Whitepaper

Luven
diagnostic

Don’t miss your chance to join our LUCRATIVE PROJECT in promoting a unique cancer diagnostic technology designed to **save millions of lives**.

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This document is not a securities offering or polled investment plan. Also, it doesn't require registration or approval by the Monetary Authority of Singapore or any other country. Participants are recommended to scrutinize this document and make prudent investments.

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Contents

** The current version of the White Paper is not final and may be amended. The final provisions will be presented several days before the ICO.*

1 History of the Method

The LUVEN project is a unique cancer diagnostic technology able to save millions of lives.

Let’s do it together!

Regardless of the rapid development of modern medicine and biology cancer takes annually millions of human lives. One cancer patient, worldwide, dies from this disease every 30 seconds. Everyone in this world has friends or relatives who have died from or have been diagnosed with cancer.

Malignant tumors relate to the most pressing issues of modern medicine. They take 2nd place to heart diseases by frequency and occurrence in the general structure of morbidity, disability and mortality. According to the WHO, around 10 mln people worldwide are annually diagnosed with cancer.

The key to successful cancer treatment is early diagnosis.

If detected at the early stage, when there are no visible symptoms, cancer can be cured without any complex aggressive therapies.

The limited ability to accurately localize cancer in the human body is also a significant problem. The main task is not only to detect a disease, but also to specify the affected organ.

As of today, we have developed a unique unrivaled diagnostic method with substantial advantages over existing practices.

1.1 Our Mission

Our mission is to save 1,000,000 people annually as a result of early detection of cancer...

Millions of people can save their lives if they get early diagnosis of possible health problems.

Most malignant tumors detected early can be successfully cured!

According to the World Health Organization:

- Each year 8,000,000 people die from cancer;
- Every day 27,000 patients are diagnosed with cancer and this number is constantly growing

- Due to late diagnosis more than half of cancer patients die, because manifestations of the disease appear in advanced stages;
- In the last 10 year the number of oncology patients has increased by around 25%;

The average 5-year survival rate of cancer patients after treatment:

· Treatment in stage 1 cancer – around 93% of patients survive;
· Treatment in stage 2 cancer – around 75% of patients survive;
· Treatment in stage 3 cancer – around 55% of patients survive;
· Treatment in stage 4 cancer – around 13% of patients survive;

The Luven technology allows to detect the disease in its early stages, thus, preventing its progression in thousands of patients.

Consequently, this diagnostic method will be particularly useful to healthy people and families for preventive checkups several times a year.

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1.2 Scientific foundation

Any process in the body reflects in the cell, a structural unit of the body. Buccal cells (cells from the inside of the cheek) are the fastest to respond to any changes.

We have established some regularities in the changes in electrical activity of buccal cells and their cytomorphological parameters in case of any changes in the life processes.

By examining various parameters of cells and their combinations, our system called The Luven Diagnostic allows, with a high degree of accuracy, to detect oncological diseases, localization of a diseased organ, tendency of progression of the disease and comorbidities.

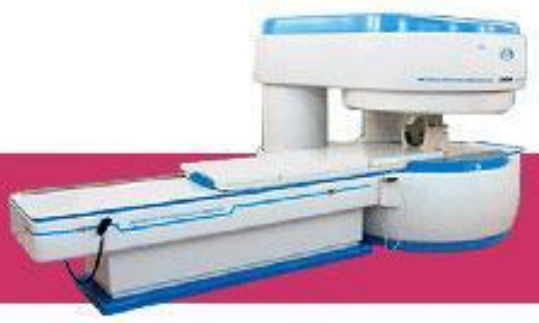
A large number of studies, conducted in cancer centers, showed that The Luven methods' accuracy is up to 96% for some types of cancer, which is a very high rate comparable to biopsy.

2.1 Existing diagnostic methods and their disadvantages

As of today, there is a big number of cancer diagnostic methods which can be divided into visual and laboratory analytical methods.

Among visual methods the following are mostly used:
-X-Ray;
- magnetic resonance
- radionuclide
- ultrasound
Visual methods allow an in-depth study of the tumor structure, angioarchitecture state and other parameters, but it cannot accurately establish cancer diagnosis and can be used only as an additional tool for diagnosing a tumor.

Among laboratory analytical methods utilized for cancer diagnosis one should highlight:
- radioimmunoassay (RIA);
- blood test (clinical, biochemical, for tumor markers);
- biopsy;
- histology.



As of today, biopsy and histology are the main methods with the highest diagnostic accuracy used to verify neoplastic processes. However, these methods have essential disadvantages, such as invasiveness (skin penetration), possible contamination of the tested tumor or adjacent organs, possible injury and dependence of the swab quality on the lab assistant's skills.

Radioimmunoassay is based on the principle that any type of malignant tumors results in formation of a nonspecific set of tumor markers. Low immunogenicity of proteins in the set causes their accumulation in blood at early stages of the disease. The number of nonspecific oncogenes in blood can be measured by the order of values of the relevant number of specific oncogenes. At the early stages of the disease the oncogene concentration is so low that it cannot be detected by visual methods. The set of oncogenes interacts with normal blood serum micro-molecules thus causing their specific changes. Besides, the carcinoembryonal antigen is detected in the blood serum of only 80% of cancer patients which doesn't allow to diagnose the disease in every fifth person. An increased level of the embryonal antigen in gastric, pancreatic, rectal, colon, liver, breast or lung cancer is mostly used as a diagnostic criterion only in case of disease recurrence.

2.2 Advantages over other methods

We offer a cytomorphobiophysical tumor diagnosis which also relates to laboratory analytical examination methods and allows to diagnose a tumor by healthy, non-affected pools of buccal cells and to trace a connection between diseased organs and cytomorphobiophysical parameters of these cells, non-invasively, without possible contamination or injury.

Advantages of this diagnostic method over other existing methods

- High diagnostic accuracy at a low cost;
- One examination replaces several types of diagnostic tests;
- No pain, discomfort or side effects;
- Possibility to check several organs with one test;
- Early disease diagnosis when there are no visible signs of a disease;
- Quick test results (within 15 minutes);
- Portability (space-saving equipment can be carried around and used in areas with no hospitals or laboratories);
- Periodic checkups to avoid non-effective drug therapies;

- Diagnosis allows to detect cancer in its early stages, to ascertain a diseased organ and stage of disease, to carry out metastatic evaluation, to differentiate between benign and malignant tumors. This diagnostic method is particularly valuable as it allows to select the most suitable type of treatment, since there are no restrictions to the frequency of testing and no counter-indications. After a course of chemotherapy, this method allows to estimate effectiveness of the treatment given;

- Luven recognizes metastatic lesions when other diagnostic methods are helpless;
Unlike other diagnostic methods, it differentiates between chronic inflammatory conditions and cancer. Other diagnostic techniques, including paracentesis with a negative result, are not 100% reliable.

2.3 Diagnostic procedure

1. A patient fills out a patient card in the computer program;

2. A buccal swab is carefully collected with a mouth spatula and placed under the microscope;

3. The program records a video from the microscope and transfers it to the processing center;

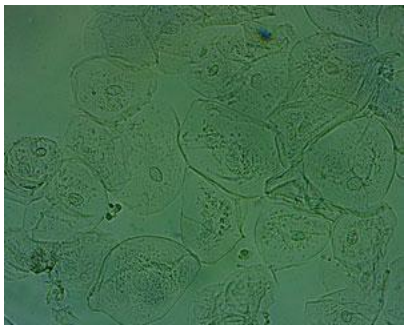
4. Within several minutes the program receives a printable report;

2.4 Report contents

Based on data processing results the report shows:

- Cancer lesions in the body, if any;
- Predisposition or liability to cancer;
- Comorbidities according to the international classification of diseases (MKB-10 and TNM);

2.5 Diagnostic accuracy



Clinical trials showed up to 96% accuracy in cancer detection.
It is significantly higher than in other existing methods.

However, it should be borne it mind that our technique doesn’t supersede all other tests. If needed, one can have either a follow-up test or additional examination with other methods or markers.

Localization accuracy (detection of a diseased organ) ranges from 67 to 89%.

Exception for our diagnostic method is, as of today, blood cancer (leukemia) and skin cancer (melanoma, basalioma) detection where accuracy reaches 50-60%. Scientific studies in this area are currently underway. ICO will help us to significantly increase diagnostic accuracy in detection of these diseases, as well as to reach at least 96% localization accuracy.

2.6 Uses of the diagnostic complex

To run diagnostics only a computer and a microscope are needed which makes the system easy to use in doctor's surgeries, labs, clinics, health centers, health and recreation resorts, early treatment centers, in a house-call practice etc.

2.7 Why and who needs to get diagnosed

1. Patients who have a disease for checking treatment effectiveness;
2. Physicians for making accurate diagnosis;
3. People who prefer preventive diagnostic care
As a rule, a complete diagnostic procedure for all of the organs and systems is quite complicated, expensive and time-consuming.
4. Insurance company for a rapid comprehensive checkup before insuring.

Luven runs diagnostics within just several minutes, with the cost several times less than charged in conventional methods.

2.8 Our history and our team

The development of this method **started in early 1983** at the research institute, chair for genetics. Based on the cellular theory by Rudolf Vichow, a team of scientists was working on a diagnostic method and studying buccal cells. **It took 28 years** to collect a so-called “deviation album” which established a relationship between cell parameters and body conditions.

Ms. Galina Shchukina, a genetic scientist and cytologist, was at the head of the scientific research.

She conducted an in-depth study of scientific papers describing a new biophysical concept of the gene activity regulation based on the role of relationship between homologous chromosomes and genome.

Ms. Galina then requested her husband Mr. Alexander Shchukin to search for a technique allowing to accurately count a number of positively and negatively charged nuclei.

Since then Mr. Alexander, a nuclear physicist who studied at the chair for experimental nuclear physics, became a part of the team and buckled down to that difficult task.

During eight years the lab scientists were trying to find an accurate method to count charged nuclei and get a precise number.

As a result of thousands of experiments, they invented an ion trap sending impulses on cells and, thus, allowing to differentiate between positively and negatively charged cell nuclei.

In this manner, 8 years later, it became possible to calculate the percentage of negative charged nuclei (bioelectrical charge) and to easily estimate an actual physiological age of any organism.

It was the first milestone in the development of LUVEN a unique diagnostic and treatment system.

The Shchukiny family took the lead of the team of scientists continuing further studies and research of this concept. All of this culminated in 2004 when they developed a new diagnostic method the main idea of which is that any changes in the body manifest at the cellular level, including buccal cells.

It has been more than 30 years now since they started comparing changes in healthy and diseased cells and studying interrelation between them. So far, this method has collected samples for examination from more than twenty thousand patients.

From 2007 until the present day, a new cancer diagnostic method has been formalized and automated by the scientists in cooperation with Mr. Nikolay Shchukin, Ms. Galina and Mr. Alexander's son and postgraduate student of chair for biochemical engineering.

In 2010 the team embraced IT specialists and mathematicians who put all the knowledge and formulae into the software of Luven Diagnostic system. They set up a commercial enterprise promoting the new technology.

In 2014 they launched Luven Diagnostic franchise which boosted development in many countries (more than 23 newly opened diagnostic rooms diagnosed more than two thousand patients), but soon afterwards our team faced a large number of problems that couldn't be solved without big financial investment:

1. The software, at that time, transmitted images from the microscope to our processing center where a team of cytologists would specify parameters for the received material, after which the computer would process the data and give a result. We were putting great efforts into teaching cytologists how to correctly record image parameters which closed the door to our prospective growth. Also, our lab assistants couldn't work 24/7 which caused long delays in text interpretations, just as the number of those tests was constantly increasing;

2. We couldn’t sell our diagnostic system to other countries, since the method required certification and clinical trials which, in turn, requires big money.

Finally, we decided to take a pause and improve the software by adding computer-assisted learning (automatic corrections of coefficients in formulae for the database of clinically confirmed patient diagnoses) that will allow us to constantly improve diagnostic accuracy, run clinical tests and re-start our project in many countries at the same time.

CEO

Alexander Danilchenko

Postgraduate Student of Chair for Biomedical Engineering

Nikolay Shchukin

Nuclear Physician

Aleksander Shchukin

Geneticist & Cytologist

Galina Shchukina

CTO

Grigoriy Evglevskiy

Lead Software Engineer

Alexander Kamensky

PR Manager

Yana Ivchenko

SMO/SMM Manager

Lina Lisitsa

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3.0 Why we need funds

We need money for:

- further studies, since the technology allows to not only diagnose cancer, but also detect other diseases;
- debugging software for computer-assisted learning, automatic recognition of images transmitted from lab microscopes, generation of the database of patients and their test results for trending and informing patients on the necessity of being diagnosed;
- other business-related operations;
- marketing and advertising;
- opening a center in Austria to study the method;
- legal services;
- opening new labs worldwide;
- developing a diagnostic device specially for family use;

3.1 Investment prospects

Unlike the majority of projects involving crowdfunding, our company has already completed 90% of the project We have already conducted studies, developed the entire procedure and received several patents for the procedure. Also, we have the all necessary equipment and software which can produce income and treat people even today. Your investment is not only a cure for a huge number of people, but also your tool for making money from the capitalization growth and test sale.

Token holders have two opportunities:

· receiving a part of the company income;

· exchanging their tokens for testing services with a 30% discount, using or selling them to wholesale customers (such as clinics, insurance companies, physicians in private practice etc.)

** Investors from the countries where tokens equal securities (such as USA or China) will not be able to share the company income, however, they will have a possibility to exchange their tokens for tests with a 80% discount, use them or sell them to wholesale customers. It means that the company will exchange tokens for tests 5 times cheaper than the market price.*

3.2 Allotment of tokens

The initial release of tokens will be regulated by a smart contract, on the Ethereum blockchain.
The smart contract address for Luven token distribution will be posted before the token sale.

Our sales target:

preICO – 3,000,000 tokens
(1st day bonus – 30%, 1st week bonus – 25%, 2nd week bonus – 20%, 3d week bonus – 15%)

ICO – 27, 000,000 tokens
(1st week – 10%, 1 to 1 onwards)

9,000,000 tokens will be kept by the founders and developers of Luven Diagnostic.

Token standard is ERC20.
Rate: 1 Ethereum = 290 tokens.
Participation in ICO is possible both with Ethereum and Bitcoin.

Luven tokens are free to exchange among all of the holders using Ethereum addresses. Tokens can also be sent to trading platform accounts and back once the token is added on the trading platform.

3.3 Getting tokens

To get tokens, please use the token allotment interface on https://ico.luvenmed.io/

There are 2 steps for getting tokens:

1. Send at least 0.1 ETH to the smart contract address. You can do it via the token allotment interface or by direct transfer. Thus, you start participating in the current token sale period.

2. Once ETH arrives to the smart contract, tokens will be automatically credited to the transaction address.

3.4 Terms and timing

pre-ICO
Start: **15/11/2017 12pm GMT**
Completion: **06/12/2017 12pm GMT**

ICO
Start: **15/01/2017 12pm GMT**
Completion: **28/02/2018 12pm GMT**

If pre-ICO sells out all tokens, ICO will start earlier.

3.5 Road map

Year / month	Dates and prospects
1983	Development of the cancer diagnostic method started, based on the study of buccal cells (cells from the inside of the cheek)
2004	A cytomorphobiologial diagnostic method appeared which formed the basis of the diagnostic complex
2010	Team expansion. A commercial enterprise promoting the LUVEN trademark was established. The software automating a part of the diagnostic procedure was created.
2014	The diagnostic method was patented, completion of the clinical trials, creation of the software diagnostic complex presented at two international medical exhibitions “The 5th International Medical Forum” and “Health Care 2014”. Opening first franchise outlets.
2015	In five months after launching a franchise, the contracts were signed with more than twenty outlets, half of which have already run tests on more than two thousand patients. Suspension of activities for a time allowing technology enhancement.

Year / month	Dates and prospects
2016-2017	Software enhancement, additional clinical trials. Optimizing a big number of the system algorithms
September - November 2017	Preparing and starting a preICO aimed at fundraising for the software enhancement, legal costs and operational expenses of the project
January 2018	Starting an ICO.
2018	Further software enhancement, signing contracts with clinics worldwide for conducting clinical trials, opening a research center in Austria. Initiating certification of the method in the European Union and Eurasian Union
2019	Opening 20 new labs in the European Union and Eurasian Union, incorporating a blockchain and developing a domestic exchange for token sale, working on the optical recognition of incoming images of the cell, creating a database of patients and their test results for monitoring tendencies and informing patients on the necessity of being diagnosed
2020	Starting clinical trials and certification in the USA and Asia
2021	Developing home gadgets (a home lab) for running tests on the entire family at any time, launching the product.

3.6 Projected business model

The company will start selling sets of necessary equipment to labs, hospitals and physicians in private practice.

Tests will be read on the company servers, each test will be paid for. The diagnosis price will vary from country to country. The lowest price will be based on the current GDP per capita. The company services will cost 50% of the retail price. In this manner, we will ensure a balance between affordability of the diagnosis for the population and Company income.

We are planning to re-invest 50% of the company income back into the business and technology development and allocate another 50% to the token holders.

3.7 Price list for a test reading by country

Country	Price for clinic	Price for patient
Australia	175	350
Austria	125	250
Azerbaijan	25	50
Albania	10	20
Algeria	10	20
Angola	10	20
andorra	125	250
Antigua and Barbuda	25	50
Argentina	25	50
Armenia	10	20
Afghanistan	5	10
Bahamas	50	100
Bangladesh	5	10
Barbados	25	50
Bahrain	50	100
Belize	10	20
Byelorussia	10	20
Belgium	100	200
Benin	5	10
Bermudas	225	450
Bulgaria	25	50
Bolivia	5	10
Bosnia and Herzegovina	10	20
Botswana	25	50
Brazil	25	50
Brunei	100	200
Burkina Faso	5	10
Burundi	5	10
Butane	5	10
Vanuatu	10	20
United Kingdom	100	200
Hungary	25	50
Venezuela	25	50
East Timor	5	10
Vietnam	5	10
Gabon	25	50
Haiti	5	10
Guyana	10	20
Gambia	5	10
Ghana	5	10
Guatemala	10	20
Guinea	5	10
Guinea-Bissau	5	10
Germany	100	200

Honduras	5	10
Hong Kong	100	200
Grenada	25	50
Greece	50	100
Georgia	10	20
Denmark	150	300
Democratic Republic of the Congo	5	10
Djibouti	5	10
Dominica	10	20
Dominican Republic	10	20
Egypt	25	50
Zambia	5	10
Zimbabwe	5	10
Israel	75	150
India	5	10
Indonesia	10	20
Jordan	10	20
Iraq	10	20
Iran	10	20
Ireland	125	250
Iceland	100	200
Spain	75	150
Italy	100	200
Yemen	5	10
Cape Verde	10	20
Kazakhstan	25	50
Cambodia	5	10
Cameroon	5	10
Canada	150	300
Kenya	5	10
Cyprus	75	150
Kyrgyzstan	5	10
Kiribati	5	10
China	10	20
Colombia	25	50
Comoros	5	10
Costa Rica	25	50
Côte d'Ivoire	5	10
Cuba	10	20
Kuwait	150	300
Laos	5	10
Latvia	25	50
Lesotho	5	10
Liberia	5	10
Lebanon	25	50
Libya	25	50

All list of countries here

3.8 Why Luven is appealing from a business perspective

A lucrative market
A pre-clinical cancer diagnosis market is growing rapidly due to fear of the dreaded disease.

Service demand
Health care and healthy lifestyle is one of the most popular trends among youngsters and elderly people which ensures success of Luven business.

Short payback period
Due to 100% gross margin of the service, our partners will recover their investments during the first two months.

Specialty of the service
Luven Diagnostic is a unique patented method for early cancer detection, localization of the disease and is fast and absolutely painless.

A broad spectrum of potential customers
Literally everyone in this world is a potential customer. Cancer is beyond any boundaries, age or status.
Subsequently, everyone can be a target audience.

3.9 Terms and conditions

This document is for informational purposes only, it does not constitute an offer or call to buy shares or securities.

The Luven tokens are not securities.

The user admits, understands and agrees that the Luven tokens are not securities, not registered at any public body as security and cannot be deemed as such. The user admits, understands and agrees that the ownership of the Luven tokens does not constitute the User's right to get profit, income or any other payments or income related to purchase, keeping, administration or disposal, exercise, acquisition or expiration of any right, interest, ownership or privilege in Luven Diagnostic, or any other property of the Company, whether fully or partially.

No guarantee income or profit

There is no guarantee that the token will go up in price or generate profit. If it happens, there is no guarantee that due to any unforeseen circumstances or events beyond the reasonable control of the developers or due to force majeure circumstances, the rate will not drop significantly.

Ethereum-related risks

The Luven tokens are released on the Ethereum blockchain. Due to this, any fault or malfunction of the Ethereum protocol may cause unpredictable consequences for the token trading network.

Regulatory uncertainty
Blockchain-based technologies are subject to surveillance and control by regulatory authorities worldwide. The Luven tokens may also be subject to their regulations, including restrictions to use or have digital tokens which can subsequently delay or limit functionality or purchase of tokens.

The Luven token is not an investment
The Luven token is not an official or legally binding investment of any kind. Due to unforeseen circumstances, the objectives set forth herein may be changed. Notwithstanding that we intend to fulfill all of the provisions hereof, all the persons and parties participating in purchase of tokens act at their sole risk.

Quantum computers
Technological innovations such as quantum computers may be dangerous for cryptocurrencies, including the Luven tokens.

Risk of losing money
Fundraising is not secured by any means. If money is lost or devaluated, there is no private or public insurance agent to fall back on.

Refund
If the campaign fails or gets discontinued by the author or moderator, the money will be refunded to wallets of the users who have made money transfers to the company's smart wallet. If the user has made payment in a fiat currency (such as USD, EUR, RUB or other), the money will be refunded to their ETH wallet.

Risks of using innovative technologies
The Luven tokens is a new and relatively unproven technology. Additionally to the risks mentioned above, there are some additional risks which cannot be predicted by the developers. Such risks may be of a type other than those mentioned herein.

Integration
This Agreement represents the entire agreement of the parties as to the subject matter hereof. All of the previous agreements, negotiations, presentations, warranties and conditions are incorporated in this document. There are no warranties, representations, conditions or agreements, whether express or implied, between the parties, other than as expressly set forth in this Agreement. This Agreement can be amended only by a written document properly executed by the parties.

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LUVEN is a unique cancer diagnostic technology designed to save millions of lives

Let's do it together!

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Even a small investment on your part will help us to launch a technology capable of changing the cancer statistics worldwide and possibly saving the life of your loved ones.