Medical AI in Skolkovo
Global market launch for Russian startups
September 2019
Agenda

• Skolkovo ecosystem

• Medical AI companies

• Services for startups
Skolkovo Innovation Ecosystem

<table>
<thead>
<tr>
<th>STARTUPS</th>
<th>INDUSTRIAL COMPANIES</th>
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| Number of startups 1,900+  
Total revenue for 2018 $1070M+  
Total investments for 2018 $200M+  
Patents 2,000+ | Number of partners 100+  
Workforce 6,300+  
R&D Centers in Skolkovo 45 |

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<tr>
<th>INVESTORS</th>
<th>SKOLTECH</th>
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| Number of deals 150+  
Investments $235M+  
Share of Russia’s VC market >40% | Professors and lecturers 85+  
Students 600+  
Centers for Research, Education and Innovation 10 |

Advanced industrial technologies

Creation and development of a critical mass of the ecosystem’s elements

Further development and integration of elements within ecosystem

Transition to self-development; unlocking the ecosystem’s commercialization potential

2010 - 2012  
2013 - 2015  
2016+
Skolkovo Innovation Center"
Digital Healthcare in Skolkovo

Telemedicine

50+ startups
50% on the market

Clinical decision support
systems
Medical AI companies in Skolkovo

Clinical Decision Support
- Histopathology
- xRay/CT image recognition
- Medical Semantics
- Cardiology
- Individual medical device design

Patient support
- Home-use medical devices
- Chat-bots

Drug Discovery
- Pathway analysis
- NGS result analysis
- Medical semantics

Key factors of success:
- Regulatory approval
- Clinical validation
- Contacts with KOLs
- Reimbursement program inclusion

Key factors of success:
- Regulatory approval
- Marketing

Key factors of success:
- Clinical validation
- Contacts with industrial partners
Services for startups

FINANCIAL SUPPORT

VC fundraising support:
• Venture Funds and Business Angels community development
• Presentation materials for professional investors
• Facilitation of investments from professional investors

Grant financing:
• Non-repayable financing
• The foundation provides micro-grants (up to $20,000) for local tasks, mini-grants (up to $70,000) for the base-phase of the project and grants (up to $4M) for R&D, provided that the startup attracts co-financing of 25% to 75%, depending on the project stage and grant amount

Tax and customs benefits:
• Insurance premiums - 14%
• Profit tax – 0%
• Exemption from VAT
• Property tax – 0%
• Reimbursement of customs payments

NON-FINANCIAL SUPPORT

Acceleration services:
• Mentorship program
• Support of commercialization
• Acceleration programs in Russia and abroad

Intellectual property protection:
• Patenting in Russia and abroad
  • Patent search and development of patent landscapes
  • Legal support in complex deals related to the registration, protection, use and transfer of IP rights

Access to office and laboratory infrastructure:
• R&D infrastructure of Skoltech and shared resource centers
• Lease of offices and co-working spaces

Certification and regulatory:
• Certification and testing
• Preclinical and technical trials
Corporate acceleration

Acceleration program

20 Acceleration directors
25+ Project managers
700+ Independent experts
250+ Mentors

Roadmap and planning
Market feedback facilitation

Project evaluation
Risk assessment

Individual support
Progress tracking

Consulting and mentoring
Corporate acceleration

2018
COMPETITION AND ACCELERATOR

- Pharma and biocellular products
- Test systems, drug delivery systems and medical devices
- 140+ applications submitted
- 30 projects participated in BootCamp Day and evaluated by AstraZeneca International Science Board
- 6 winners participated in acceleration program

2019
COMPETITION AND ACCELERATOR 2.0

- Pharma and biocellular products
- Test systems, drug delivery systems and medical devices
- IT solution in Health
- 6 finalists will take part in individual acceleration program by SMILE INCUBATOR
- 170+ applications submitted, 6 winners

Patents Power

- Cardiovascular diseases
- Oncology
- Women’s health
- Ophthalmology
- 40+ applications submitted
- 3 winners selected
- 10 finalists participated in education program

SMILE INCUBATOR
10 YEARS OF SUCCESSFUL LIFE SCIENCE STARTUPS

70 COMPANIES over 10 years
Data Economy regulation

• Skolkovo Foundation is running the Center of competence for Data Economy regulation.

• Areas of interest in Healthcare:
  • SaMD regulation;
  • Clinical trial databases;
  • Personal and medical data handling;
  • Biometric identification (for telemedicine).

• Cluster BMT is participating in regulatory initiatives by HealthNet:
  • Fast-track regulation for laboratory-developed test;
  • Big data in healthcare regulation.
Collaboration with the Ministry of Health

- During 2018 digital healthcare has become the key development direction for Ministry of Health. The following committees were formed:
  - Department of IT and digital development,
  - Competence Center for digital transformation of healthcare,
  - Workgroup for digital Healthcare, with Cluster BMT representatives.

- Currently the newly formed organs are developing roadmaps for expertise, clinical approbation, regulatory approval, pilot adaptation and scaling of digital healthcare products and solutions. Skolkovo is actively participating in this work.

Ministry of Health delegation participated in Skolkovo Foundation’s business mission to Helsinki (HIMSS Health 2.0 exhibition)
Healthcare IoT Innovation Center

will combine interests of Russian Healthcare ecosystem
and allow to reach government priorities

- Ministry of Health
- Ministry of Economic Development
- Ministry of Industry and Trade

Russian government – key healthcare priorities

National Healthcare Project:
#1 decrease mortality
#2 focus on Oncology and Chronic Diseases
#3 develop Digital Healthcare

Healthcare IoT Innovation Center in Skolkovo

- IoT center: testing, demonstration of solutions
- Education center
- Start-up collaboration space

Ministries

Chief freelance specialists

Professional medical associations

Scientific partners / Institutes

Pharmaceutical companies

Industry partners / start-ups
Vladimir Egorov
Director of Operations
Cluster BMT

vegorov@sk.ru
Agenda:

21.10.
TeleMedForum: 4 sessions:
- International Digital Trend in Healthcare
- Artificial intelligence as a tool for digitalization of medicine
- Internet of things in healthcare
- Legal issues of telemedicine

Session «Superhuman». New technologies are breaking the boundaries
Session «Drug Discovery»
The signing of the agreement on cooperation Skolkovo – Cambridge Network

22.10.

- The finals of «Patents Power» competition
- Opening of the center for innovation and the Internet of things in healthcare
- Session «Life science»
- Partner session EFKO

23.10

- Open mentoring session Magnus Björsne (CEO of BioVentureHub Sweden) with the winners of the AZ Accelerator Challenge 2019