



PHOTONIX LTD.

FOUNDED

in **15.11.2010**

CORE OF THE DEVELOPMENT

New medical laser systems for soft and hard tissue surgery.

IMPLEMENTATION OF THE DEVELOPMENT

ALREADY IN **2012-2013**

APPLICATIONS

Dentistry, cardiovascular surgery, surgical interferences in obstetrics and gynaecology, otorhinolaryngology, proctology and other fields of medicine.

PEOPLE

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The laser equipment being designed is based on the following three innovation technologies:

LPM

innovation technology based on minimum thermal effect of the laser on the surface of gum mucosa;

1

APC

unique feedback technology allowing to automatically regulate the laser power and tip temperature, which leads to accelerated healing, minimizes the risk of gum atrophy and ensures high speed of the procedure;

2

M₂L₂

unique laser of the new generation for surgery of hard tissues ensuring a considerable increase of adhesion of the filling materials during medical treatment of hard tissues of teeth, requires minimum anaesthesia, enables delivery of therapeutic reagents directly into the tooth tissue via microperforations as well as bleaches teeth "from inside" and not only on the surface.

3

1

stLase

Pre-clinical and clinical research has been conducted:

- there was proved the tissue coagulation effect achieved with the use of laser-induced thermal radiation and automatic control of the laser power. For the first time it enabled performing surgery of soft tissues with a new level of effectiveness and safety;
- a new thermal-optical-acoustic effect has been discovered, which can be used in dentistry for removing tooth stone in the mode of shockwave generation and cavitation.

2

A Roszdravnadzor registration certificate has been obtained.

3

A pilot release of 5 devices has been carried out.

