AND PREVENTS BLINDNESS OF HUNDREDS THOUSANDS PEOPLE WORLDWIDE

Makes early glaucoma diagnostics performed by Primary Care Physicians
PRESENTATION CONTENT

- Global Problem: Glaucoma
- Intraocular Pressure (IOP)
- Diaton Tonometer Now
- Tonometry Market Overview
- Diaton Business Roadmap
- Digital Trends in Eye Care
WHAT IS GLAUCOMA

- Often called «the silent thief of sight», glaucoma is an increase in the intraocular pressure of the eyes, which causes damage the optic nerve with no signs or symptoms in the early stages of the disease. If left untreated, glaucoma can lead to a decrease in peripheral vision and eventually blindness.

- Early detection and regular eye exams are vital to slowing the progress of the disease.

GLAUCOMA STATISTICS

GLAUCOMA’s GLOBAL IMPACT ON VISION LOSS & BLINDNESS

- People blind due to glaucoma: an estimated 4.5 MILLION globally
- Percent of all global blindness caused by glaucoma: slightly more than 12%
- 2nd most common cause of blindness worldwide
- Percent of affected that are not even aware of having glaucoma: up to 50% in developed countries, may rise to 90% in underdeveloped parts of the world

Screening for glaucoma requires optic nerve examination, visual field analysis, measurement of IOP and other procedures.

Normally, IOP should be below 21 mmHg (millimeters of mercury).

If your IOP is higher than 30 mmHg, your risk of vision loss from glaucoma is 40 times greater than someone with intraocular pressure of 15 mmHg or lower.

According to the American Academy of Ophthalmology
The most common type of glaucoma – called primary open-angle glaucoma:

Now 2,2 million people

2020 3,3 million people

as the U.S. population ages

REGULAR MEASUREMENT OF IOP*
HELPS TO AVOID BLINDNESS

* IOP = Intra-Ocular Pressure
WHY GLAUCOMA NOT DIAGNOSED

1. **100 mln. people in groups of risk**

2. **Need regular eye exam**
   - People feel no symptoms therefore they don’t go to eye doctors

3. **Only in Eye Care Centers**
   - Traditional methods of glaucoma diagnostics are available only with special equipment in eye care clinics

4. **50% don’t know of their disease**
   - Too many potential patients.
   - Too less eye care specialists

5. **BLINDNESS**

GROUPS OF RISK

- 49 M People Over 60
- 42 M African Americans
- 5,6 M Hispanics in Older Age
- 18 M Asians
- 12 M Family Members with Glaucoma
- 1 M Steroid Users
- 34 M High myopia
- 75 M Hypertension
- 29 M Diabet

GLAUCOMA AFFECTS
2.7 MILLION PEOPLE IN U.S.

Sources: U.S. Census Bureau, Centers for Disease Control and Prevention, National Eye Institute, StatisticBrain.com, American Diabetes Association
GLAUCOMA SCREENING FUNNEL – AS IS

THE PROBLEM

• All IOP tonometers on the market designed for professional use by eye-care doctors.
• There are too few eye-care doctors to make regular eye exam of all patients in group of risk for glaucoma.

THE SOLUTION

• Diaton tonometer measuring IOP through eyelid. Non-invasive, no risk for patient.
• Every doctor and nurse can perform glaucoma screening with Diaton.

GLAUCOMA SCREENING FUNNEL – TO BE

In a survey conducted in the USA by the National Eye Institute (NEI) almost all adults (96 %) responded that they would go for an eye checkup if their PCP recommended it

* - not counting pediatric doctors
IDEAL TONOMETER

- Gives accurate and reasonable IOP value
- Serial tonometry for obtaining Diurinal curve
- Convenient to use both for patients and doctors
- Short time for measuring procedure
- No pain – no anesthesia required
- No contact with cornea – no risk of infection
- Consumables not required
- Simple to calibrate or no calibration required
- Compatible with historic data
- Little or no special training for use

WHAT IS DIATON?

The Diaton non-corneal tonometer calculates pressure by measuring the response of a free-falling rod, as it rebounds against the tarsal plate of the eyelid through the sclera. The patient is positioned so that the tip of the device and lid are overlying sclera.

BENEFITS OF DIATON TONOMETER

- No contact with the cornea (only upper eyelid)
- No risk of infecting or scratching cornea
- No anesthesia drops
- No consumables
- No sterilization
- No pachymetry needed
- No daily calibration needed
- Handheld / Portable + Easy to use
PATENTS AND CERTIFICATION

Method for measuring the intraocular pressure through the eyelid and the device realizing this method are protected by the Patent of Russia № 2123798, United States Patent № US 6,394,954 B1 and Patent of Japan №3593314.

Approved by the FDA Class 2, 510k in 2006, the instrument has been the subject of numerous clinical trials, where it has been found to be comparable with the gold standard, the Goldmann tonometer, and with many other devices.

CE Mark 0535 for Europe.

DIATON USE CASES

- IOP control during clinical observation of glaucoma patients
- Mass screening of patients at clinical examination
- IOP measuring at home
- Serial tonometry for obtaining Diurnal curve
- IOP measuring of children

Patients with the following conditions: immobile, chronic conjunctivitis, corneal pathology including keratitis, keratotone, corneal dimness, after penetrating keratoplastics, keratoprosthesis, laser refractive correction, high degree of ametropia, astigmatism, medicinal allergies
Among handled devices Diaton looks like optimal choice because its safety for patients, usability for doctors, good accuracy and reasonable price. PCPs and patients can use it as well as eye care professionals.

From the other hand, for advanced clinical observation traditional Goldmann tonometers still are preferable by medical stuff. But clinics buy tonometers of different types.
OUR STRATEGY

DIATON «CLASSIC»
10+ years on the market
Progressive method
Clinically approved
Customer base
Established reputation

DIGITAL COMPETENCE
Blockchain
Mobile development
UI & UX portfolio
Business-driven approach

= NEW LEADER IN GLAUCOMA SCREENING

DIATON DIGITAL
### BUSINESS MODEL CANVAS

#### Value Proposition

Painless (no anesthesia), through eyelid (no risk of infection) and quick IOP measuring. Can be done by anybody after short training (no need to visit Eye Care Center)

Control IOP regularly

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<td>• Manufacturing site (Ryazan)</td>
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<td>• Pharma Companies</td>
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<td>• Glaucoma research organizations</td>
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<td>• Sending results to doctor via internet</td>
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<th>Customer Segment</th>
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<td>• Eye care specialists: optometrists ophthalmologists</td>
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<td>• Primary care physicians (PCPs)</td>
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<td>• Glaucoma patients and family</td>
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<td>• Hypertonics</td>
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<td>• Diabetics</td>
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<td>• Geriatric medicine</td>
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<td>• Direct sales</td>
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<td>• e-Commerce: eBay, AliExpress</td>
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<td>• Facebook</td>
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<td>Staff training</td>
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| Complimentary software (mobile apps) |
| Related product sales (physiotherapy) |
DIATON ROADMAP

Phase I
RE-MARKETING CURRENT DEVICE

Achieve better market penetration by:
- Partners development
- New regions entering
- Sales channels optimization
- Create user community

Goal: EXTENDED MARKET SHARE

Phase II
INTRODUCE NEW DIGITAL DEVICE

Device re-engineering:
- BlueTooth connection
- Mobile application
- More sensors
- Better UX
- Contemporary design
- Integration with MIS

Goal: BECAME AN «IDEAL TONOMETER»

Phase III
BUILD ECOSYSTEM

Patient-centric approach:
- IOP monitoring as service
- IOP + IoT – combined with other smart devices
- New devices and gadgets with new features

Goal: «MORE THEN TONOMETER»

DIATON TARGET AUDIENCE

- Diaton Tonometer is intended for use by Inpatient & Outpatient Clinics such as Hospitals, Emergency Rooms, Nursing & Elderly Homes, General & Specialty Practitioners as well as Ophthalmologists and Optometrists.
- Special model will be available for home use.
  (In R&D phase yet.)

DIATON CUSTOMERS

- Eye Care Doctors
- PCPs
- Patients
MARKET CAPACITY ESTIMATION – EYE CARE DOCTORS

Professional tonometer usage

- 64,000 users (ophthalmologists + optometrists)
- Buy new tonometer once in 3-5 years (suggestion)
- Annual demand for tonometers = 64 / 4 = 16,000
- Current Diaton sales – 300 devices/year = 1,87% of market.

The whole market cannot dramatically grow in numbers. But it’s possible to extend our market share.

TAM: Every eye care doctor needs portable tonometer
SAM: There is a demand for portable tonometers. With active marketing we can reach at least 50% of audience - because of competition (iCare, Tono-Pen)
Target Market: current customers buy new devices, new customers appear. Anyway, they but new device once in 3-5 years. 
Sales: 4,000/year

MARKET CAPACITY ESTIMATION – PCPs

1996 – «Routine measurement of intraocular pressure by primary care physicians to screen patients for glaucoma is not recommended».

2015 – «The participation of primary care physicians (PCPs) in glaucoma care may improve health outcomes for glaucoma patients».

Practicing PCPs (without Pediatric) can do IOP measurement with Diaton

TAM = 163,874 PCPs
SAM = 100,000 PCPs
Target = 25,000 PCPs

MARKET CAPACITY ESTIMATION – PATIENTS

TAM: There are 2.7 M people with glaucoma diagnosed.
SAM: Researches show high awareness about disease among glaucoma patients – up to 74%. We take more conservative estimation at 50%.
Target: Level of trust to doctor among patients is high also. There are no common practice of using IOP tonometer at home. Eye care doctors still believe in «gold standard» of Goldmann tonometry. Thus, we estimate our share as 2%.
MARKETS – ALL TOGETHER

Total number of potential Diaton tonometer customers estimated as

91,000
in U.S. only

Doctors will buy new tonometer once in 3-5 years. Then annual sales for these groups can achieve 10,000 devices/year. With price

$2,000
it gives market
20M/year

For patients we offer more cheap device for

$900
It gives market of
45M/year
Because, every year patients are new

91,000 Total number of potential Diaton tonometer customers estimated as

16K Eye Care Doctors

50K Patients

25K PCPs

$65M/year

91K CUSTOMERS

THESE VALUES ARE ACHIEVABLE ON HORIZON OF 5-6 YEARS
DIGITAL TRENDS IN EYE CARE: FUTURE R&D PLANS

Medical Devices Transformed

- Everything connected
- MEMS sensors
- Miniaturization
- Wearables

Medical Processes Transformed

- Continuous patient monitoring
- Big Data analytics
- Artificial Intelligence
- Telemedicine
Everybody refers Goldmann tonometer as «gold standard» as if it is something absolutely immutable.

But the last gold standard in monetary system established by Bretton Woods Agreement in 1944 was broken in 1971.

Goldmann tonometer is bulky mechanical device, contemporary to Bretton Woods. IOP measuring with GAT isn't patient friendly because of anesthesia required, risk of infection, etc.

Now it's time to establish new standard in tonometry of digital era: Diaton digital is comfortable for patients and convenient for doctors, secured and measured with high accuracy.