



## PRODUCTION OF IMPLANTS AND ENDOPROSTHESES

### PROJECT

Proposed project – **production of implants for osteosynthesis and endoprotheses for joints.**

Feasibility of establishing a production of implants and endoprotheses is determined by the following factors:

- Availability of highly qualified specialists and successful experience in creating similar productions.
- High growth rate of imports to Russia (CAGR **+24%** since 2009). In 2012 imports of endoprotheses exceeded **260 mn USD**. Source of financing is the state budget.
- **Localization of production close to final consumers** (primarily Russia).
- The main markets are **the market of Customs Union and markets of developing countries (BRIC and others).**
- Investment costs are estimated at **15-20 mn USD**, payback period – **5 years**.

### SALES MARKETS

#### Customs Union market:

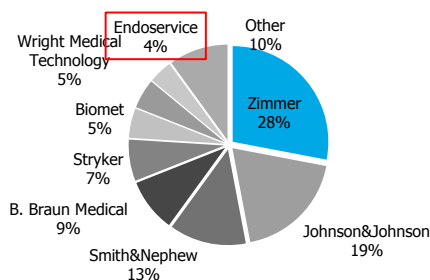
- Imported endoprotheses **exceed 95%** of the total Russian market of these medical products.
- There is only one large local company "Endoservice" on the Russian endoprosthesis market, which occupies **4% of the market**.
- Major financing of the procurement of large joints endoprotheses (hip and knee) is effected from the federal budget. Foreign manufacturers dominate the Russian market in terms of procurement volumes.
- Average annual growth rate of endoprotheses imports to Russia in 2009-2012 amounted to **+24%**, imports exceeded **260 mn USD** in 2012.
- Implants for osteosynthesis account for about half of the implants market (**48%**) in Russia.

#### Developing countries market:

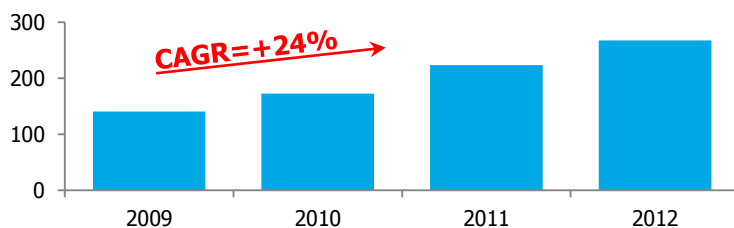
- Emerging markets (BRIC) for the last 5 years have shown a significant growth in consumption. Share of BRIC countries in global consumption of medical equipment and furniture **exceeded 10%** and amounted to **43 bn USD**. In 2012 Chinese market became the 4<sup>th</sup> largest market, Russian - 8<sup>th</sup>.

Thus, the most promising market is **the Customs Union market as well as the market of developing countries.**

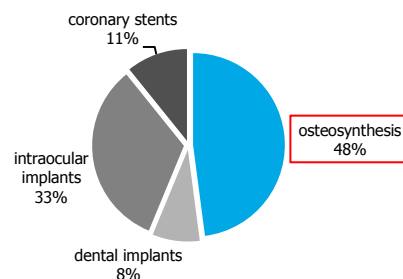
#### Structure of Russian endoprosthesis market



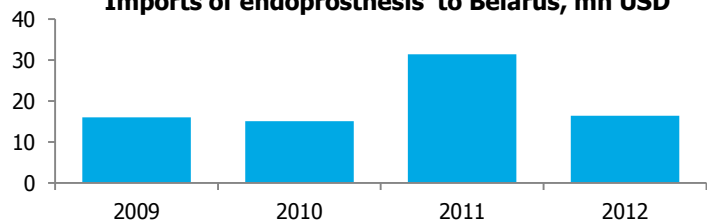
#### Imports of endoprosthesis to Russia, mn USD



#### Structure of implants consumption in Russia, 2012



#### Imports of endoprosthesis to Belarus, mn USD



## MARKET OPPORTUNITIES

### Global opportunities:

- Global endoprosthesis market amounted to almost **15 bn USD** in 2012. The average annual growth of the world market for the period 2007-2012 was 4,1% which is higher than the rate of global GDP growth during this period.
- Replacements of hip and knee joints account for more than 90% of the market.
- It is estimated that the global endoprosthesis market will exceed **23,5 bn USD** dollars in 2017.
- An ageing of population and more widespread degenerative joints diseases.

### Regional opportunities:

- Growth in consumption of medical equipment and furniture in emerging markets is conditioned by a significant **growth in income**.
- The total demand for endoprosthesis replacement operations in Russia amounts to about 300 thousand per year while only **about 50 thou operations** is actually performed.
- There is a practice to allocate budgetary funds (quotas) for endoprosthesis replacement in Russia. The share of public competitive bidding in the segment endoprosthesis amounts to 80-90%. The cost of foreign implants which are almost entirely occupy the market is high. Thus, the majority of patients requiring endoprosthesis replacement, is waiting for subsidized medical care sometimes up to **1-2 years**.
- Implementation of state programs will continue in 2014-2017. Russian market of medical products may exceed **10-12 bn USD** by 2018. This is due to the fact that share of expenditures for health care in Russia amounted to only **5,4% of GDP** in 2012 while in developed countries the share of such expenditures exceeds 7-10%.

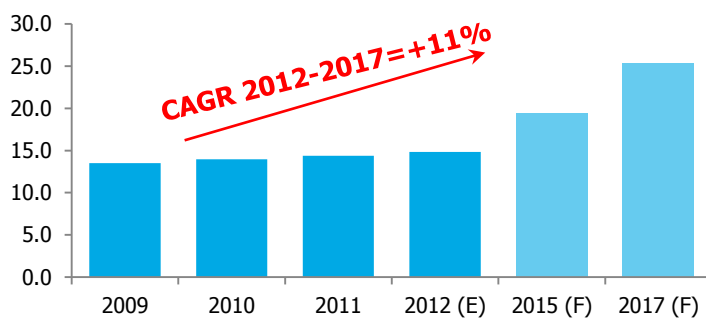
## INVESTMENT OPPORTUNITIES

- Investment costs for the creation of facilities for implants and endoprostheses production are estimated at **15-20 mn USD**.
- Expected payback period of the project may amount to **5 years**.
- IRR** for the project may reach around **18-20%**.

## POTENTIAL INVESTORS



Forecast of global endoprosthesis market, bn USD



Size of medical products market in Russia

Indicator	2011, bn USD	2012, bn USD	Growth rate, %
Consumption of medical products in public sector	4,72	7,10	50,3%
Consumption of medical products in private sector	1,36	1,23	-9,7%
Domestic production in Russia	1,19	1,53	29,0%
Exports from Russia	0,15	0,16	8,2%
Imports to Russia	5,04	6,95	37,9%
<b>Total consumption of medical products in Russia</b>	<b>6,08</b>	<b>8,33</b>	<b>36,9%</b>

Structure of medical products imports to Russia, mn USD

