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

• Skolkovo ecosystem

• Medical AI companies

• Services for startups
# Skolkovo Innovation Ecosystem

## Startups
- Number of startups: 1,900+
- Total revenue for 2018: $1070M+
- Total investments for 2018: $200M+
- Patents: 2,000+

## Industrial Companies
- Number of partners: 100+
- Workforce: 6,300+
- R&D Centers in Skolkovo: 45

## Investors
- Number of deals: 150+
- Investments: $235M+
- Share of Russia's VC market: >40%

## Skoltech
- Professors and lecturers: 85+
- Students: 600+
- Centers for Research, Education and Innovation: 10

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<td>Creation and development of a critical mass of the ecosystem’s elements</td>
<td>Further development and integration of elements within ecosystem</td>
<td>Transition to self-development; unlocking the ecosystem’s commercialization potential</td>
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Skolkovo Innovation Center

- AMALTEA
- SKOLTECH
- R&D facilities for startups
- R&D centers and offices for industrial partners
- REENA LAB
- FAMILY CAMPUS
  (Pre-school and school)
- BOEING
- RESIDENTIAL FACILITIES
- SBERBANK R&D CENTER
- SKOLKOVO TECHNOPARK

Skolkovo Innovation Center
Digital Healthcare in Skolkovo

50+ startups
50% on the market

Telemedicine

Clinical decision support systems

Healthcare IoT
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

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

2. 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

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

NON-FINANCIAL SUPPORT

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

5. 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

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

7. 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 bio cellular 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

PHARMA • MEDTECH • BIOTECH • DIAGNOSTICS • E-HEALTH
NANOTECH • PROBIOTICS • DRUG DELIVERY

SMILE INCUBATOR LUND, SWEDEN
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.
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**

**Scientific partners / Institutes**

**Industry partners / start-ups**

**Pharmaceutical companies**
Vladimir Egorov
Director of Operations
Cluster BMT

TEGROROV@sk.ru
OPEN INNOVATIONS FORUM 2019

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