



Biopharma production

PROJECT

There is provided a project on **building biopharmaceuticals (antisera, probiotics, etc.) producing plant.**

Project attractiveness is preconditioned by the following factors:

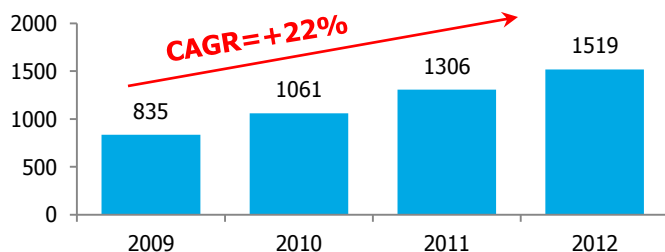
- Imports of antisera in Russia in 2012 totaled more than **USD 1,5 bn** and annually grew by **22%** on average over 2009-2012.
- Russia biopharmaceutical market is estimated at **USD 2,2 bn**.
- There is no biopharmaceutical production in Belarus – biopharma is totally imported.
- It is planned to increase consumption and production of biotechnologies in Russia by **8,3** and **33** times respectively by 2020.
- Capital expenditures for the project are estimated at **USD 30-100 mn**, payback period – **4-7years**.

MARKET

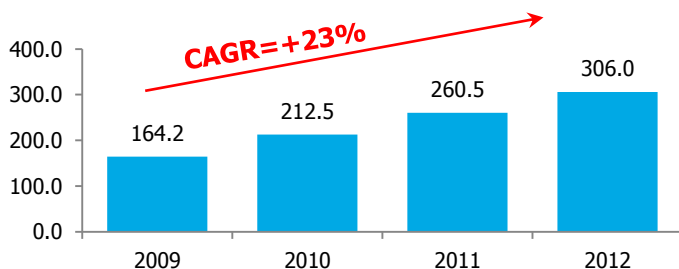
Customs Union market:

- CEA's (Common Economic Area) adoption of mutual recognition of marketing authorization (if there is a GMP certificate) is expected to be adopted in 2014.
- Russia is among **top 15** antisera importers in the world (imports in 2012 – **USD 1519 mn**), lagging far behind world's top importers – Germany, USA, Great Britain.
- Annual average growth rate of antisera imports over 2009-2012 in Russia was around **22%**.
- Aggregated imports of antisera in Belarus, Ukraine, Ukraine and Kazakhstan in 2012 totaled **USD 306 mn**.
- More than a half of Russian antisera imports is accounted for by three major world's exporters – Germany (**26,1%**), Switzerland (**14,6%**) and USA (**14,2%**).
- Imports of germ cultures in Russia in 2012 totaled **USD 376 mn**.
- Annual average growth rate of germ cultures import in Russia over 2009-2012 was **27%**.

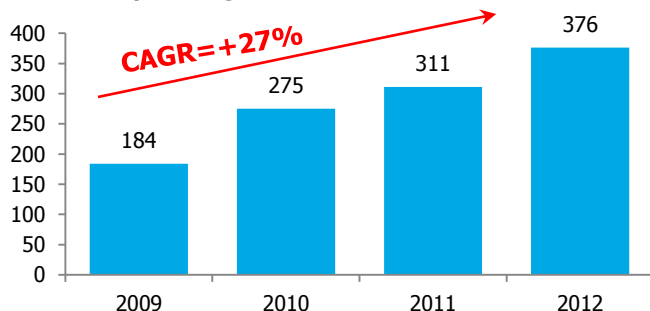
Imports of antisera in Russia, USD mn



Aggregated imports of antisera in Belarus, Kazakhstan and Ukraine, USD mn



Imports of germ cultures in Russia, USD mn



MARKET OPPORTUNITIES

Global opportunities:

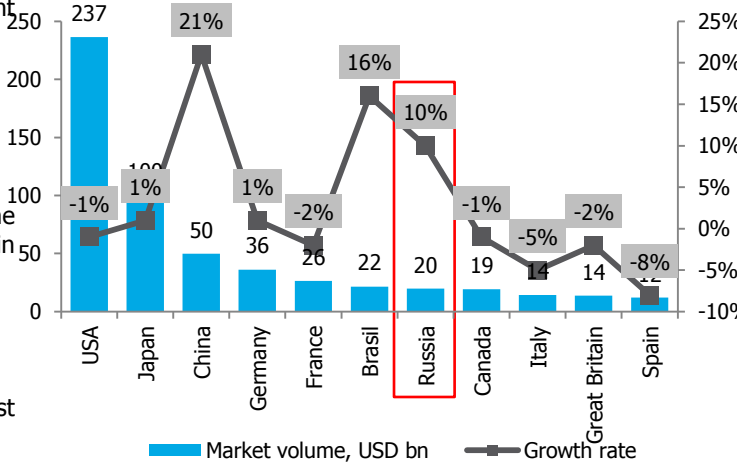
- There has been a **"patent gap"** during 2011-2015: patent protection for 35 pharmaceutical "blockbusters" (total sales **USD 150 bn**) expires.
- It is expected that by 2015 bioengineering market will exceed **USD 320 bn**, out of which more than a half (**USD 167 bn**) will be accounted for by biopharma market.
- Global bioengineering market is estimated to reach **2 trn**, growth rates throughout different segments will vary from **5-7%** to **30%**. On average, annual growth of bioengineering market is expected at **9-10%** - the industry is one of the fastest growing and high-opportunity.
- There are three key areas for innovation-based development of modern economy:
 - Information technologies
 - Nanotechnologies
 - Bioengineering**
- Sales of monoclonal antibodies are expected to grow at the fastest rate – from USD 37 bn in 2010 to **USD 60 bn** in 2015.

Local opportunities:

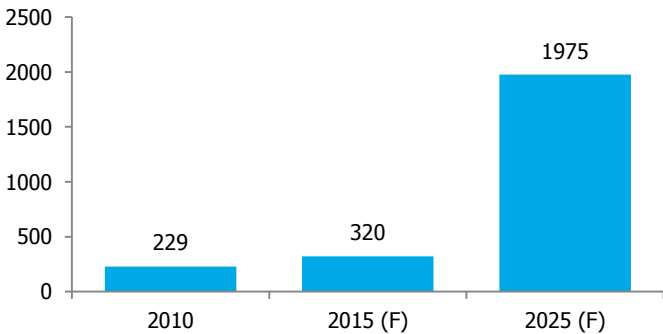
- Customs Union biopharma market totals **USD 32 bn**.
- Russia is the **3rd** rapid growing and among **top 7** largest pharmaceutical markets in the world.
- According to Bioengineering development program in Russia, consumption and output volumes are expected to increase by **8,3** and **33** times respectively by 2020.
- Biopharmaceutical market in Russia is estimated at **USD 2,2 bn**.
- Monoclonal antibodies account for **16%** of biopharma market in Russia, however the share is expected to significantly grow and reach **20%** by 2020.



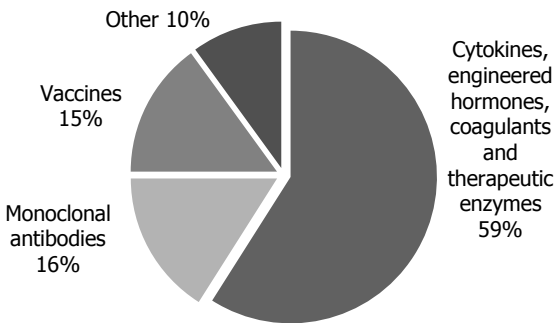
Top 10 finished pharma product markets, 2012



Global biopharma market, USD bn



Biopharmaceutical market structure in Russia



INVESTMENT OPPORTUNITIES

- Capex for the project totals **USD 30-100 mn** on average.
- IRR varies between **12-18%**.
- Payback period is about **4-7 years**.

POTENTIAL INVESTORS

Chinese and Indian biopharma and finished pharma product producers, aimed at locating their production on the Customs Union market.

Original drug producers intending to enter generics market.

Special purpose venture funds (in case of technologically difficult and innovative projects.)