

diaton

DIGITAL



Makes early glaucoma diagnostics
performed by Primary Care Physicians

AND PREVENTS BLINDNESS
OF HUNDREDS THOUSANDS
PEOPLE WORLDWIDE

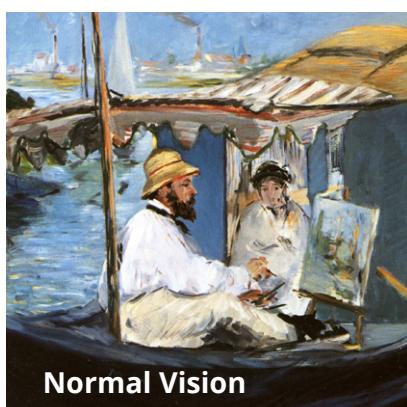
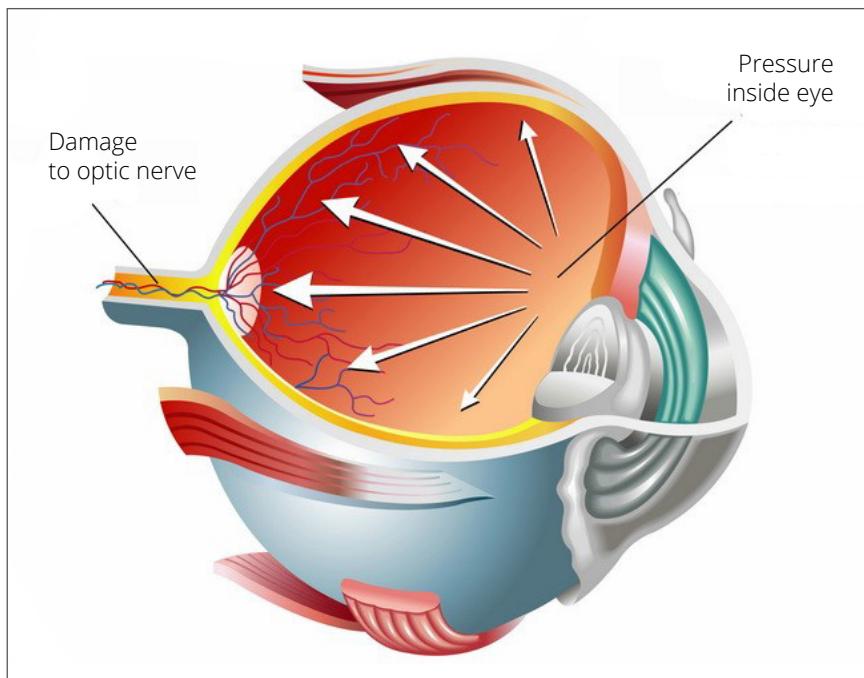
PRESENTATION CONTENT

- 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



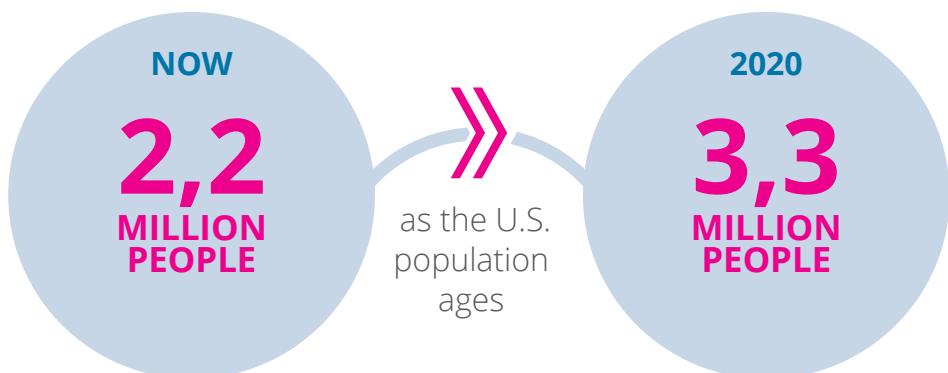
Source: World Health Organization & World Glaucoma Association, 2016

GLAUCOMA IN THE UNITED STATES



According to the American Academy of Ophthalmology

The most common type of glaucoma - called primary open-angle glaucoma:



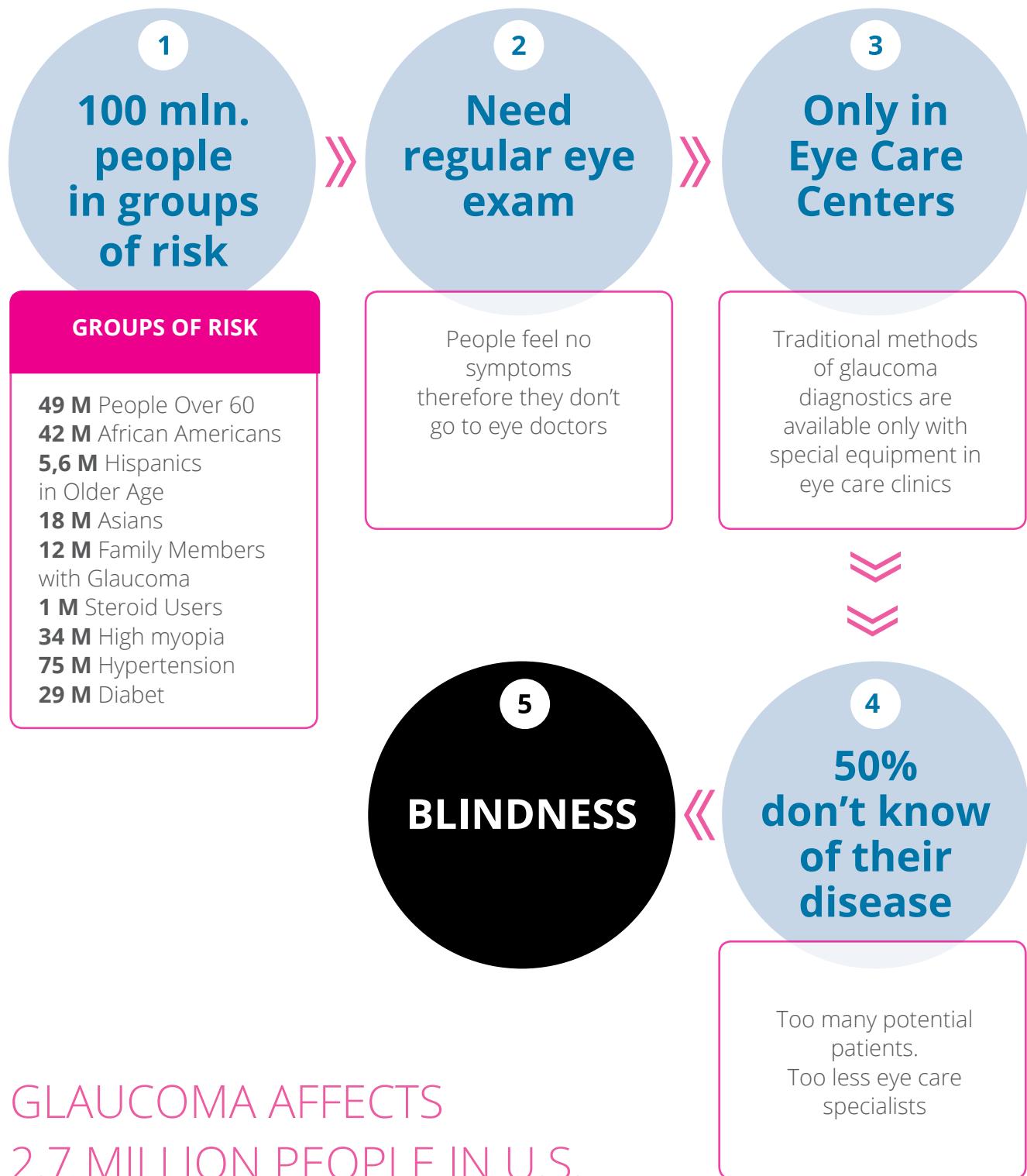
REGULAR MEASUREMENT OF IOP*
HELPS TO AVOID BLINDNESS



- 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.**

* IOP – Intra-Ocular Pressure

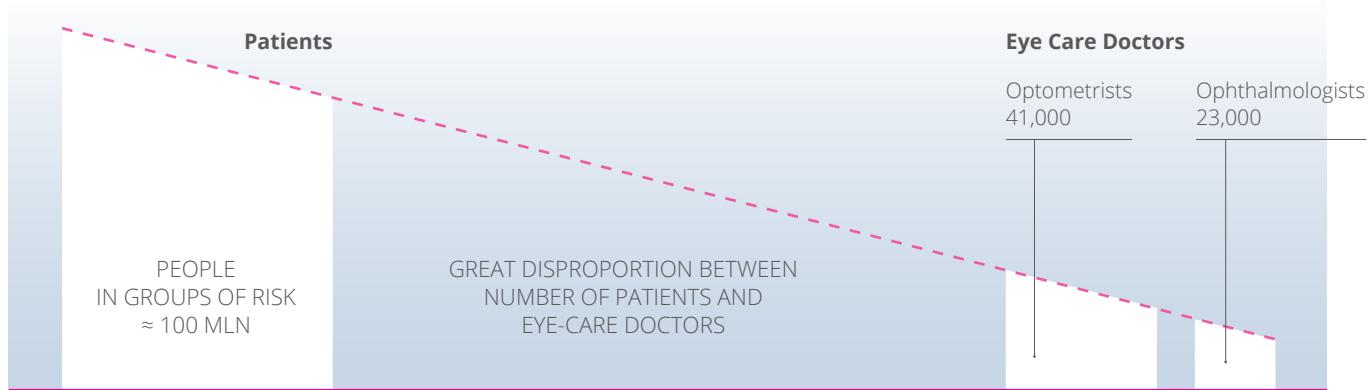
WHY GLAUCOMA NOT DIAGNOSED



**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



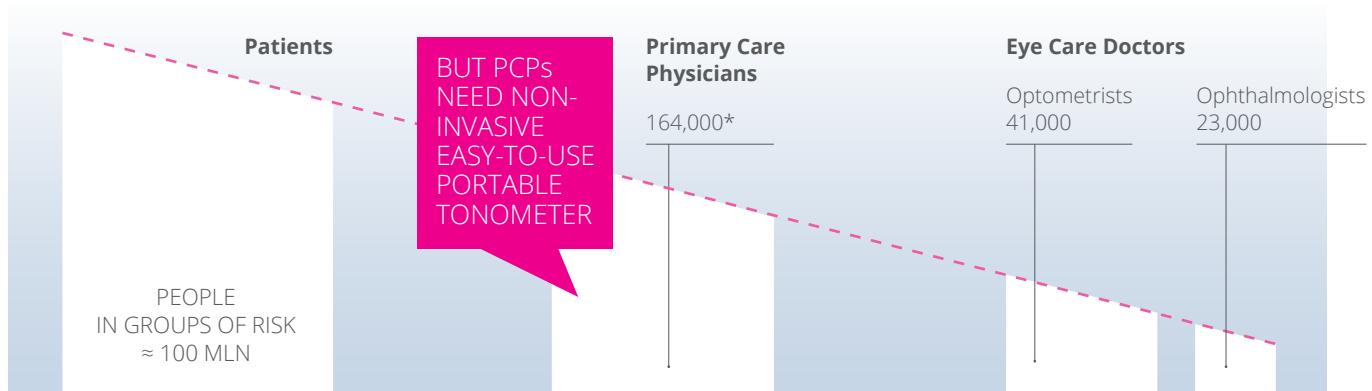
THE PROBLEM

- 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 Diurnal 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

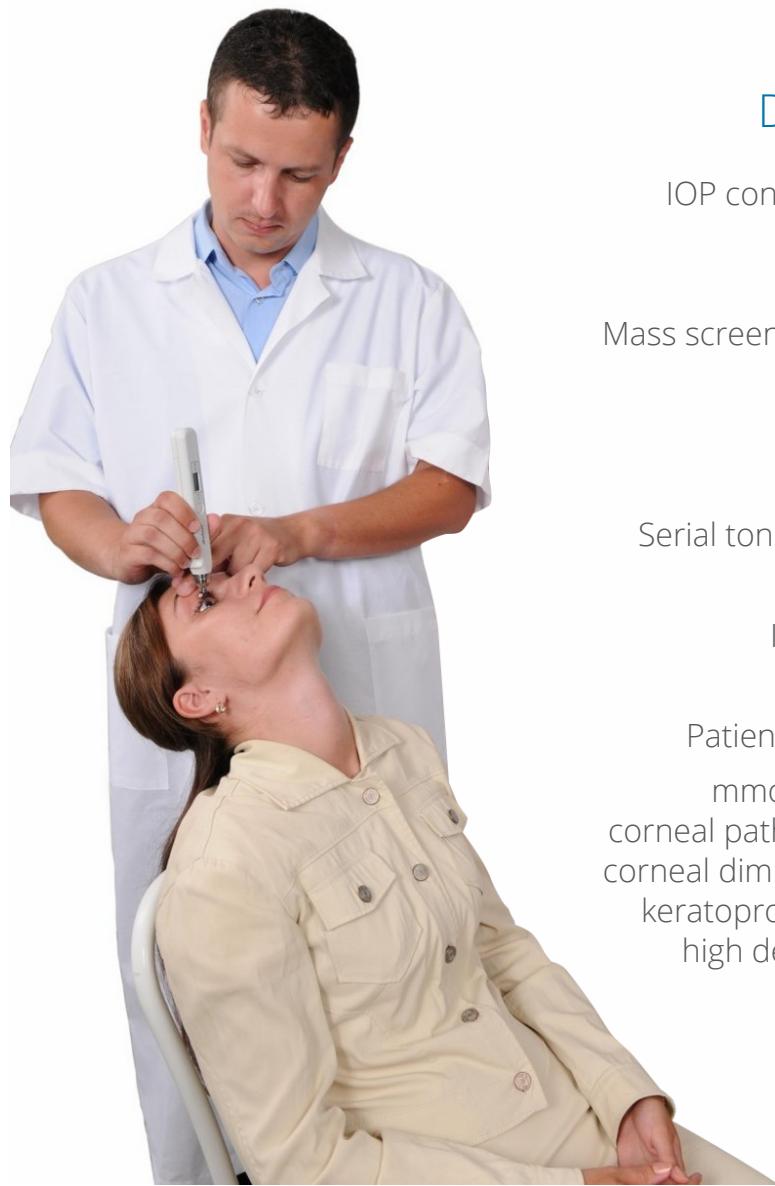
Method for measuring the intraocular pressure through the eyelid and the device realizing this method are protected by the Patent of Russia № 2123798, United States Patent № US 6,394,954 B1 and Patent of Japan №3593314.



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:

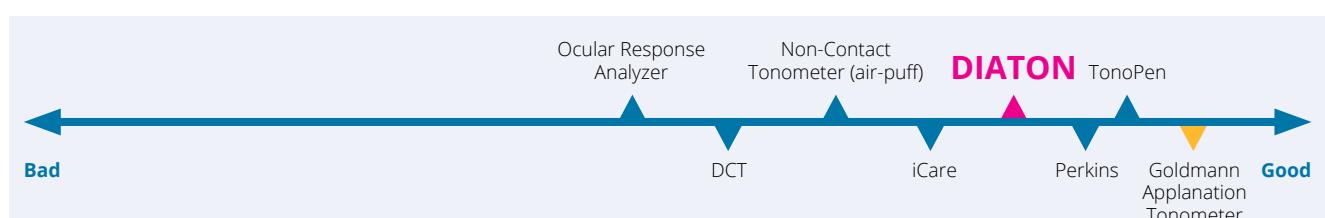
immobilized, chronic conjunctivitis, corneal pathology including keratitis, keratotone, corneal dimness, after penetrating keratoplastics, keratoprosthesis, laser refractive correction, high degree of ametropia, astigmatism, medicinal allergies

PATENTS AND CERTIFICATION



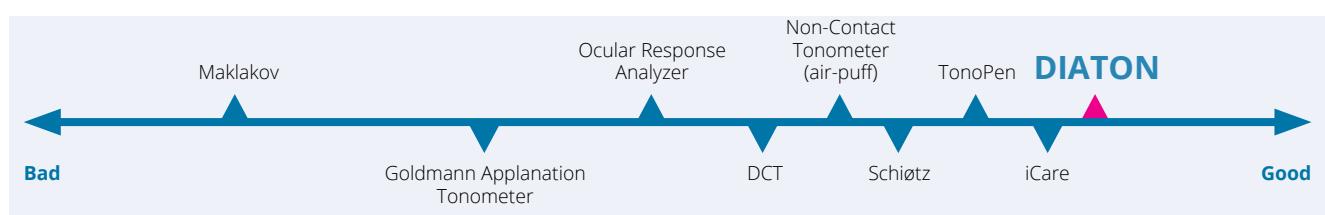
PATIENT SAFETY & COMFORT

DIATON'S no-pain, non-invasive through the eyelid method of measurement is the most safe and comfortable



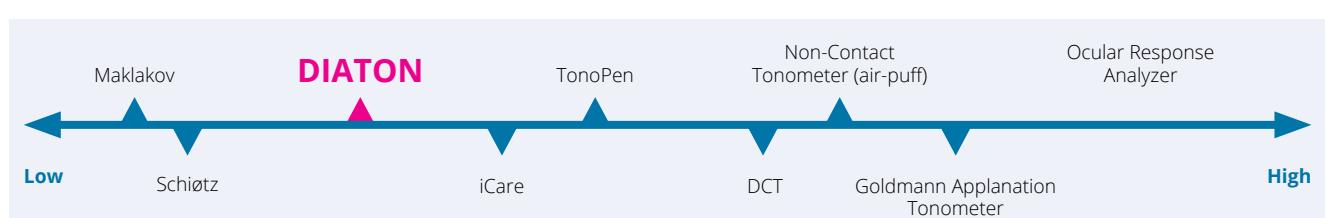
ACCURACY (relative to Goldmann)

According clinical comparisons, DIATON demonstrates good correlation with Goldmann applanation tonometry



USABILITY

According clinical comparisons, DIATON demonstrates good correlation with Goldmann applanation tonometry



PRICE & TCO

DIATON'S no-pain, non-invasive trough the eyelid method of measurement is the most safe and comfortable

CONCLUSION

- 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**



DIATON DIGITAL

**New leader
in glaucoma
screening**

BUSINESS MODEL CANVAS

Value Proposition



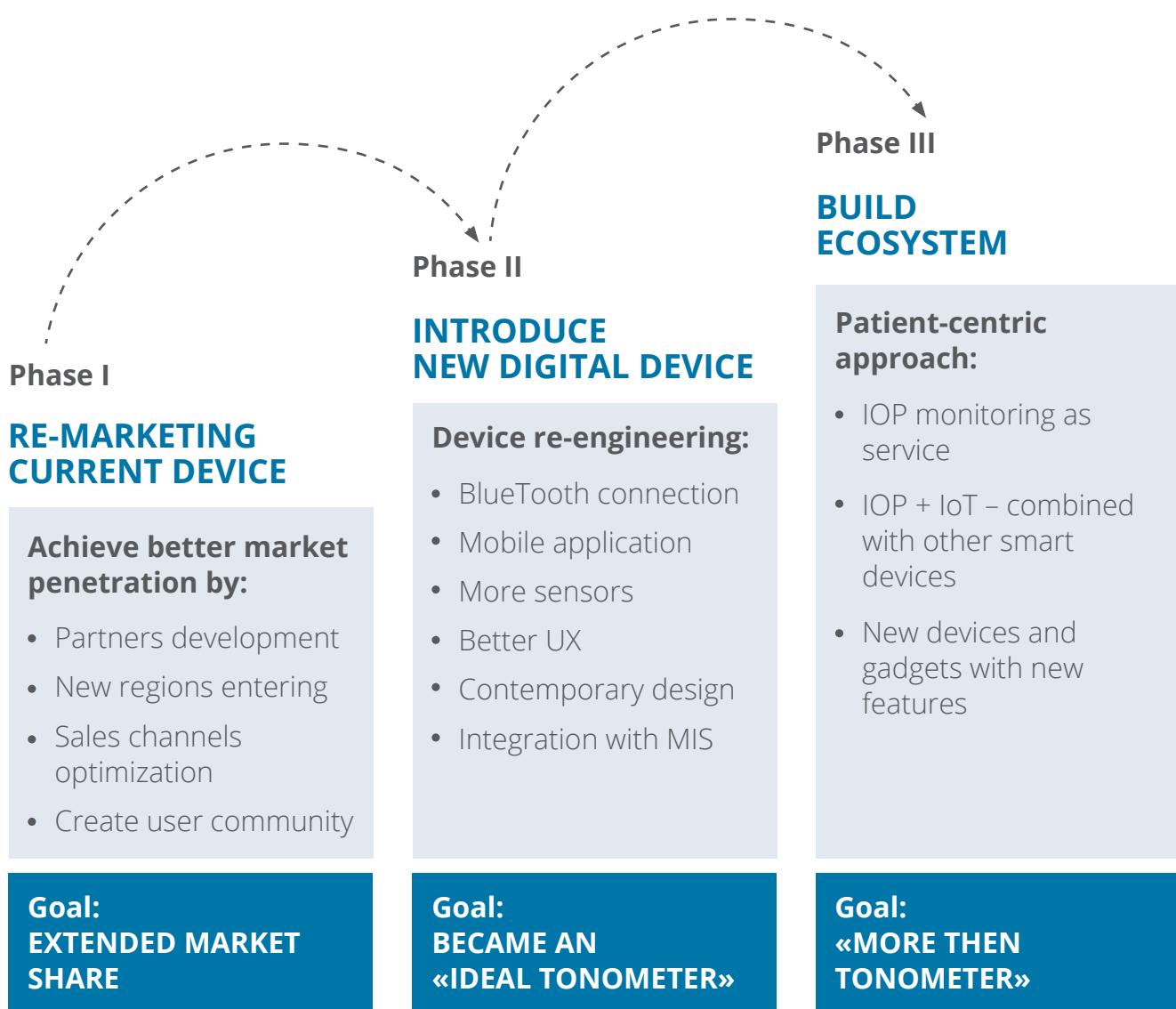
Painless (no anesthesia), through eyelid (no risk of infection) and quick IOP measuring.

Can be done by anybody after short training (no need to visit Eye Care Center)

Control IOP regularly

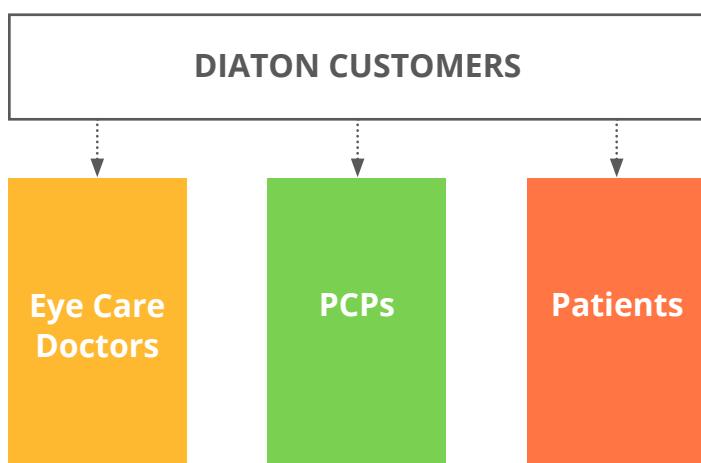
Key Partners	Key Activities	Customer Relationships	Customer Segment
<ul style="list-style-type: none"> • Manufacturing site(Ryazan) • Pharma Companies • Glaucoma research organizations • Eye care doctors communities • FDA experts • Glaucoma patients groups / communities • Optometrist Colleges 	<ul style="list-style-type: none"> • Product R&D • Clinical evaluation • FDA application • Social networks activities • Trade shows 	<ul style="list-style-type: none"> • Remote training and device diagnostics • Sending results to doctor via internet 	<ul style="list-style-type: none"> • Eye care specialists: optometrists ophthalmologists • Primary care physicians (PCPs) • Glaucoma patients and family • Hypertonic • Diabetics • Geriatric medicine • Insurance companies/ medicare
Key Resources	Channels		
<ul style="list-style-type: none"> • Diaton 10 years presence at market – reputation • IP, R&D • Marketing force 	<ul style="list-style-type: none"> • Dealers • Pharma • Direct sales • e-Commerce: eBay, AliExpress • Facebook 		
Cost Structure	Revenue Stream		
Manufacturing cost IP protection FDA cost	Clinical trials Marketing cost	Device sales Staff training	Complimentary software (mobile apps) Related product sales (physiotherapy)

DIATON ROADMAP



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.)

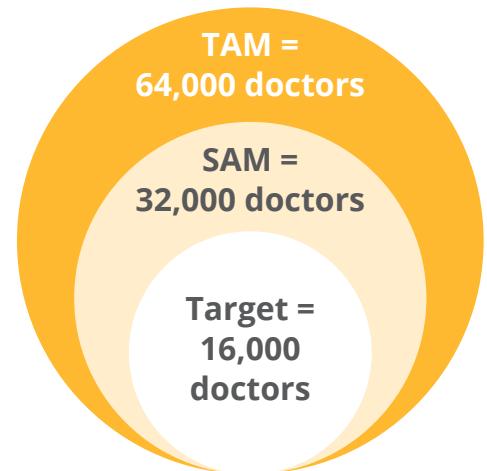


MARKET CAPACITY ESTIMATION – EYE CARE DOCTORS

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)

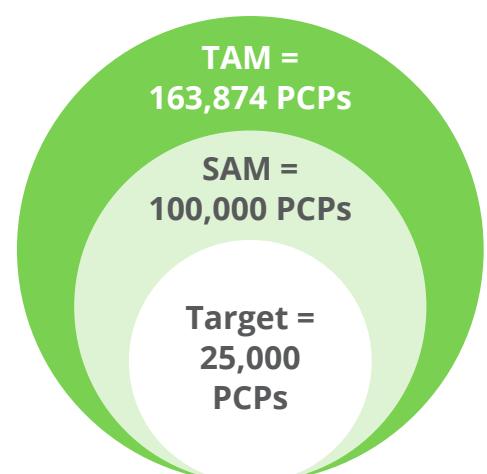
Target Market: current customers buy new devices, new customers appear. Anyway, they buy new device once in 3-5 years. → **Sales: 4,000/year**

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

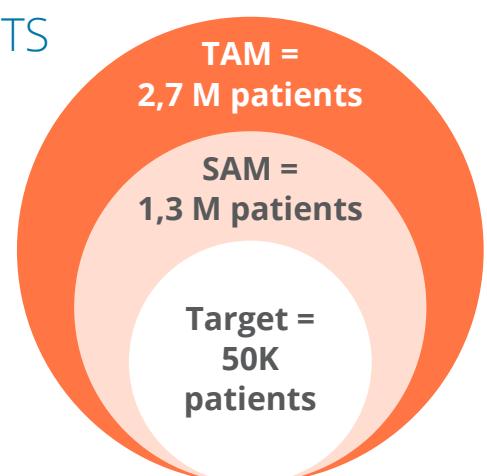


MARKET CAPACITY ESTIMATION – PATIENTS

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



THESE VALUES ARE ACHIEVABLE
ON HORIZON OF 5-6 YEARS

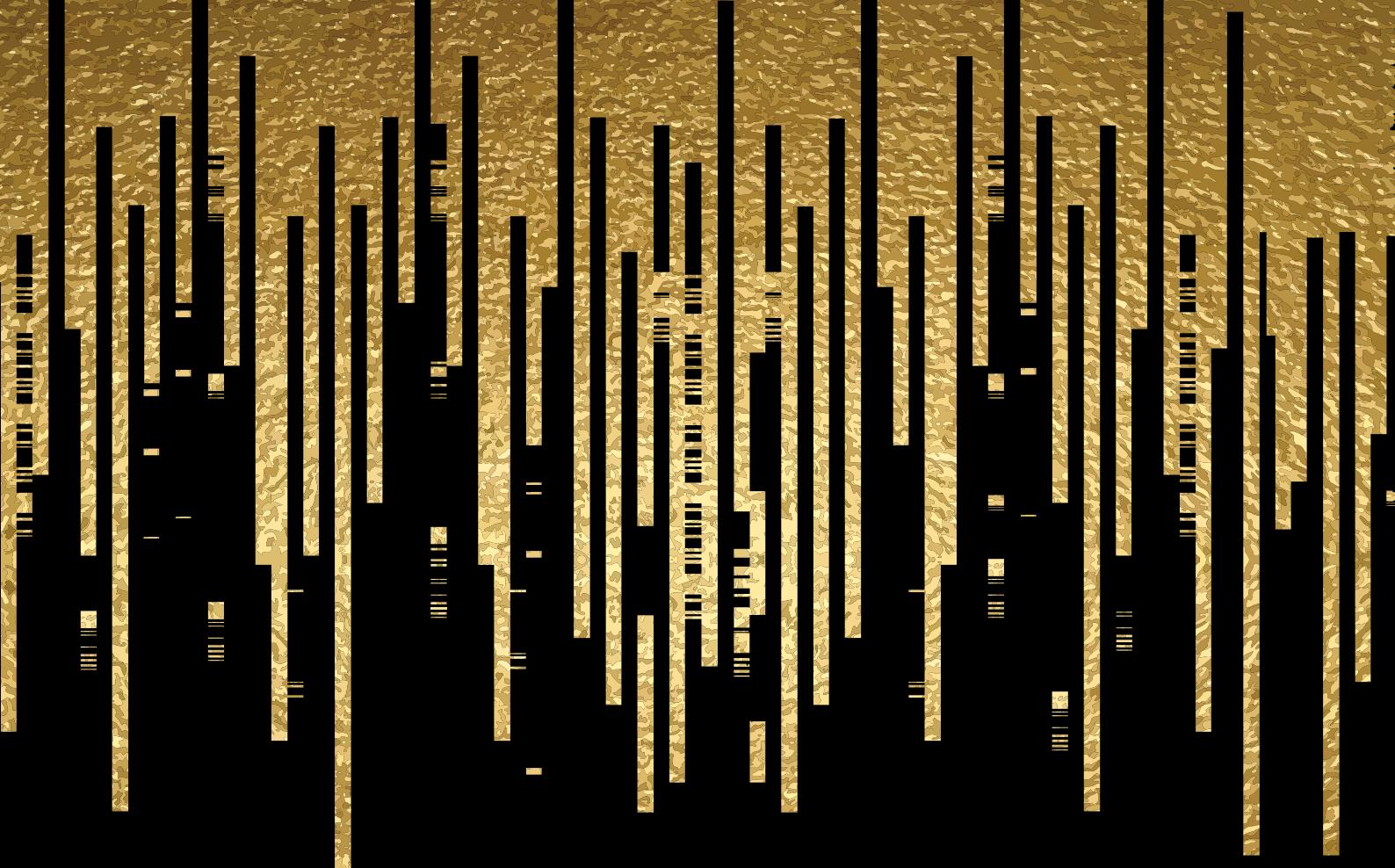
DIGITAL TRENDS IN EYE CARE: FUTURE R&D PLANS

Medical Devices Transformed

- Everything connected
- MEMS sensors
- Miniaturization
- Wearables

Medical Processes Transformed

- Continuous patient monitoring
- Big Data analytics
- Artificial Intelligence
- Telemedicine



FROM GOLD TO DIGITAL STANDARD IN IOP MEASUREMENT

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