



CELSUS™

Early detection of oncology.



Total Addressable Market for 1 year

\$125 mln



Serviceable Available Market for 1 year

\$51 mln





Serviceable & Obtainable Market for 1 year


\$36 mln

Number of public health facilities for 2018	6228
Private specialized medical centers and medical organizations of large corporations for 2018	1568
Average cost per mammography study	\$1,2
Average cost per fluorography study	\$0,7
Private Practitioners for 2018	25613

Foreign market volume in the case of Germany

- 

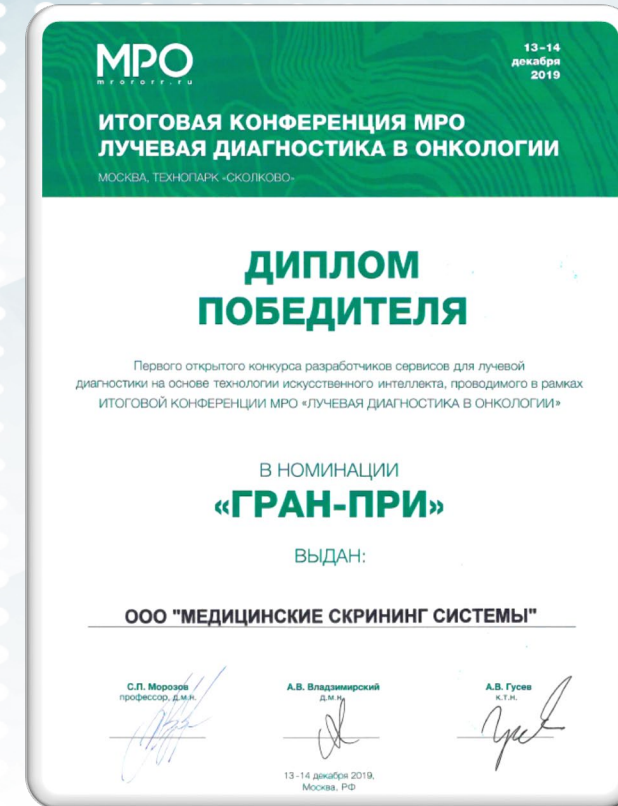
Total Addressable Market for 1 year
\$50 mln
- 

Serviceable Available Market for 1 year
\$17,5 mln
- 

Serviceable & Obtainable Market for 1 year
12,6 mln

Number of public and private specialized medical institutions for 2019	More than 2000
Women's population	42 101 000 people
Women over 40 years old	23 998 000 people
Average cost per mammography study	\$2 (minimal cost)

- Winner of the first open battles of AI-based services for radiation diagnostics at the "Final Conference of Radiologists and Radiologists of Russia", 2019
- Winner of the "Цифровые вершины" (Digital Heights) award in the category "The best solution using artificial intelligence to improve efficiency", 2019



Team



Chernin Stanislav

CEO - experience in attracting investments and launching new projects since 2012, successful experience in developing and selling startup companies.



Kapninskiy Artem

CMO, CBDO - experience in launching new projects and project management since 2008, successful experience in overcoming the crisis and further selling existing service companies.



Nikitin Evgeny

CTO, CIO Data Science, Grade Master in University of Warwick, PhD candidate in New York University, Playrix analyst.

Staff on January 01, 2020 - 34 people:

Full-part team- 29 people

Part-time time - 5 people

Problems in oncology



Untimely diagnosis of cancer diseases:

- In 2018, detection of malignant breast tumor at **stage I** amounted to only **26%** of the total number of diagnoses
- In 2018, the **mortality rate** from breast cancer was **22295** people



- lack of qualified personnel
- «human factor»
- high costs of diagnostic procedures



Solution

CELSUS™ - a complex neural network.

The system of assistance in making medical decisions based on neural networks (artificial intelligence) by analyzing digital medical images, detecting pathological objects and interpreting the results according to international standards.



Results



Reducing diagnostic costs



Minimizing the risks associated with the "human factor" in doctors' work



Compensation of understaffing or lack of staff



Saving Lives

Why now?



Evolution of new technologies and Data science;



Increasing computing powers;



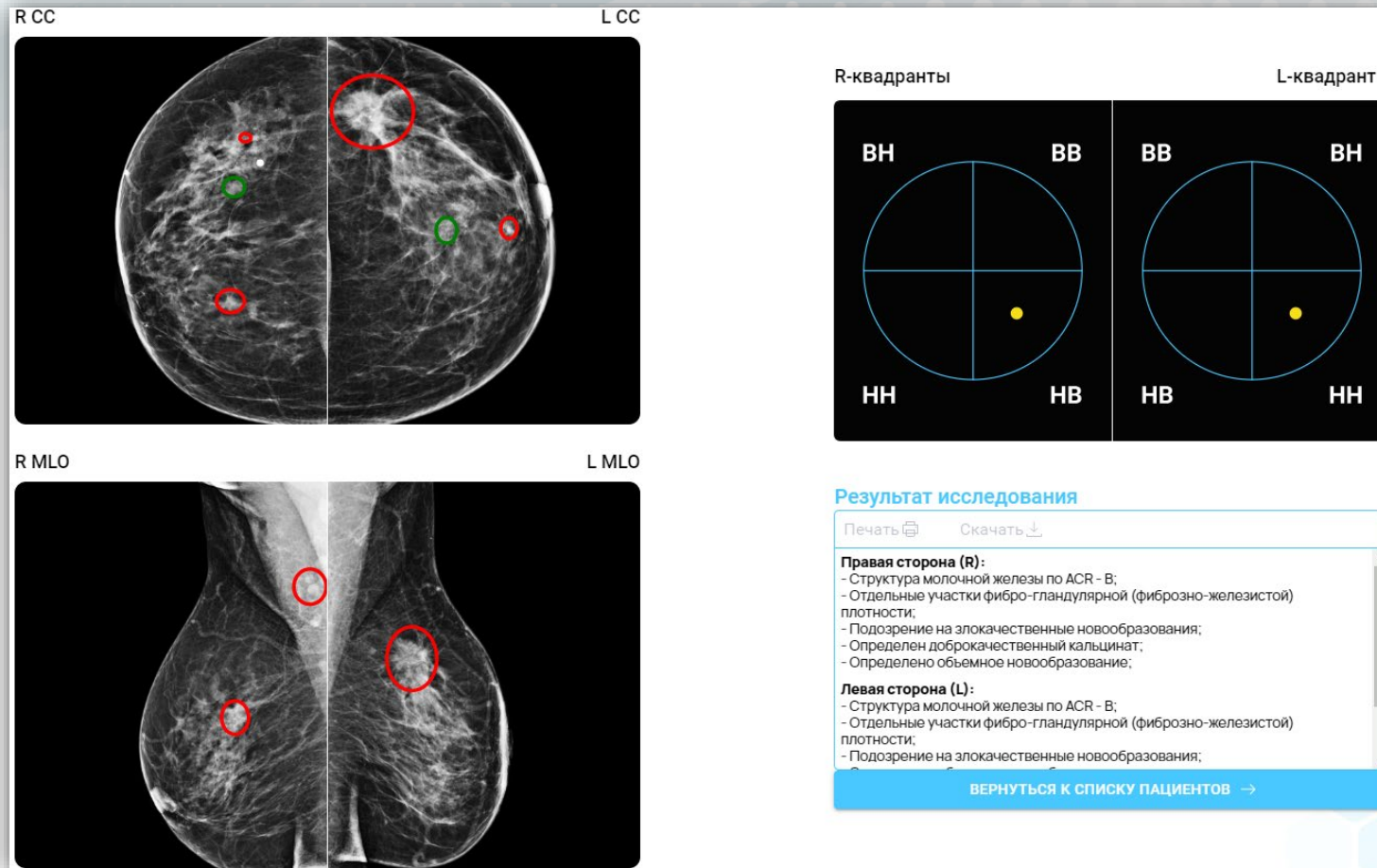
Understanding of real approaches to the use of information technologies in medicine in conjunction with physicians;



Large free market

 **CELSUS™** - ready-made solution!

Interpretation accuracy over 95% for Bi-Rads



The screenshot displays a medical software interface for breast mammography analysis. It features four mammography views: R CC (Right Craniocaudal), L CC (Left Craniocaudal), R MLO (Right Mediolateral Oblique), and L MLO (Left Mediolateral Oblique). Red and green circles highlight specific findings on the images. To the right, a quadrant analysis tool shows two circular diagrams for the R and L quadrants, divided into four quadrants labeled BH (top-left), BB (top-right), HB (bottom-left), and HH (bottom-right). A yellow dot is present in the BB quadrant of both diagrams. Below the diagrams, a 'Результат исследования' (Research Result) section provides a detailed report for both the right and left sides, including findings on breast structure, fibro-glandular densities, and calcifications. At the bottom of the report, there is a blue button labeled 'ВЕРНУТЬСЯ К СПИСКУ ПАЦИЕНТОВ' (Return to patient list).

R-квadrанты **L-квadrанты**

Результат исследования

Печать 🖨 Скачать ⬇

Правая сторона (R):

- Структура молочной железы по ACR - B;
- Отдельные участки фибро-глангулярной (фиброзно-железистой) плотности;
- Подозрение на злокачественные новообразования;
- Определен доброкачественный кальцинат;
- Определено объемное новообразование;

Левая сторона (L):

- Структура молочной железы по ACR - B;
- Отдельные участки фибро-глангулярной (фиброзно-железистой) плотности;
- Подозрение на злокачественные новообразования;

[ВЕРНУТЬСЯ К СПИСКУ ПАЦИЕНТОВ →](#)

Our strengths and assets

- ✓ The customer does not need to purchase expensive equipment and long training of employees to operate it
- ✓ Support for HL7/FHIR (international) protocols
- ✓ Integration with any medical and radiological information systems, medical image archives
- ✓ Interpretation of research results based on the algorithm of the doctor's actions (based on a set of factors), the choice of standard for the doctors' interpretations;
- ✓ Presence of a patent for invention in Russia
- ✓ International application was filed under PCT procedure
- ✓ Optimized algorithms and tools for Dataset's preparation and marking
- ✓ Availability of a system of quality control of markings by physicians – radiologists
- ✓ Registered trademark
- ✓ Pilot projects in 6 regions of the Russian Federation. **15 regional agreements**

Competitors

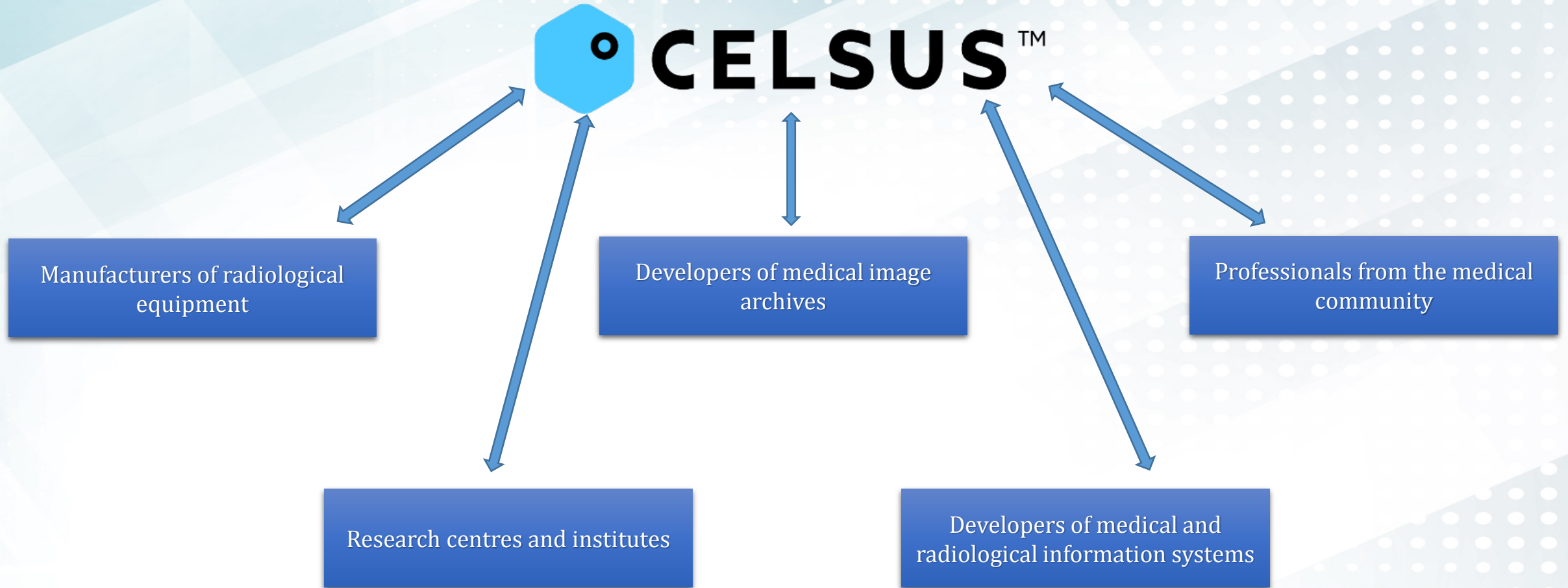
Russian federation

- ❖ Botkin. AI - small startup. There are no performance indicators of the solution in open access, hired team of developers, investments attracted, occupy less than 1% of the market.
- ❖ Третье мнение (Third Opinion) - startup. There are no indicators of the solution's performance in the open access, investments attracted, no patents for invention.

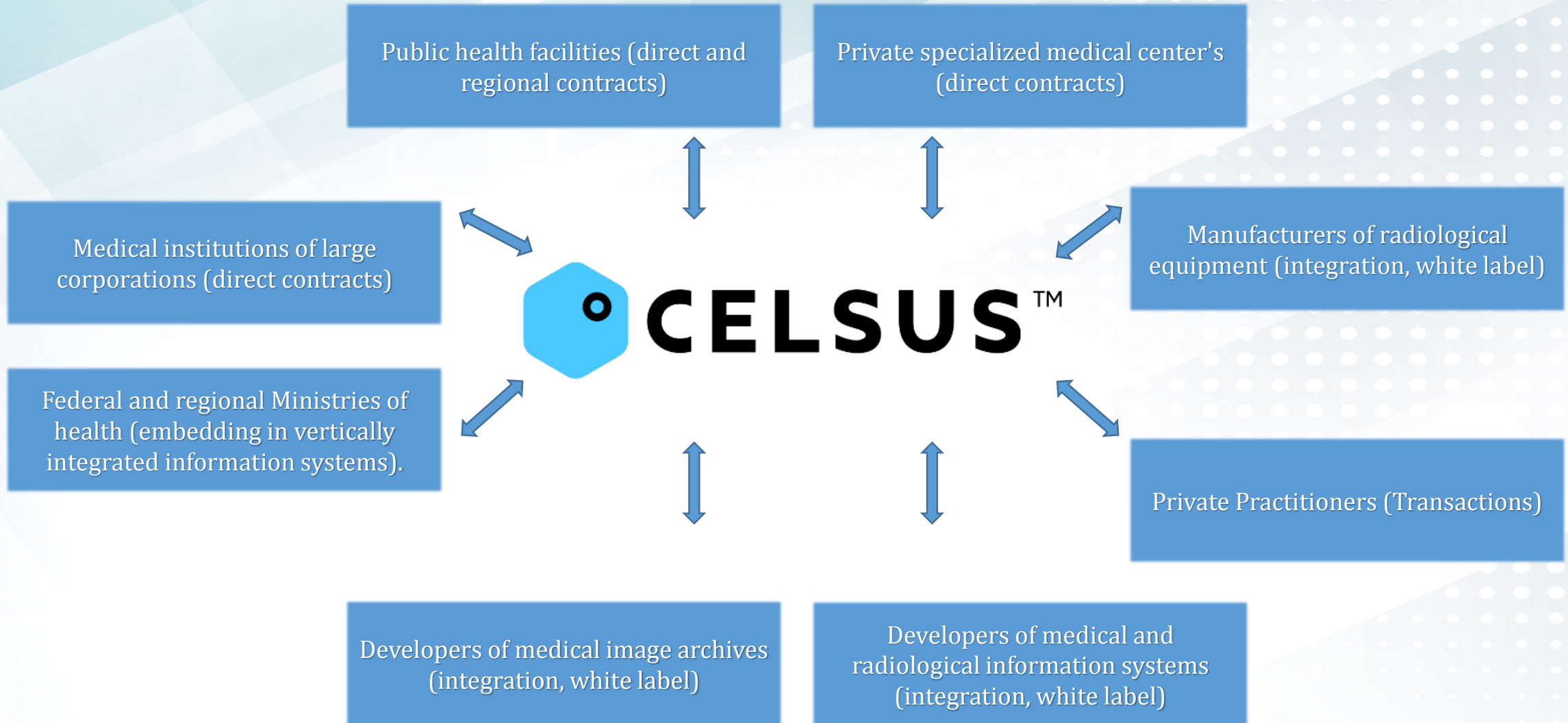
International competitors

- ❖ Lunit - Republic of Korea;
- ❖ Zebra Med – Israel;
- ❖ IBM Watson AI – USA;
- ❖ Google DeepMind AI – ISA;
- ❖ Kheiron Medical – UK;
- ❖ QuantX – USA.

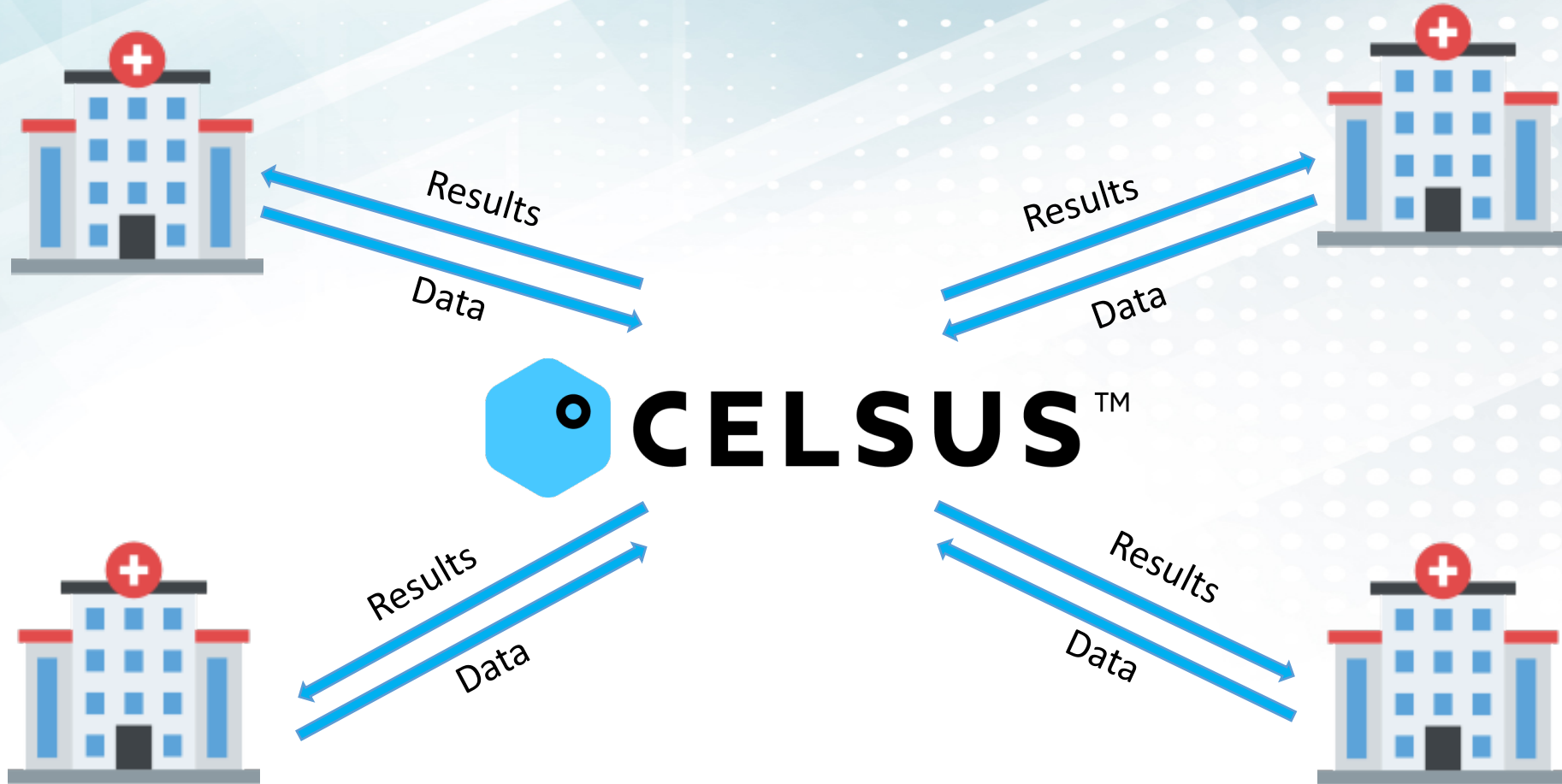
Potential partners



Clients



Operating model



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