedures were not effective as of December 31, 2019.

***Material Weaknesses Identified***

In connection with the preparation of our financial statements for the year ended December 31, 2019, certain significant deficiencies in internal control became evident to management that, in the aggregate, represent material weaknesses, which include the following:

Insufficient segregation of duties in our finance and accounting functions due to limited personnel. During the year ended December 31, 2019, we used outside services to perform all aspects of our financial reporting process, including, but not limited to, access to the underlying accounting records and systems, the ability to post and record journal entries and responsibility for the preparation of the financial statements. This creates a lack of review over the financial reporting process that would likely result in a failure to detect errors in spreadsheets, calculations, or assumptions used to compile the financial statements and related disclosures as filed with the SEC. These control deficiencies could result in a material misstatement to our interim or annual financial statements that would not be prevented or detected.

Insufficient corporate governance policies. Although we have a code of ethics which provides broad guidelines for corporate governance, our corporate governance activities and processes are not always formally documented. Specifically, decisions made by our Board of Directors to be carried out by management should be documented and communicated on a timely basis to reduce the likelihood of any misunderstandings regarding key decisions affecting our operations and management.

***Plan for Remediation of Material Weaknesses***

We intend to take appropriate and reasonable steps to make the necessary improvements to remediate these deficiencies provided that we have the resources to implement them.

This Annual Report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report is not subject to attestation by our registered public accounting firm.

There was no change in our internal control over financial reporting that occurred during the year ended December 31, 2019, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**ITEM 9B. OTHER INFORMATION**

Not applicable.

## PART III

### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CORPORATE GOVERNANCE

As of February 18, 2020, the Company's current officers and directors consist of the following persons:

| Name | Age | Title | Year Appointed |
|---|---|---|---|
| Clarence E. Smith | 56 | Chairman, Chief Executive Officer, President | February 2015 |
| | | Director | June 2014 |
| Michael R Guzzetta | 62 | Chief Financial Officer | November 2017 |
| Edward P. McDonough | 67 | Director | July 2015 |

**Clarence E. Smith** was appointed President and Chief Executive Officer for the Company on February 19, 2015 and was previously appointed a member of the Board of Directors of the Company on June 1, 2014. Prior to joining the Company as President and CEO, Mr. Smith served and continues to serve as managing member of Tombstone Resources and Smith Equipment, LLC, a privately held company that holds operating oil and gas wells and Smith Equipment Company, a privately held company that leases out construction equipment. In 1981, Mr. Smith started Arvilla Well Service in West Virginia which provided construction services to oil and gas companies in the Appalachian Basin. After merging Arvilla Well Service into Arvilla Pipeline Construction Co., Inc., Mr. Smith sold the company in 2008. Mr. Smith also purchased Arrow Oilfield Services in 2004, which was renamed Arvilla Oilfield Services, LLC and subsequently merged with Trans Energy, a publicly traded company in 2004. Mr. Smith served as Chairman of the Board and CEO of Trans Energy, Inc. from 2005 to 2006. Mr. Smith graduated from St. Marys High School in West Virginia in 1981.

**Michael R. Guzzetta** was appointed Chief Financial Officer of the Company on November 14, 2017. Mr. Guzzetta is a Certified Public Accountant with a practice located in Central & Northeast Ohio providing services including business and individual taxation, non-profit accounting, corporate policy and procedure development, business organization and consulting. Prior to opening his practice, he spent 20 years in corporate management in the communications and energy industries. Between 2014 and 2015, Mr. Guzzetta served as Treasurer and principal financial officer of Trans Energy Inc., a publicly traded energy company, where his responsibilities included corporate banking, risk management, maintaining fiscal control, budgeting, taxation and SEC reporting. His prior positions include Midwest Region Business Manager for a Fortune 100 company and Controller for an energy marketing company. Mr. Guzzetta also served as an Adjunct Professor at Stark State College and taught courses in accounting, finance, business management, and economics. He is a graduate of Walsh University where he graduated Magna Cum Laude with a BA in Accounting. He earned his MBA from Capital University in Columbus, Ohio. Mr. Guzzetta has been a past member of both the Ohio Society of Certified Public Accountants and the American Institute of Certified Public Accountants. He has served on the boards of the Canton Ballet, the ALS CARE Project and the Finance Committee of Stark County Board of Developmental Disabilities.

**Edward P. McDonough** was appointed as a member of the Board of Directors of the Company on July 1, 2015. In addition to serving as a director of the Company, Mr. McDonough is a managing shareholder and President of McDonough, Eddy, Parsons & Baylous, A.C., a certified public accountant firm in Parkersburg, West Virginia since 1985. The firm originated in the early 1950s, employs 15 professional certified public accountants and accountants, and serves as certified public accountants for approximately 400 private corporations, firms, and individuals in various commercial, business, professional, and industrial fields. Mr. McDonough became a Certified Public Accountant in 1978, a Certified Valuation Analyst in 1996, and a Chartered Global Management Accountant in 2012. Since 1986, Mr. McDonough has served as a Director and Chairman of the Board of Community Bank of Parkersburg, held by Community Bankshares, Inc. He is also a Member of the American Institute of Certified Public Accountants (AICPA), has served as a Past President and Member of the West Virginia Board of Accountancy, is a Life Member, Past Director and Past President of the West Virginia Society of Certified Public Accountants and is a Member and Past President of the Parkersburg Chapter of the West Virginia Society of CPAs. Mr. McDonough acquired his Bachelor of Science in Business Administration with a Major in Accounting at West Virginia University in Morgantown, West Virginia in 1973.

**Family Relationships**

There are no family relationships among any of our executive officers and directors.

**Term of Office**

Each director shall hold office until the next annual meeting of shareholders or until his successor shall have been elected and qualified, or until there is a decrease in the number of directors.

**Involvement in Legal Proceedings**

See Item 3—Legal Proceedings.

**Corporate Governance**

***Code of Ethics***

On July 8, 2019, the Board adopted a new Code of Business Conduct and Ethics and Whistleblower Policy ("Code of Ethics") which replaced in its entirety the Company's prior code of ethics. The Code of Ethics applies to all directors, officers, employees and consultants of the Company and amends and restates the Company's prior code of ethics to update certain provisions for business and regulatory developments and to provide additional guidance and greater detail on certain issues such as conflicts of interest, reporting illegal or unethical behavior, confidentiality and use of the Company's assets, and hedging of Company securities. The Board also approved an insider trading policy, related party transactions policy, and policy on trading blackout periods, benefit plans and SEC reporting.

***Committees of the Board of Directors***

The Company does not currently have a separately designated audit committee. Instead, the Board of Directors as a whole acts as the Company's audit committee. Consequently, the Company does not currently have a designated audit committee financial expert.

The Company also does not have a separately designated compensation committee. To date, the Company has not retained an independent compensation advisor to assist the Company review and analyze the structure and terms of the Company's executive officers.

***Independent Directors***

The Board of Directors has determined that Mr. McDonough is the only independent member of the Board of Directors of the Company pursuant to SEC Rule 10A-3(b)(1) and NYSE American Rule 803A.

***Business and Scientific Advisory Board***

Our Business and Scientific Advisory Board exists to assist the Board of Directors with understanding both the regulatory and business aspects of the biopharmaceutical industry are particularly valuable for the expansion and commercialization of AAGP® applications. The members on the board are:

- Dr. Julia Levy, PhD, Chairman, Business and Scientific Advisory Board. Dr. Levy is a founder, former President and former Chief Scientific Officer of QLT, Inc., where she and her colleagues developed the first medical treatment for macular degeneration, a leading cause of blindness among the elderly. She has received numerous awards and honorary degrees. In her honor the Julia Levy B.C. Leadership Chair in Macular Research at the University of British Columbia was established.

- Mr. Peter Jensen, former director of the Company.

**Delinquent Section 16(a) Reports**

Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), requires the Company's directors, executive officers and holders of more than 10% of the Company's common stock to file with the Securities and Exchange Commission initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. To our knowledge, based solely on a review of copies of Forms 3, 4 and 5 and any amendments thereto filed with the Securities and Exchange Commission and stockholder reports from our transfer agent and written representations that no other reports were required, during the fiscal year ended December 31, 2019 our officers, directors and 10% or more stockholders complied with all Section 16(a) filing requirements applicable to them except that: (i) Mr. Smith filed four Forms 4 late representing 20 transactions not reported on a timely basis; (ii) Mr. Guzzetta filed one Form 4 late representing two transactions not reported on a timely basis; and (iii) Mr. Young filed one Form 4 late representing seven transactions not reported on a timely basis. A majority of Mr. Smith's late reported transactions were purchases on the open market and Mr. Smith will no longer purchase shares on the open market on a regular basis.

## ITEM 11. EXECUTIVE COMPENSATION

The following table summarizes the annual compensation paid to ProtoKinetix's named executive officers for the two years ended December 31, 2019 and 2018:

**Summary Compensation Table for Executive Officers**

| Name and Principal Position | Fiscal Year | Salary ($) | Bonus ($) | Stock Awards ($) | Option Awards(1) ($) | Non-equity Incentive Plan Compensation ($) | Nonqualified Deferred Compensation Earnings ($) | All Other Compensation ($) | Total ($) |
|---|---|---|---|---|---|---|---|---|---|
| Clarence E. Smith | | | | | | | | | |
| President & CEO | 2019 | — | — | — | 941,688 | — | — | — | 941,688 |
| | 2018 | — | — | — | 212,739 | — | — | — | 212,739 |
| Michael R Guzzetta | | | | | | | | | |
| Chief Financial Officer | 2019 | 60,000 | — | — | 515,147 | — | — | — | 575,147 |
| | 2018 | 60,000 | — | — | 41,757 | — | — | — | 101,757 |

(1) Represents the grant date full fair value of compensation costs of stock options granted during the respective year for financial statement reporting purposes, using the Black-Scholes option pricing model. Assumptions used in the calculation of these amounts are included in the Company's consolidated financial statements. Refer to the Outstanding Equity Awards at Fiscal Year End schedule regarding option details on an award-by-award basis.

**Consulting Agreements**

We have entered into consulting agreements with certain Company officers as set forth below.

***Clarence E. Smith*** – Mr. Smith is Chief Executive Officer and President of the Company. He entered into a consulting agreement with the Company dated March 30, 2015 (effective January 1, 2015). On December 21, 2015, Mr. Smith and the Company entered into a new consulting agreement effective January 1, 2016, superseding the prior agreement (the "2016 Smith Agreement"). The 2016 Smith Agreement provided for a one-year term through December 31, 2016 and for an annual salary of $1.00 and a termination fee.

In connection with the 2016 Smith Agreement, the Company issued Mr. Smith an option pursuant to the Company's 2015 Plan to purchase 5,000,000 shares of common stock of the Company at a price of $0.08 per share with 1,250,000 shares vesting every three months starting March 31, 2016.

On or about December 30, 2016, the Company entered into a new consulting agreement with Mr. Smith, effective January 1, 2017 (the "2017 Smith Agreement") which replaced the 2016 Smith Agreement, terminating December 31, 2016.

The 2017 Smith Agreement provides for a one-year term through December 31, 2017 and for an annual salary of $1.00. Mr. Smith is entitled to receive a bonus payment equal to 2.5% of the aggregate value of any application sale or license of any patent rights or products effected during the term of the 2017 Smith Agreement.

Mr. Smith is also entitled to a termination fee if the agreement is terminated for the following two reasons:

- A termination without cause: If Mr. Smith is terminated without cause he will be entitled to a termination fee of $100,000 per year of service (including the pro-rata amount for partial years of service);

- A termination upon a change of control event: Following a change of control event he will be entitled to a termination fee equal to $100,000 per year of service (including the pro-rata amount for partial years of service) plus 2.5% of the aggregate transaction value of the change of control.

In connection with the 2017 Smith Agreement, the Company issued Mr. Smith an option pursuant to the Amended 2017 Plan to purchase 5,000,000 shares of common stock of the Company at a price of $0.05 per share with 1,250,000 shares vesting every three months starting March 31, 2017.

On September 1, 2017, Mr. Smith and the Company entered into an amendment to the 2017 Smith Agreement (the "September Amendment"), whereby the term of the agreement was extended from December 31, 2017 to December 31, 2018 and automatically renews for one-year increments under the same terms and conditions of the 2017 Smith Agreement, unless either party gives written notice to the other party at least 30 days prior to the end of such calendar year.

In connection with the September Amendment, the Company issued Mr. Smith an option pursuant to the Company's Amended 2017 Plan to purchase 5,000,000 shares of common stock of the Company at a price of $0.06 per share, with 1,250,000 shares vesting every three months starting December 31, 2017.

In connection with Mr. Smith's continued service to the Company, on November 9, 2018, the Company issued options pursuant to the Amended 2017 Plan to acquire 5,000,000 shares of common stock of the Company at an exercise price of $0.09 per share with 1,250,000 shares vesting every three months starting March 31, 2019. Prior to a change in control of the Company, the vesting schedule of the option shall immediately accelerate so that the option is fully vested and available for exercise by Mr. Smith.

Please refer to "Recent Sales of Unregistered Securities and Use of Proceeds" for a description of the option grants canceled and issued to Mr. Smith during 2019.

***Michael R. Guzzetta*** – Mr. Guzzetta is Chief Financial Officer of the Company. He entered into a consulting agreement with the Company dated November 14, 2017. The consulting agreement term is from November 14, 2017 to December 1, 2018, with automatic renewal in one-year increments with both parties having a right to terminate by giving either party notice 30 days prior to the end of the term. It also provides for a monthly consulting fee of $5,000. In 2019, the Company paid Mr. Guzzetta $60,000 in consulting fees, and reimbursed The Guzzetta Company LLC $12,600 in office rent. In 2018, he received $60,000 in consulting fees and The Guzzetta Company LLC was reimbursed $12,600 for office rent of $1,050 monthly.

In connection with the consulting agreement, the Company issued Mr. Guzzetta an option pursuant to the Amended 2017 Plan to purchase 1,000,000 shares of common stock of the Company at a price of $0.07 per share with 250,000 shares vesting every three months starting February 14, 2018.

On November 9, 2018, in connection with Mr. Guzzetta's continued service to the Company, the Company issued options pursuant to the Amended 2017 Plan to acquire 4,000,000 shares of common stock of the Company at an exercise price of $0.09 per share with 1,000,000 shares vesting every three months starting March 31, 2019. Prior to a change in control of the Company, the vesting schedule of the option shall immediately accelerate so that the option is fully vested and available for exercise by Mr. Guzzetta.

Please refer to "Recent Sales of Unregistered Securities and Use of Proceeds" for a description of the option grants canceled and issued to Mr. Guzzetta during 2019.

**Outstanding Equity Awards at Fiscal Year-End**

The following table provides information as to option awards held by each of the named executive officers of ProtoKinetix as of December 31, 2019.

| Name | Number of Securities Underlying Unexercised Options (#) Exercisable | Number of Securities Underlying Unexercised Options (#) Unexercisable | Option Exercise Price ($) | Option Expiration Date |
|---|---|---|---|---|
| Clarence E. Smith | 5,000,000(1) | — | 0.05 | 12/31/2020 |
| | 5,000,000(2) | — | 0.06 | 8/31/2021 |
| | 5,000,000(3) | — | 0.09 | 11/08/2023 |
| | 1,250,000(4) | 3,750,000 | 0.26 | 07/14/2024 |
| | 1,250,000(4) | 3,750,000 | 0.26 | 07/14/2024 |
| | — (5) | 5,000,000 | 0.11 | 11/17/2024 |
| Michael R. Guzzetta | 1,000,000(6) | — | 0.07 | 11/14/2021 |
| | 4,000,000(7) | — | 0.09 | 11/08/2023 |
| | 1,000,000(8) | 3,000,000 | 0.26 | 07/14/2024 |
| | — (9) | 4,000,000 | 0.11 | 11/17/2024 |

(1) Represents options granted pursuant to the Amended 2017 Plan on January 1, 2017 at $0.05 per share with 1,250,000 vesting every three months beginning March 31, 2017.
(2) Represents options granted pursuant to the Amended 2017 Plan on September 1, 2017 at $0.06 per share with 1,250,000 vesting every three months beginning December 31, 2017.
(3) Represents options granted pursuant to the Amended 2017 Plan on November 9, 2018 at $0.09 per share with 1,250,000 vesting every three months beginning March 31, 2019.
(4) Represents options granted pursuant to the Amended 2017 Plan on July 15, 2019 at $0.26 per share with 1,250,000 vesting every three months beginning October 13, 2019.
(5) Represents options granted pursuant to the Amended 2017 Plan on November 18, 2018 at $0.11 per share with 1,250,000 vesting every three months beginning February 18, 2020.
(6) Represents options granted pursuant to the Amended 2017 Plan on November 14, 2017 at $0.07 per share with 250,000 vesting every three months beginning February 14, 2018.
(7) Represents options granted pursuant to the Amended 2017 Plan on September 1, 2017 at $0.09 per share with 1,000,000 vesting every three months beginning March 31, 2019.
(8) Represents options granted pursuant to the Amended 2017 Plan on July 15, 2019 at $0.26 per share with 1,000,000 vesting every three months beginning October 13, 2019.
(9) Represents options granted pursuant to the Amended 2017 Plan on November 18, 2018 at $0.11 per share with 1,000,000 vesting every three months beginning February 18, 2020.

**Director Compensation**

The following table sets forth a summary of the compensation earned by each non-employee director who served on the Board during the fiscal year ended December 31, 2019:

**Director Compensation**

| Director | Fees Earned or Paid in Cash ($) | Bonus ($) | Stock Awards (1) ($) | Option Awards (2) ($) | Nonequity Incentive Plan Compensation ($) | Nonqualified Deferred Compensation Earnings ($) | All Other Compensation ($) | Total ($) |
|---|---|---|---|---|---|---|---|---|
| Edward P. McDonough | - | — | — | 247,889(3) | — | — | — | 247,889 |

(1) The aggregate grant date fair value of these stock awards was computed in accordance with ASC 718.

(2) Represents the grant date full fair value of compensation costs of stock options granted during the respective year for financial statement reporting purposes, using the Black-Scholes Option Pricing Model. Assumptions used in the calculation of these amounts are included in the Company's audited financial statements.

(3) As of December 31, 2019, Mr. McDonough held options to acquire 7,000,000 shares of the Company's common stock, of which 3,750,000 were vested and exercisable.

On July 1, 2015, the Company entered into a consulting agreement with Mr. McDonough for director services dated July 1, 2015. On December 21, 2015, Mr. McDonough and the Company entered into a new director consulting agreement, superseding the prior agreement (the "2016 McDonough Agreement") which provides for a one-year term through December 31, 2016. In connection with the 2016 McDonough Agreement, the Company issued Mr. McDonough an option pursuant to the 2015 Plan to purchase 1,000,000 shares of common stock of the Company at a price of $0.08 per share with 250,000 shares vesting every three months starting March 31, 2016.

On or about December 30, 2016, the Company entered into a new consulting agreement with Mr. McDonough, effective January 1, 2017 (the "2017 McDonough Agreement") which replaced the 2016 McDonough Agreement, terminating December 31, 2016.

The 2017 McDonough Agreement is for a one-year term through December 31, 2017. In connection with the 2017 McDonough Agreement, the Company issued Mr. McDonough an option pursuant to the Amended 2017 Plan to purchase 1,000,000 shares of common stock of the Company at a price of $0.05 per share with 250,000 shares vesting every three months starting March 31, 2017.

On September 1, 2017, the Company entered into an amendment to the 2017 McDonough Agreement, effective immediately. This new agreement is effective through December 31, 2018, but shall automatically renew for one-year increments under the same terms and conditions of the 2017 McDonough Agreement unless by stockholder vote or 30 days prior to the end of such calendar year written notice is given by either party to the other notifying them of a desire to terminate.

In connection with the amendment to the 2017 McDonough Agreement, the Company granted Mr. McDonough options pursuant to the Amended 2017 Plan to purchase 1,000,000 shares of common stock of the Company at an exercise price of $0.06 per share with 250,000 shares vesting every three months starting December 31, 2017.

On November 9, 2018, in connection with continued service to the Company, the Company granted Mr. McDonough options pursuant to the Amended 2017 Plan to purchase 1,000,000 shares of common stock of the Company at an exercise price of $0.09 per share with 250,000 shares vesting every three months starting March 31, 2019. Prior to a change in control of the Company, the vesting schedule of the option shall immediately accelerate so that the option is fully vested and available for exercise by Mr. McDonough.

Please refer to "Recent Sales of Unregistered Securities and Use of Proceeds" for a description of the option grants canceled and issued to Mr. McDonough during 2019.

## ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding our shares of common stock beneficially owned as of February 18, 2020, for (i) each stockholder known to be the beneficial owner of more than 5% of our outstanding shares of common stock (ii) each named executive officer and director, and (iii) all executive officers and directors as a group. A person is considered to beneficially own any shares: (a) over which such person, directly or indirectly, exercises sole or shared voting or investment power, or (b) of which such person has the right to acquire beneficial ownership at any time within 60 days through an exercise of stock options, warrants or convertible debt. Shares underlying such options, warrants, and convertible promissory notes, however, are only considered outstanding for the purpose of computing the percentage ownership of that person and are not considered outstanding when computing the percentage ownership of any other person. Unless otherwise indicated, voting and investment power relating to the shares shown in the table for our directors and executive officers is exercised solely by the beneficial owner or shared by the owner and the owner's spouse or children.

| Name & Address of Beneficial Owner | Amount and Nature of Beneficial Ownership | Beneficial Ownership Percentage as of February 18, 2020 (1) |
|---|---|---|
| ***More than 5% Stockholders*** | | |
| Grant Young (2) | 40,896,850 | 13.4% |
| | | |
| ***Directors and Named Executive Officers*** | | |
| Clarence E. Smith(3) | 93,951,825 | 31.4% |
| Michael R. Guzzetta(4) | 8,923,313 | 2.0% |
| Edward P. McDonough(5) | 5,500,000 | 3.1% |
| All directors and executive officers as a group: | 108,375,138 | 36.5% |

(1) Based on 275,400,259 shares of common stock outstanding on February 18, 2020, and, with respect to each individual holder, rights to acquire common stock exercisable within 60 days of February 18, 2020.

(2) Consists of 10,021,250 shares of common stock owned by Mr. Young directly; 1,125,600 shares held by Mr. Young's wife; the right to acquire 6,000,000 shares of common stock upon warrant exercise; and the right to acquire 23,750,000 shares of common stock upon option exercise. The principal address of Mr. Young is 6438 Rosebery Ave, West Vancouver, BC V7W 2C6, Canada.

(3) Consists of 54,899,999 shares of common stock owned by Mr. Smith directly, 13,235,160 held by Mr. Smith's trusts, 1,850,000 held by Mr. Smith's retirement account, the right to acquire 23,750,000 shares of common stock upon option exercise, and the right to acquire 216,666 shares upon warrant exercise. The principal address of Mr. Smith is 1845 County Road #214, St. Augustine, FL 32084.

(4) Consists of 173,313 shares of common stock owned by Mr. Guzzetta directly, and 8,750,000 shares of common stock issuable upon the exercise of stock options. The principal address of Mr. Guzzetta is 7187 Steel Dust Dr, New Albany, OH 43054.

(5) Consists of 5,500,000 shares of common stock issuable upon the exercise of stock options. The principal business address of Mr. McDonough is 1226 Washington Avenue, Parkersburg, WV 26101.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The following is a description of transactions during the last fiscal year in which the transaction involved a material dollar amount and in which any of the Company's directors, executive officers or holders of more than 5% of the Company's common stock had or will have a direct or indirect material interest, other than compensation which is described under "Executive Compensation." Management believes the terms obtained or consideration that was paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in arms' length transactions:

As at December 31, 2019, there is no amount due to or due from a related party.

Please refer to "Recent Sales of Unregistered Securities and Use of Proceeds" for a description of the option grants canceled and issued to Mr. Smith during 2019 as well as securities purchased by Mr. Smith directly from the Company.

Please refer to "Recent Sales of Unregistered Securities and Use of Proceeds" for a description of the option grants canceled and issued to Mr. Young during 2019.

See also Item 1, page 8 for a description of the patent rights assignments made by Mr. Young to the company in 2016 as well as Item 11 for a description of the consulting agreements with the officers and directors of the Company.

## ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

### Audit Fees

For the years ended December 31, 2019 and 2018, Davidson & Company LLP, Chartered Professional Accountants ("Davidson") the Company's principal accountants billed the Company $25,000 and $24,293, respectively for fees for the audit of the Company's annual financial statements. All amounts are in U.S. dollars.

### Audit-Related Fees

For the years ended December 31, 2011 and 2016, Davidson did not provide the Company with any assurances or related services reasonably related to the performance of the audit or review of the Company's financial statements and are not reported above under "Audit Fees."

**Tax Fees**

For the years ended December 31, 2019 and 2018, Davidson billed $3,500 in 2019 and $4,300 in 2018 for professional services for tax compliance, tax advice, and tax planning.

**All Other Fees**

For the years ended December 31, 2019 and 2018, Davidson did not bill the Company for fees associated with the preparation and filing of the Company's registration statements, the creation of pro forma financial statements and other related matters.

For the years ended December 31, 2019 and 2018, Davidson billed the Company $19,282 and $14,550 for fees for the review of the Company's quarterly financial statements. All amounts are in U.S. dollars.

**Audit Committee Pre-Approval Policies**

The Company currently does not have a formal audit committee. The Company's Board of Directors currently approves in advance all audit and non-audit related services performed by the Company's principal accountants and appointed Ed McDonough as the responsible director to review all financial information of the Company and correspond with the independent auditors regarding the same.

## PART IV

## ITEM 15. EXHIBITS, FINANCIAL STATEMENTS AND SCHEDULE

### EXHIBIT INDEX

The following documents are being filed with the Commission as exhibits to this Annual Report on Form 10-K.

| Exhibit | Description |
|---|---|
| 3.1 | Certificate of Incorporation(1) |
| 3.2 | Bylaws(1) |
| 4.2 | Amended 2017 Stock Option and Stock Bonus Plan(2) |
| 4.3 | Amendment to Amended 2017 Stock Option and Stock Bonus Plan as approved on July 15, 2019(5) |
| 10.1 | Royalty Agreement between the Company and The Governors of the University of Alberta, dated April 8, 2015(3) |
| 10.2 | Collaborative Research Agreement between the Company and the University of British Columbia, dated May 31, 2016(4) |
| 10.3 | Consulting Agreement between the Company and Clarence E. Smith, dated December 30, 2016(2) |
| 10.4 | Director Consulting Agreement between the Company and Edward P. McDonough, dated December 30, 2016(2) |
| 10.5 | Consulting Agreement between the Company and Grant Young, dated December 30, 2016(8) |
| 10.6 | First Amendment to Consulting Agreement between Clarence E. Smith and the Company dated September 1, 2017(7) |
| 10.7 | First Amendment to Consulting Agreement between Grant Young and the Company dated September 1, 2017(7) |
| 10.8 | First Amendment to Consulting Agreement between Edward P. McDonough and the Company dated September 1, 2017(7) |
| 10.9 | Consulting Agreement between ProtoKinetix Incorporated and Michael Guzzetta, dated November 14, 2017(6) |
| 14.1 | Code of Business Conduct and Ethics and Whistleblower Policy as approved on July 8, 2019(5) |
| 31.1 | Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002* |
| 31.2 | Certification of the Principal Financial Officer and Principal Accounting Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002* |
| 32.1 | Certification of the Principal Executive Officer and the Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002** |
| 101.INS | XBRL Instance Document |
| 101.SCH | XBRL Schema Document |
| 101.CAL | XBRL Calculation Linkbase Document |
| 101.DEF | XBRL Definition Linkbase Document |
| 101.LAB | XBRL Label Linkbase Document |
| 101.PRE | XBRL Presentation Linkbase Document |

1. Incorporated by reference from the Company's registration statement on Form 10-SB filed on June 22, 2001 with the SEC.
2. Incorporated by reference from the Company's Annual Report on Form 10-K filed on February 21, 2017 with the SEC.
3. Incorporated by reference from the Company's Annual Report on Form 10-K filed on April 14, 2015 with the SEC.
4. Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on August 15, 2016 with the SEC.
5. Incorporated by reference from the Company's Current Report on Form 8-K filed on July 17, 2019 with the SEC.
6. Incorporated by reference from the Company's Current Report on Form 8-K filed on November 15, 2017 with the SEC.
7. Incorporated by reference from the Company's amended Current Report on Form 8-K filed on September 12, 2017 with the SEC.
8. Incorporated by reference from the Company's Quarterly Report on Form 10-Q filed on November 13, 2017 with the SEC.

*. Filed herewith.

** Furnished, not filed herewith.

**ITEM 16. FORM 10-K SUMMARY**

This Item is optional and the registrant is not required to furnish this information.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized.

**PROTOKINETIX, INCORPORATED**

Dated: February 18, 2020

By: /s/ Clarence E. Smith
Clarence E. Smith
Principal Executive Officer

Dated: February 18, 2020

By: /s/ Michael R. Guzzetta
Michael R. Guzzetta
Principal Financial Officer & Principal Accounting Officer

Pursuant to the requirement of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Dated: February 18, 2020

By: /s/ Clarence E. Smith
Clarence E. Smith
Chief Executive Officer (principal executive officer)
& Chairman of the Board

Dated: February 18, 2020

By: /s/ Edward P. McDonough
Edward P. McDonough
Director

**PROTOKINETIX, INC.**
**(A Development Stage Company)**

FINANCIAL STATEMENTS

December 31, 2019
(Stated in US Dollars)

**C O N T E N T S**

DAVIDSON & COMPANY LLP — Chartered Accountants — A Partnership of Incorporated Professionals

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Directors of
Protokinetix, Inc.

***Opinion on the Financial Statements***

We have audited the accompanying balance sheets of Protokinetix, Inc. (the "Company"), as of December 31, 2019 and 2018, and the related statements of operations, stockholders' equity, and cash flows for the years ended December 31, 2019 and 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of Protokinetix, Inc. as of December 31, 2019 and 2018, and the results of its operations and its cash flows for the years ended December 31, 2019 and 2018 in conformity with accounting principles generally accepted in the United States of America.

***Going Concern***

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has not generated any significant revenues to date and has suffered recurring losses from operations. This raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

***Basis for Opinion***

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatements of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2008.

**"DAVIDSON & COMPANY LLP"**

Vancouver, Canada Chartered Professional Accountants

February 18, 2020

NEXIA INTERNATIONAL
1200 - 609 Granville Street, P.O. Box 10372, Pacific Centre, Vancouver, B.C., Canada V7Y 1G6
Telephone (604) 687-0947 Fax (604) 687-6172

**PROTOKINETIX, INC.**
(A Development Stage Company)

**BALANCE SHEETS**
As of December 31, 2019

| | 2019 | 2018 |
|---|---|---|
| **ASSETS** | | |
| Current Assets | | |
| Cash | $ 377,349 | $ 136,029 |
| Prepaid expenses and deposits (Note 3) | 1,050 | 1,050 |
| Total current assets | 378,399 | 137,079 |
| | | |
| Intangible assets (Note 4) | 207,508 | 187,771 |
| | | |
| Total assets | $ 585,907 | $ 324,850 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current Liabilities | | |
| Accounts payable and accrued liabilities | $ 25,520 | $ 78,885 |
| | | |
| Total current liabilities | 25,520 | 78,885 |
| Stockholders' Equity | | |
| Common stock, $0.0000053 par value; 400,000,000 common shares authorized; 275,400,259 and 259,785,766 shares issued and outstanding for 2019 and 2018 respectively (Note 7) | 1,472 | 1,389 |
| Additional paid-in capital | 36,107,058 | 31,594,822 |
| Accumulated deficit | (35,548,143) | (31,350,246) |
| Total stockholders' equity | 560,387 | 245,965 |
| Total liabilities and stockholders' equity | $ 585,907 | $ 324,850 |

**Basis of Presentation – Going Concern Uncertainties** (Note 1)
**Commitments and Contingency** (Note 9)

See Notes to Financial Statements

**PROTOKINETIX, INC.**
(A Development Stage Company)

**STATEMENTS OF OPERATIONS**
For the Years Ended December 31, 2019 and 2018

| | 2019 | 2018 |
|---|---|---|
| **EXPENSES** | | |
| Amortization – intangible assets (Note 4) | $ 3,000 | $ 3,000 |
| General and administrative | 280,438 | 78,074 |
| Interest | — | 306 |
| Professional fees (Note 8) | 149,619 | 149,123 |
| Research and development | 369,520 | 337,067 |
| Share-based compensation (Notes 5 and 8) | 3,395,319 | 648,773 |
| | (4,197,897) | (1,216,343) |
| Net loss for the year | $ (4,197,897) | $ (1,216,343) |
| Net loss per common share (basic and diluted) | $ (0.02) | $ (0.00) |
| Weighted average number of common shares outstanding (basic and diluted) | 268,984,776 | 256,217,173 |

See Notes to Financial Statements

**PROTOKINETIX, INC.**
(A Development Stage Company)
**STATEMENT OF STOCKHOLDERS' EQUITY**
For the Years Ended December 31, 2019 and 2018

| | Common Stock | | Additional paid-in | Accumulated | |
|---|---|---|---|---|---|
| | Shares | Amount | capital | deficit | Total |
| Balance, December 31, 2017 | 251,352,433 | $ 1,344 | $ 30,506,094 | $ (30,133,903) | $ 373,535 |
| Fair value of compensatory options issued | — | — | 648,773 | — | 648,773 |
| Exchange debt for common stock | 2,359,240 | 13 | 117,949 | — | 117,962 |
| Issuance of common stock pursuant to private placement offering | 1,000,000 | 5 | 49,995 | — | 50,000 |
| Issuance of common stock pursuant to private placement offering | 3,240,760 | 17 | 162,021 | — | 162,038 |
| Issuance of common stock pursuant to private placement offering | 1,833,333 | 10 | 109,990 | — | 110,000 |
| Net loss for the year | — | — | — | (1,216,343) | (1,216,343) |
| Balance, December 31, 2018 | 259,785,766 | $ 1,389 | $ 31,594,822 | $ (31,350,246) | $ 245,965 |

See Notes to Financial Statements

**PROTOKINETIX, INC.**
(A Development Stage Company)
**STATEMENT OF STOCKHOLDERS' EQUITY**
For the Years Ended December 31, 2019 and 2018

| | Common Stock | | Additional paid-in | Accumulated | |
|---|---|---|---|---|---|
| | Shares | Amount | capital | deficit | Total |
| Balance, December 31, 2018 | 259,785,766 | $ 1,389 | $ 31,594,822 | $ (31,350,246) | $ 245,965 |
| Fair value of compensatory options issued | — | — | 3,395,319 | — | 3,395319 |
| Issuance of common stock pursuant to cashless option exercise | 97,826 | 1 | (1) | — | — |
| Issuance of common stock pursuant to private placement offering | 15,516,667 | 82 | 1,116,918 | — | 1,117,000 |
| Net loss for the year | — | — | — | (4,197,897) | (4,197,897) |
| Balance, December 31, 2019 | 275,400,259 | $ 1,472 | $ 36,107,058 | $ (35,548,143) | $ 560,387 |

See Notes to Financial Statements

**PROTOKINETIX, INC.**
(A Development Stage Company)

**STATEMENTS OF CASH FLOWS**
For the Years Ended December 31, 2019 and 2018

| | 2019 | 2018 |
|---|---|---|
| **CASH FLOWS USED IN OPERATING ACTIVITIES** | | |
| Net loss for the year | $ (4,197,897) | $ (1,216,343) |
| Adjustments to reconcile net loss to cash used in operating activities: | | |
| Amortization – intangible assets | 3,000 | 3,000 |
| Fair value of compensatory options granted | 3,395,319 | 648,773 |
| Accrued interest expense | — | 306 |
| | | |
| Changes in operating assets and liabilities: | | |
| Prepaid expenses and deposits | — | 61,077 |
| Accounts payable and accrued liabilities | (51,080) | 49,694 |
| | | |
| Net cash used in operating activities | (850,658) | (453,493) |
| | | |
| **CASH FLOWS FROM (USED IN) INVESTING ACTIVITIES** | | |
| Purchase of intangible assets | (25,022) | (35,458) |
| | | |
| Net cash used in investing activities | (25,022) | (35,458) |
| | | |
| **CASH FLOWS FROM (USED IN) FINANCING ACTIVITIES** | | |
| Issuance of common stock for cash | 1,117,000 | 322,038 |
| | | |
| Net cash from financing activities | 1,117,000 | 322,038 |
| | | |
| Net change in cash | 241,320 | (166,913) |
| | | |
| Cash, beginning of year | 136,029 | 302,942 |
| | | |
| Cash, end of year | $ 377,349 | $ 136,029 |
| | | |
| Cash paid for interest | $ — | $ — |
| | | |
| Cash paid for income taxes | $ — | $ — |
| Supplementary information – non-cash transactions: | | |
| Intangible asset costs included in accounts payable and accrued liabilities | $ — | $ 2,285 |

See Notes to Financial Statements

**Note 1. Basis of Presentation – Going Concern Uncertainties**

ProtoKinetix, Inc. (the "Company"), a development stage company, was incorporated under the laws of the State of Nevada on December 23, 1999. The Company is a medical research company whose mission is the advancement of human health care.

The Company is currently researching the benefits and feasibility of synthesized Antifreeze Glycoproteins ("AFGP") or anti-aging glycoproteins, trademarked AAGP. During the year ended December 31, 2015, the Company acquired certain patents and rights for cash consideration of $30,000 (25,000 Euros), as well as additional patent applications for cash consideration of $10,000 and 6,000,000 share purchase warrants with a fair value of $25,000 (Note 4).

The Company's financial statements are prepared consistent with accounting principles generally accepted in the United States applicable to a going concern.

The Company has not developed a commercially viable product, has not generated any significant revenue to date, and has incurred losses since inception, resulting in a net accumulated deficit at December 31, 2019. These factors raise substantial doubt about the Company's ability to continue as a going concern.

The Company needs additional working capital to continue its medical research or to be successful in any future business activities and continue to pay its liabilities. Therefore, continuation of the Company as a going concern is dependent upon obtaining the additional working capital necessary to accomplish its objective. Management is presently engaged in seeking additional working capital through equity financing or related party loans.

The accompanying financial statements do not include any adjustments to the recorded assets or liabilities that might be necessary should the Company fail in any of the above objectives and is unable to operate for the coming year.

**Note 2. Summary of Significant Accounting Policies**

**Basis of Presentation**

The accompanying financial statements have been prepared by the Company in accordance with accounting principles generally accepted in the United States of America ("US GAAP") and are expressed in United States dollars.

**Note 2. Summary of Significant Accounting Policies** (cont'd)

**Use of Estimates**

Preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. The more significant accounting estimates inherent in the preparation of the Company's financial statements include estimates as to valuation of equity- related instruments issued, deferred income taxes and the useful life and impairment of intangible assets.

**Cash**

Cash consists of funds held in checking accounts. Cash balances may exceed federally insured limits from time to time.

**Fair Value of Financial Instruments**

Financial instruments, which includes cash, accounts payable and accrued liabilities are carried at amortized cost, which management believes approximates fair value due to the short-term nature of these instruments.

The Company measures the fair value of financial assets and liabilities pursuant to ASC 820 "Fair Value Measurements and Disclosures" which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. ASC 820 establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The policy describes three levels of inputs that may be used to measure fair value:

Level 1 – quoted prices in active markets for identical assets or liabilities.
Level 2 – quoted prices for similar assets and liabilities in active markets or inputs that are observable.
Level 3 – inputs that are unobservable (for example cash flow modeling inputs based on assumptions).

Level 1 inputs are used to measure cash. At December 31, 2019, there were no other assets or liabilities subject to additional disclosure.

**Income Taxes**

The Company accounts for income taxes following the assets and liability method in accordance with the ASC 740 "Income Taxes." Under such method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. The Company applies the accounting guidance issued to address the accounting for uncertain tax positions. This guidance clarifies the accounting for income taxes, by prescribing a minimum recognition threshold a tax position is required to meet before being recognized in the financial statements as well as provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure and transition Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years that the asset is expected to be recovered or the liability settled.

**Note 2. Summary of Significant Accounting Policies** (cont'd)

**Intangible assets – patent and patent application costs**

The Company owns intangible assets consisting of certain patents and patent applications. Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses. Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures are recognized in profit or loss as incurred.

As at December 31, 2019, the Company does not hold any intangible assets with indefinite lives.

Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization method and amortization period of an intangible asset with a finite life is reviewed at least annually.

Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates.

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives of the Company's patents, whereas no amortization has been recognized on the patent application costs at December 31, 2019.

**Research and Development Costs**

Research and development costs are expensed as incurred.

**Loss per Share and Potentially Dilutive Securities**

Basic loss per share is computed by dividing the net loss available to common stockholders by the weighted average number of common shares outstanding in the period. Diluted loss per share takes into consideration common shares outstanding (computed under basic earnings per share) and potentially dilutive securities. The effect of 91,450,000 stock options (December 31, 2018 – 58,600,000) and 8,500,000 warrants (December 31, 2018 – 6,000,000) were not included in the computation of diluted earnings per share for all periods presented because it was anti-dilutive due to the Company's losses.

**Share-Based Compensation**

The Company has granted warrants and options to purchase shares of the Company's common stock to various parties for consulting services. The fair values of the warrants and options issued have been estimated using the Black-Scholes Option Pricing Model.

The Company accounts for stock compensation with persons classified as employees for accounting purposes in accordance with ASC 718 "Compensation – Stock Compensation", which recognizes awards at fair value on the date of grant and recognition of compensation over the service period for awards expected to vest. Cliff Vesting is used and awards vest on the last day of the vesting period. The fair value of stock options is determined using the Black-Scholes Option Pricing Model. The fair value of common shares issued for services is determined based on the Company's stock price on the date of issuance.

**Note 2. Summary of Significant Accounting Policies** (cont'd)

**Share-Based Compensation** (cont'd)

Share-based compensation for non-employees in exchange for goods and services used or consumed in an entity's own operations are also recorded at fair value on the measurement date and accounted for in accordance with ASC 718. The measurement of share-based compensation is subject to periodic adjustment as the underlying instruments vest. The fair value of stock options is estimated using the Black-Scholes Option Pricing Model and the compensation charges are amortized over the vesting period.

**Common stock**

Common stock issued for non-monetary consideration are recorded at their fair value on the measurement date and classified as equity. The measurement date is defined as the earliest of the date at which the commitment for performance by the counterparty to earn the common shares is reached or the date at which the counterparty's performance is complete. Transaction costs directly attributable to the issuance of common stock, units and stock options are recognized as a deduction from equity, net of any tax effects.

**Related Party Transactions**

A related party is generally defined as (i) any person that holds 10% or more of the Company's securities and their immediate families, (ii) the Company's management, (iii) someone that directly or indirectly controls, is controlled by or is under common control with the Company, or (iv) anyone who can significantly influence the financial and operating decisions of the Company. A transaction is considered to be a related party transaction when there is a transfer of resources or obligations between related parties.

**Recent Accounting Pronouncements**

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, or "ASU 2016-02", to increase transparency and comparability among organizations by requiring the recognition of right-of-use assets and lease liabilities for most lease arrangements on the balance sheet. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases.

ASU 2016-02 was originally required to be adopted on a modified retrospective basis, meaning the new leasing model would need to be applied to the earliest year presented in the financial statements and thereafter. However, in July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements,* or "ASU 2018-11" which permits companies to apply the transition provisions of the lease accounting standard at its effective date (i.e. comparative financial statements are not required). Furthermore, in December 2018, the FASB issued ASU No. 2018-20, *Leases (Topic 842): Narrow Scope Improvements for Lessors* or "ASU 2018-20", which clarifies that lessor costs paid directly to a third-party by a lessee on behalf of the lessor, are no longer required to be recognized in the lessor's financial statements.

The Company adopted this standard on January 1, 2019. The adoption did not have any impact on the Company's financial statements.

**Note 3. Prepaid Expenses and Deposits**

The following summarizes the Company's prepaid expenses and deposits outstanding as at December 31, 2019 and 2018:

| | 2019 | 2018 |
|---|---|---|
| Rental deposit | $ 1,050 | $ 1,050 |
| | $ 1,050 | $ 1,050 |

**Note 4. Intangible Assets**

Intangible asset transactions are summarized as follows:

| | Patent Rights | Patent Application Rights | Total |
|---|---|---|---|
| **Cost** | | | |
| Balance, December 31, 2017 | $ 30,000 | $ 130,528 | $ 160,528 |
| Additions | — | 37,743 | 37,743 |
| Balance, December 31, 2018 | $ 30,000 | $ 168,271 | $ 198,271 |
| Additions | — | 22,737 | 22,737 |
| Balance, December 31, 2019 | $ 30,000 | $ 191,008 | $ 221,008 |
| **Accumulated amortization** | | | |
| Balance, December 31, 2017 | $ 7,500 | $ — | $ 7,500 |
| Amortization | 3,000 | — | 3,000 |
| Balance, December 31, 2018 | $ 10,500 | $ — | $ 10,500 |
| Amortization | 3,000 | — | 3,000 |
| Balance, December 31, 2019 | $ 13,500 | $ — | $ 13,500 |
| | | | |
| **Net carrying amounts** | | | |
| December 31, 2017 | $ 22,500 | $ 130,528 | $ 153,028 |
| December 31, 2018 | $ 19,500 | $ 168,271 | $ 187,771 |
| December 31, 2019 | $ 16,500 | $ 191,008 | $ 207,508 |

During the year ended December 31, 2015, the Company entered into an Assignment of Patents and Patent Application (effective January 1, 2015) (the "Patent Assignment") with the Institut National des Sciences Appliquees de Rouen ("INSA") for the assignment of certain patents and all rights associated therewith (the "Patents"). The Company and INSA had previously entered into a licensing agreement for the Patents in August 2004. The Patent Assignment transfers all of the Patents and rights associated therewith to the Company upon payment to INSA in the sum of $30,000 (25,000 Euros) (paid). During the year ended December 31, 2019, the Company recorded $3,000 (2018 - $3,000) in amortization expense associated with the Patents based on a 10-year useful life.

During the year ended December 31, 2015, the Company entered into a Technology Transfer Agreement with Grant Young for the assignment of his 50% ownership of certain patents and all rights associated therewith (the "Patent Application Rights"). In exchange for the Patent Application Rights, the Company agreed to pay $10,000 (paid) and to issue 6,000,000 warrants (issued) to purchase shares of the Company's common stock at an exercise price of $0.10 per share for a period of five years. The Patent Application Rights had a total fair value of $35,000, which was allocated as $10,000 to the cash consideration paid, with the remaining $25,000 being allocated to the warrant component of the overall consideration. The Company incurred an additional $156,008 in direct costs relating to the Patent Application Rights, $22,737 of which were incurred during the year ended December 31, 2019.

**Note 4. Intangible Assets** (cont'd)

The remaining 50% ownership of the Patent Application Rights was acquired from the Governors of the University of Alberta in exchange for a future gross revenue royalty.

During the year ended December 31, 2016, the Company entered into a Universal Assignment with Grant Young for the assignment of his ownership of certain new and useful improvements in an invention entitled "Use of Anti-Aging Glycoprotein for Enhancing Survival of Neurosensory Precursor Cells" (the "New Patent Application Rights"). In exchange for the New Patent Application Rights, the Company agreed to pay $1 (paid). The Company incurred $2,415 in direct costs relating to the New Patent Application Rights during the year ended December 31, 2016.

No amortization was recorded on the Patent Application Rights or the New Patent Application Rights to December 31, 2019.

**Note 5. Stock Options**

On December 30, 2016, the Board of Directors of the Company adopted the 2017 Stock Option and Stock Bonus Plan (the "2017 Plan", as amended on November 9, 2018). The Board of Directors adopted the 2017 Plan as it anticipates utilizing equity compensation as part of its ongoing standard corporate operations and in connection with its contemplated activities going forward.

The aggregate number of shares that may be issued under the 2017 Plan is 89,700,000 shares subject to adjustment as provided therein. The 2017 Plan includes two types of options. Options intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code of 1986, as amended are referred to as incentive options. Options which are not intended to qualify as incentive options are referred to as non-qualified options.

As of December 31, 2019, there are 89,450,000 options and no shares of common stock granted and outstanding under the 2017 Plan.

**Note 5. Stock Options** (cont'd)

The 2017 Plan is administered by the Board of Directors, or a committee appointed by the Board of Directors. In addition to determining who will be granted options or stock bonuses, the committee has the authority and discretion to determine when options and bonuses will be granted and the number of options and bonuses to be granted. The committee also may determine a vesting and/or forfeiture schedule for bonuses and/or options granted, the time or times when each option becomes exercisable, the duration of the exercise period for options and the form or forms of the agreements, certificates or other instruments evidencing grants made under the 2017 Plan.

The committee may determine the purchase price of the shares of common stock covered by each option and determine the fair market value per share. The committee also may impose additional conditions or restrictions not inconsistent with the provisions of the 2017 Plan. The committee may adopt, amend and rescind such rules and regulations as in its opinion may be advisable for the administration of the 2017 Plan.

The committee also has the power to interpret the 2017 Plan, and the provisions in the instruments evidencing grants made under it and is empowered to make all other determinations deemed necessary or advisable for the administration of it.

Participants in the 2017 Plan may be selected by the committee from employees, officers, consultants and advisors (including board members) of the Company. The committee may take into account the duties of persons selected, their present and potential contributions to the success of the Company and such other considerations as the committee deems relevant to the purposes of the 2017 Plan.

In the event that a change, such as a stock split, is made in the Company's capitalization which results in an exchange or other adjustment of each share of common stock for or into a greater or lesser number of shares, appropriate adjustments will be made to unvested bonuses and in the exercise price and in the number of shares subject to each outstanding option. The committee also may make provisions for adjusting the number of bonuses or underlying outstanding options in the event the Company effects one or more reorganizations, recapitalizations, rights offerings, or other increases or reductions of shares of its outstanding common stock. Options and bonuses may provide that in the event of the dissolution or liquidation of the Company, a corporate separation or division or the merger or consolidation of the Company, the holder may exercise the option on such terms as it may have been exercised immediately prior to such dissolution, corporate separation or division or merger or consolidation; or in the alternative, the committee may provide that each option granted under the 2017 Plan shall terminate as of a date fixed by the committee.

The exercise price of any option granted under the 2017 Plan must be no less than 100% of the "fair market value" of the Company's common stock on the date of grant. Any incentive stock option granted under the 2017 Plan to a person owning more than 10% of the total combined voting power of the common stock must be at a price of no less than 110% of the fair market value per share on the date of grant.

The exercise price of an option may be paid in cash, in shares of the Company's common stock or other property having a fair market value equal to the exercise price of the option, or in a combination of cash, shares, other securities and property. The committee determines whether or not property other than cash or common stock may be used to purchase the shares underlying an option and shall determine the value of the property received.

**Note 5. Stock Options** (cont'd)

Stock option transactions are summarized as follows:

| | Number of Stock Options | Weighted Average Exercise Price | Weighted Average Remaining Life |
|---|---|---|---|
| | | $ | (Years) |
| Outstanding, December 31, 2018 | 58,600,000 | 0.07 | |
| Options cancelled | (16,000,000) | 0.07 | |
| Options exercised | (250,000) | 0.07 | |
| Options granted | 49,100,000 | 0.21 | |
| Outstanding, December 31, 2019 | 91,450,000 | 0.14 | 3.51 |

| | Number of Stock Options | Weighted Average Exercise Price | Weighted Average Remaining Life |
|---|---|---|---|
| | | $ | (Years) |
| Outstanding, December 31, 2017 | 44,100,000 | 0.06 | |
| Options granted | 16,400,000 | 0.05 | |
| Options expired | (1,900,000) | 0.10 | |
| Outstanding, December 31, 2018 | 58,600,000 | 0.07 | 2.60 |

Total share-based compensation for stock options granted during the year ended December 31, 2019 was $3,156,694 (2018 - $648,773). The fair values of the stock options granted during the years ended December 31, 2019 and 2018 were estimated using the Black-Scholes Option Pricing Model. The weighted average assumptions used in the pricing model for these options are as follows:

| | December 31, 2019 | December 31, 2018 |
|---|---|---|
| Risk-free interest rate | 2.42% | 1.50% |
| Dividend yield | 0.00% | 0.00% |
| Expected stock price volatility | 140.21% | 125.00% |
| Expected forfeiture rate | 0.00% | 0.00% |
| Expected life | 4.95 years | 3.45 years |

The following non-qualified stock options were outstanding and exercisable at December 31, 2019:

| Expiry date | Exercise Price | Number of Options Outstanding | Number of Options Exercisable |
|---|---|---|---|
| | $ | | |
| February 25, 2020 | 0.04 | 2,000,000 | — |
| December 31, 2020 | 0.05 | 12,200,000 | 12,200,000 |
| August 31, 2021 | 0.06 | 11,000,000 | 11,000,000 |
| November 14, 2021 | 0.07 | 750,000 | 750,000 |
| December 31, 2022 | 0.06 | 800,000 | 800,000 |
| August 31, 2023 | 0.08 | 600,000 | 600,000 |
| November 08, 2023 | 0.09 | 15,000,000 | 15,000,000 |
| May 2, 2023 | 0.13 | 1,600,000 | 1,600,000 |
| July 14, 2024 | 0.26 | 32,500,000 | 8,250,000 |
| November 17, 2024 | 0.11 | 15,000,000 | — |
| | | 91,450,000 | 50,200,000 |

**Note 5. Stock Options** (cont'd)

As at December 31, 2019, the aggregate intrinsic value of the Company's stock options is $1,005,350 (December 31, 2018 – $572,000). The weighted average fair value of stock options granted during the year ended December 31, 2019 is $0.18 (2018 - $0.07), and the weighted average exercise price of exercisable stock options is $0.10 (2018 - $0.06).

**Note 6. Warrants**

On July 15, 2019, the Company cancelled and concurrently replaced 6,000,000 warrants previously issued to a consultant in 2015. The replacement warrants granted have a term of 5 years and are exercisable at a price of $0.26 per share, expiring July 15, 2024.

In accordance with ASC 718, the 6,000,000 replacement warrants were accounted for as a modification of the terms of the cancelled award, with the incremental cost being measured as the excess of the fair value of the replacement warrants over the fair value of the cancelled warrants at the cancellation date. Total share-based compensation of $238,625 was recorded in connection with the warrant modification, based on the following assumptions used in the Black-Scholes Option Pricing Model:

| | Warrants on cancellation | Warrants replaced |
|---|---|---|
| Risk-free interest rate | 2.41% | 2.41% |
| Dividend yield | 0.00% | 0.00% |
| Expected stock price volatility | 170.47% | 143.71% |
| Expected forfeiture rate | 0.00% | 0.00% |
| Expected life | 0.77 years | 5 years |

Warrant transactions are summarized as follows:

| | Number of Warrants | Weighted Average Exercise Price |
|---|---|---|
| | | $ |
| Outstanding, December 31, 2017 | 6,500,000 | 0.11 |
| Warrants expired | (500,000) | 0.25 |
| Outstanding, December 31, 2018 | 6,000,000 | 0.10 |
| Warrants cancelled | (6,000,000) | 0.10 |
| Warrants granted | 8,500,000 | 0.22 |
| Outstanding, December 31, 2019 | 8,500,000 | 0.22 |

The following warrants were outstanding and exercisable as at December 31, 2019:

| Number of Warrants | Exercise Price ($) | Expiry Date |
|---|---|---|
| 6,000,000 | 0.26 | July 14, 2024 |
| 833,333 | 0.12 | October 15, 2022 |
| 250,000 | 0.12 | October 21, 2022 |
| 116,667 | 0.12 | November 1, 2022 |
| 83,334 | 0.12 | November 12, 2022 |
| 833,333 | 0.12 | December 1 , 2022 |
| 166,667 | 0.12 | December 18, 2022 |
| 216,666 | 0.12 | December 18, 2022 |
| 8,500,000 | 0.22 | |

**Note 7. Stockholders' Equity**

The Company is authorized to issue 400,000,000 (December 31, 2018 – 400,000,000) shares of $0.0000053 par value common stock. Each holder of common stock has the right to one vote but does not have cumulative voting rights. Shares of common stock are not subject to any redemption or sinking fund provisions, nor do they have any preemptive, subscription or conversion rights. Holders of common stock are entitled to receive dividends whenever funds are legally available and when declared by the board of directors, subject to the prior rights of holders of all classes of stock outstanding having priority rights as to dividends. No dividends have been declared or paid as of December 31, 2019 (December 31, 2018 - $nil).

During the year ended December 31, 2019, the Company:

a) Issued 750,000 shares of common stock to investors at $0.06 per share for gross proceeds of $45,000.

b) Issued 10,000,000 shares of common stock to investors at $0.05 per share for gross proceeds of $500,000.

c) Issued 2,266,667 shares of common stock to investors at $0.12 per share for gross proceeds of $272,000.

d) Issued 97,826 shares of common stock to its CFO pursuant to a cashless exercise of 250,000 stock options.

e) Issued 2,500,000 shares of common stock to investors (one of which was the President and CEO of the Company) at $0.12 per share for gross proceeds of $300,000 and warrants to purchase 2,500,000 shares of common stock exercisable at $0.12 per share for three years.

During the year ended December 31, 2018, the Company:

a) Issued 2,359,240 shares of common stock to the President and CEO of the Company at $0.05 per share in exchange for debt to the President and CEO of $117,962.

b) Issued 1,000,000 shares of common stock to investors at $0.05 per share for gross proceeds of $50,000.

c) Issued 3,240,760 shares of common stock to investors (one of which was the President and CEO of the Company) at $0.05 per share for gross proceeds of $162,038.

d) Issued 1,833,333 shares of common stock to investors (one of which was the President and CEO of the Company) at $0.06 per share for gross proceeds of $110,000.

**Note 8. Related Party Transactions and Balances**

During the year ended December 31, 2019, the Company:

a) Entered into a consulting agreement with an effective date of January 1, 2017 with the Company's President and CEO whereby he will be compensated at a nominal amount of $1 for services. The agreement also stipulates a termination fee that would pay the Company's President and CEO $100,000 per year of service if terminated without cause or, in the case of termination upon a change of control event, the termination fee would be equal to $100,000 per year of service plus 2.5% of the aggregate transaction value of the change of control. In addition, the agreement stipulates that he would be entitled to a bonus payment equal to 2.5% of the aggregate transaction value of a sale or license of any Patent Rights, Patent Application Rights or products effected during the term of his agreement. On November 9, 2018, the President and CEO was granted an additional 5,000,000 stock options for continued service. The options are exercisable until November 8, 2023 at a price of $0.09 per share (Note 5) and vest quarterly in equal installments beginning March 31, 2019.

   On July 15, 2019, pursuant to a mutual agreement, the CEO’s vested options for 5,000,000 shares at $0.08 per share, expiring December 31, 2019, were cancelled. New stock options were granted for 5,000,000 shares of common stock at a price of $0.26 per share and expiring July 14, 2024. The options vest in equal installments quarterly starting October 13, 2019. On July 15, 2019, the CEO was also granted stock options for continued service for 5,000,000 shares of common stock at a price of $0.26 per share, expiring July 14, 2024. The options vest in equal installments quarterly starting October 13, 2019. On November 18, 2019, the CEO was granted additional stock options for 5,000,000 stock options at a price of $0.11 per share, expiring November 17, 2024. The options vest in equal installments quarterly starting February 18, 2020.

b) Pursuant to a consulting agreement with an effective date of November 14, 2017, a total of $60,000 (2018 - $60,000) was paid or accrued to the Company's CFO. On November 9, 2018, the CFO was granted 4,000,000 stock options for continued service. The options are exercisable until November 8, 2023 at a price of $0.09 per stock option (Note 5) and vest quarterly in equal installments beginning March 31, 2019. On July 15, 2019, the CFO was granted an additional 4,000,000 stock options for continued service. The options are exercisable until July 14, 2024 at a price of $0.26 per share. On November 18, 2019, the CFO was granted 4,000,000 stock options at a price of $0.11 per share, expiring November 17, 2024. The options vest in equal installments quarterly starting February 18, 2020. During the year ending December 31, 2019, the Company reimbursed a company controlled by the CFO a total of $12,600 (2018 - $12,600) in office rent.

c) Entered into a directorship agreement with an effective date of January 1, 2017 with a director of the Company. On November 9, 2018, the director was granted 1,000,000 stock options for continued service. The options are exercisable until November 8, 2023 at a price of $0.09 per share (Note 5) and vest quarterly in equal installments beginning March 31, 2019.

   On July 15, 2019, pursuant to a mutual agreement, the director’s vested options for 1,000,000 shares at $0.08 per share, expiring December 31, 2019, were cancelled. New stock options were granted for 1,000,000 shares of common stock at a price of $0.26 per share and expiring July 14, 2024. The options vest in equal installments quarterly starting October 13, 2019. On July 15, 2019, the director was also granted stock options for continued service for 2,000,000 shares of common stock at a price of $0.26 per share, expiring July 14, 2024. The options vest in equal installments quarterly starting October 13, 2019. On November 18, 2019, the director was granted additional stock options for 1,000,000 stock options at a price of $0.11 per share, expiring November 17, 2024. The options vest in equal installments quarterly starting February 18, 2020.

d) The Company recognized $1,704,723 (2018 - $310,962) in share-based compensation associated with stock options granted to key management personnel.

**Note 9. Commitments and Contingency**

*Commitments*

As at December 31, 2019, the Company has the following commitments:

a) Entered into a consulting agreement with an effective date of January 1, 2017 whereby the Company would pay the consultant $7,000 per month for providing research and development services. On November 9, 2018, the consultant was granted an additional 5,000,000 stock options for continued service. The options are exercisable until November 8, 2023 at a price of $0.09 per share (Note 5) and vest quarterly in equal installments beginning March 31, 2019.

   On July 15, 2019, pursuant to a mutual agreement, the consultant's vested options for 5,000,000 shares at $0.04 per share, expiring February 28, 2020, and vested options for 5,000,000 shares at $0.08 per share, expiring December 31, 2019, were cancelled. New stock options were granted for 10,000,000 shares of common stock at a price of $0.26 per share and expiring July 14, 2024. The options vest in equal installments quarterly starting October 13, 2019. On July 15, 2019, the consultant was also granted stock options for continued service for 5,000,000 shares of common stock at a price of $0.26 per share, expiring July 14, 2024. The options vest in equal installments quarterly starting October 13, 2019. On November 18, 2019, the consultant was granted additional stock options for 5,000,000 stock options at a price of $0.11 per share, expiring November 17, 2024.

b) Entered into a consulting agreement for research and investor relations consulting services effective January 1, 2018. The consultant was granted 400,000 stock options exercisable into common shares of the Company at a price of $0.06 per share until December 31, 2022 (Note 5). The options vest in equal instalments on a quarterly basis beginning March 31, 2018. On September 1, 2018, the consultant was granted an additional 600,000 stock options exercisable into common shares of the Company at a price of $0.08 per share until August 31, 2023. The options vest in equal instalments on a quarterly basis beginning December 31, 2018.

c) On June 29, 2018, the Company entered into an amendment to a Collaborative Research Agreement (the "CREA") initially entered into with the University of British Columbia during fiscal 2016 which required two additional instalments of CAD $54,600 ($41,369) due on June 30, 2018 and CAD $54,600 ($41,392) due on December 1, 2018. The CREA can be terminated by either party with 30 days' written notice. As of December 31, 2019, a total of $nil is included in prepaid expenses and deposits (December 31, 2018 - $nil) pertaining to the CREA.

   On January 4, 2018, the Company entered into an additional agreement with the University of British Columbia, making a payment of CAD $50,001 ($40,140) for research services to be provided over a term of 1 year.

**Note 9. Commitments and Contingency** (cont'd)

*Commitments (cont'd)*

d) Entered into a consulting agreement effective January 1, 2018, whereby the Company would pay the consultant $1,000 per month for a term of 1 year for providing public relations services, unless otherwise terminated by either party with at least 30 days' notice. The consultant was also granted 400,000 stock options exercisable into common shares of the Company until December 31, 2022 at a price of $0.06 per share (Note 5). The options vest quarterly in equal installments beginning March 31, 2018.

e) On May 1, 2019, entered into consulting agreements for investor relations consulting services with two firms. The consultants were granted 800,000 stock options each (for a total of 1,600,000) exercisable into common shares of the Company at a price of $0.13 per share until May 6, 2023. (Note 5). The options vest 400,000 shares to each of the two consultants on May 6, 2019 and 400,000 each, one on July 17, 2019 and one on August 1, 2019. The agreements also call for monthly payments of $5,000 to each of the two consultants over a term of 1 year. The agreements can be cancelled at any time with 30 days' notice.

f) Entered into a consulting agreement effective April 1, 2019, whereby the Company would pay the consultant $1,500 per month minimum plus travel expenses for a term of 1 year for providing research consulting services, unless otherwise terminated by either party with at least 30 days' notice. On July 15, 2019, the consultant was also granted 500,000 stock options exercisable into common shares of the Company until July 14, 2024 at a price of $0.26 per share. The options vest quarterly in equal installments beginning October 13, 2019.

g) Entered into a Collaborative Research Agreement (the "CREA") on February 20, 2019 with the University of Dalhousie until March 31, 2020. Pursuant to the CREA, the Company will pay a total of CAD $112,000. Dalhousie agrees to invoice the Company in four installments of CAD $28,000 ($20,982 USD) as research services progress. The CREA can be terminated by either party with 30 days' written notice. As of December 31, 2019, a total of $nil is included in prepaid expenses and deposits (December 31, 2018 - $nil) pertaining to the CREA.

*Contingency*

The Company was delinquent in filing certain income tax returns with the U.S. Internal Revenue Service and reports disclosing its interest in foreign bank accounts on form TDF 90-22.1, "Report of Foreign Bank and Financial Accounts" ("FBARs"). In September 2015, the Company filed the delinquent income tax returns and has sought waivers of any penalties under the IRS Offshore Voluntary Disclosure Program for late filing of the returns and FBARs. Under the program, the IRS has indicated that it will not impose a penalty for the failure to file delinquent income tax returns if there are no under reported tax liabilities. On November 30, 2017, the Company received a letter from the IRS concluding their review of the Company's tax returns under the program and accepting the returns as filed. No penalties have been assessed by the IRS to date, and management does not believe that the Company will incur any penalties relating to the tax years submitted under the program.

## Note 10. Income Taxes

As a Nevada corporation, the Company is liable for taxes in the United States. As of December 31, 2019, the Company did not have any income for tax purposes and therefore, no tax liability or expense has been recorded in these financial statements (December 31, 2018 – none).

A reconciliation of income taxes at statutory rates with the reported taxes is as follows:

| | 2019 | 2018 |
|---|---|---|
| Net loss for the year | $ (4,197,897) | $ (1,216,343) |
| | | |
| Expected income tax recovery | $ (882,000) | $ (255,000) |
| Non-deductible expenses | 713,000 | 136,000 |
| Impact of change of future tax rate | — | 3,632,000 |
| Adjustment to prior years provision versus statutory tax returns | 69,000 | (13,000) |
| Change in valuation allowance | 100,000 | (3,500,000) |
| Total income tax expense (recovery) | $ — | $ — |
| **The Company's deferred tax assets that have not been recognized are as follows:** | | |
| Tax benefit of net operating loss carry forward | 6,100,000 | 6,000,000 |
| Valuation allowance | (6,100,000) | (6,000,000) |
| | $ — | $ — |

The Company has tax losses of approximately $29,000,000 (December 31, 2018 - $28,360,000) to reduce future taxable income. The tax losses expire in years starting from 2028.

The deferred tax asset associated with the tax loss carry forward is approximately $6,100,000 (December 31, 2018 - $6,000,000). The Company has provided a full valuation allowance against the deferred tax asset since it is more likely than not that the asset will not be realized. The difference between the Company's statutory income tax rate of (21%) and its effective rate of zero is primarily attributable to the valuation allowance provided on deferred taxes arising from net operating loss carry forwards.

## Note 11. Subsequent Event

Entered into a Clinical Supply Agreement (the "CSA") on January 14, 2020 with Alberta Health Services and the Governors of the University of Alberta (the "Institution") and Dr. James Shapiro. The agreement requires Protokinetix to supply PKX-001 free of charge and in sufficient quantity to conduct the clinical study by Dr. James Shapiro. The delivery date is estimated to be late February 2020.

EXHIBIT 31.1

**CERTIFICATION OF THE PRINCIPAL EXECUTIVE OFFICER**

**PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Clarence E. Smith, certify that:

1. I have reviewed this Annual Report on Form 10-K of ProtoKinetix, Incorporated for the year ended December 31, 2019;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 18, 2020

/s/ Clarence E. Smith

Name: Clarence E. Smith
Title: Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

**CERTIFICATION OF THE PRINCIPAL FINANCIAL OFFICER**

**PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Michael R. Guzzetta, certify that:

1. I have reviewed this Annual Report on Form 10-K of ProtoKinetix, Incorporated for the year ended December 31, 2019;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 18, 2020

/s/ Michael R. Guzzetta

Name: Michael R. Guzzetta
Title: Principal Financial Officer & Principal Accounting Officer

EXHIBIT 32.1

**CERTIFICATION PURSUANT TO**
**18 U.S.C. §1350,**
**AS ADOPTED PURSUANT TO**
**SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of ProtoKinetix, Incorporated, (the "Company") on Form 10-K for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Clarence E. Smith, Chief Executive Officer and Principal Executive Officer of the Company and Michael R. Guzzetta, Principal Financial Officer and Principal Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of the undersigned's knowledge and belief:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

February 18, 2020

/s/ Clarence E. Smith

Name: Clarence E. Smith
Title: Chairman of the Board and
Chief Executive Officer
(Principal Executive Officer)

February 18, 2020

/s/ Michael R. Guzzetta

Name: Michael R. Guzzetta
Title: Principal Financial Officer & Principal Accounting Officer

This certification accompanies this Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.