



## Executive Summary - ABCYX NV

*"We are a distributor of orthopaedic implants and medical devices. Service, innovation and quality are our main drives in our day-to-day business. Our main goal is to maintain healthiness and quality of life of the human being".*

Confidentiality
-----------------

*This Executive Summary contained herein or any other written or oral communication transmitted to a recipient in the course of its evaluation ("Additional Information") is and shall be confidential. It is intended only for the person to whom it is communicated. This Executive Summary and the Additional Information may not, in whole or in part, be disclosed, distributed, photocopied, reproduced or entered into a computer in such a manner as to be available to persons other than those to whom it is communicated. In particular it may not be communicated to any third party without VARAFIN's prior written consent in each case. Copyright of this document remains the VARAFIN's property.*

**Copy N° \_\_\_\_ for: \_\_\_\_\_**



## Disclaimer

---

This Confidential Executive Summary (the "Executive Summary") of ABCYX NV hereinafter called "ABCYX" or the "Company" has been prepared solely for informational purposes and is being furnished solely for use by parties considering the Company as a candidate for equity investments.

The information contained herein has been prepared to assist interested parties in making their evaluation of the Company and does not purport to be all-inclusive or to contain all of the information that a prospective investor may desire. While the information contained herein is believed to be accurate, no representation or warranty is made by VARAFIN and the Company as to the accuracy, reliability or completeness of this Executive Summary. In all cases, interested parties should conduct their own investigation and analysis of the Company and the data set forth in this Executive Summary. VARAFIN and the Company expressly disclaim any and all liability for any representations (whether expressed or implied) contained in, or any omissions from, this Executive Summary or any other written or oral communication transmitted to the recipient in the course of the recipient's evaluation of the Company.

### **Statement of Confidentiality**

By accepting this Executive Summary, the recipient acknowledges and agrees that all information contained herein is of a confidential nature, that it will treat it in a confidential manner and that it will not, directly or indirectly, disclose or permit its agents or affiliates to disclose any of such information. Without limiting the generality of the foregoing, the recipient will not reproduce this Executive Summary, in whole or in part, and will use this Executive Summary solely for purposes of evaluating the recipient's interest in an investment in the Company and, if the recipient does not wish to pursue this matter, it will return this Executive Summary to the Company immediately upon request by VARAFIN and/or the Company, together with any other material relating to the Company that the recipient may have received from VARAFIN or the Company. Any proposed actions by the recipient that are inconsistent in any manner with the foregoing will require the prior written consent of VARAFIN and the Company.

### **Additional Matters**

VARAFIN and the Company reserve the right to negotiate with one or more parties at any time and to enter into a definitive agreement with any party or parties without prior notice to the recipient. VARAFIN and the Company also reserve the right to terminate, at any time, the further participation in the analysis, review and proposal process by any party and to modify, at any time, any procedure relating to such process without disclosing any reason therefore. In furnishing this Executive Summary, VARAFIN and the Company do not undertake any obligation to provide the recipient with access to any additional or updated information or to conduct any further discussions or negotiations.

The Company intends to conduct its business in the ordinary course during the evaluation and proposal period, although the Company reserves the right to take any action, whether or not in the ordinary course of business, which it deems necessary or prudent in the conduct of such business.

## Table of Content

---

THE COMPANY	4
THE PRODUCT	6
THE MARKET AND COMPETION	10
TEAM	212
FINANCIALS	244

CONFIDENTIAL



## The Company

### COMPANY



ABCYX is a distributor of orthopedic implants and medical devices. ABCYX distributes orthopedic products and services of the highest quality. It's mission is to help *patients regain an improved and pain-free quality of life on a long-term basis.*

The principal ABCYX-products are organized in three major categories:

- ARTHROPLASTY (joint replacement products):
  - large joints: hip and knee joint replacement implants;
  - upper extremity joints: for the shoulder, hand and elbow;
  - lower extremity joints: for the foot and ankle;
- Spinal ARTHRODESIS (fixation of joints);
- ACCESSORIES, such as bone cement, plugs and instruments.

In the segment of hip and knees ABCYX has an important market share in Europe.

A strong and long-term collaborative relationship with X, Y and Z has given ABCYX the opportunity to provide a complete portfolio of solutions perfectly adapted to any specific surgical requirement.

The company was founded in 1980 by Veronique Maes (50%) and Y (50%). In 1995 ABCYX INVEST BVBA bought 50% of the shares of ABCYX from Y.

Before 1980, Ann was working with the company Z, as responsible for launching new surgery products in US.

After more than 30 years of working on the development of the business, Veronique Maes judged the time to be right, to sell the company.

### ID-CARD

Corporate name	ABCYX
Legal form	N.V.
Address	Meir 31
	2012 Antwerp
	BELGIUM
Tel./Fax	+32 (0)2 845 356 232
Email	Veronique Maes <a href="mailto:veroniquemaes@ABCYX.be">veroniquemaes@ABCYX.be</a>
URL	<a href="http://www.ABCYX.be">www.ABCYX.be</a>
Registration number	0463.254.321

### CAPITAL

Capital	75.000 mio EUR
Number of shares	15.000 registered
Shareholders	ABCYX HOLDING BVBA (95%) – 100% owned by Veronique Maes



## Vision, mission & values

### vision

our long-term aspiration

To be an important player in Belgium in the distribution of orthopedic implants, devices and services of the highest quality in order to help patients regain an improved and pain-free quality of life on a long-term basis

### mission

why we are here - the cause/purpose of our business

To contribute to global health by providing our customers with high quality products and services whilst creating opportunities for our employees and generating sustainable shareholder value.

### values

what we stand for / what is important for us

#### Customer focus

- *Delivering customer satisfaction by listening to and exceeding customer expectations*
- *Adding value for our customers through our services*
- *Seeking innovative solutions to help our customers achieve their goals*

#### Quality

*Delivering quality in all our work providing accurate results on time*  
*Using the best appropriate technology and methods*  
*Seeking to improve or change our processes for the better*

#### Competence & team spirit

- *Employing a team of talented and competent staff*
- *Investing in training and creating good career opportunities*
- *Recognising and encouraging outstanding performance*

#### Integrity

- *Behaving ethically in all our business and financial activities*
- *Demonstrating respect towards our customers and our staff*



## The Product

### DEFINITIONS

Directive 2007/47/EC defines a “medical device” as:

*“any instruments, apparatus, appliances, materials or other articles, whether used alone or in combination, together with any accessories or software for its proper functioning, intended by the manufacturer to be used for human beings in the*

- *diagnosis, prevention, monitoring, treatment or alleviation of disease;*
- *diagnosis, monitoring, treatment, alleviation of or compensation for an injury or handicap;*
- *investigation, replacement or modification of the anatomy or of a physiological process;*
- *control of conception;*

*and that do not achieve their principal intended action by pharmacological, chemical, immunological or metabolic means, but which may be assisted in its function by such means.”*

An implantable medical device is:

*“a medical device that:*

- *is partly or totally inserted into the human body or a natural orifice and is expected to stay there for 30 days or more, or*
- *is used to replace an epithelial surface or the surface of the eye and is expected to stay in use for 30 days or more.*

*Surgical or medical procedures are used to insert or apply implantable medical devices and surgical or medical procedures must be used to remove them”.*

Orthopedic implants can be defined as:

*“medical devices used to replace or provide fixation of bone or to replace articulating surfaces of a joint. Orthopedic implants are used to replace damaged or troubled joints.*

*Osteoarthritis (OA) also known as **degenerative arthritis** or **degenerative joint disease**, is a group of mechanical abnormalities involving degradation of joints, including articular cartilage and subchondral bone. Symptoms may include joint pain, tenderness, stiffness, locking, and sometimes an effusion. A variety of causes—hereditary, developmental, metabolic, and mechanical—may initiate processes leading to loss of cartilage. When bone surfaces become less well protected by cartilage, bone may be exposed and damaged. As a result of decreased movement secondary to pain, regional muscles may atrophy, and ligaments may become more lax. Treatment generally involves a combination of exercise, lifestyle modification, and analgesics. If pain becomes debilitating, joint replacement surgery may be used to improve the quality of life.*

*OA is the most common form of arthritis, and the leading cause of chronic disability in the Western world.*

### TYPES OF PRODUCTS

There are many types of orthopedic implants and each orthopedic implant is designed to replace the affected joint so that it withstand the movement and stress associated and to enhance mobility and decrease pain.

Broadly speaking, Orthopedic implants are available for the hip, knee, elbow, shoulder, spine, foot, hand and ankle.

The principal ABCYX-products are organized in three major categories:

- ARTHROPLASTY (joint replacement products):
  - large joints: hip and knee joint replacement implants;
  - upper extremity joints: for the shoulder, hand and elbow;
  - lower extremity joints: for the foot and ankle;
- spinal ARTHRODESIS;
- ACCESSORIES, such as bone cement, plugs and instruments.

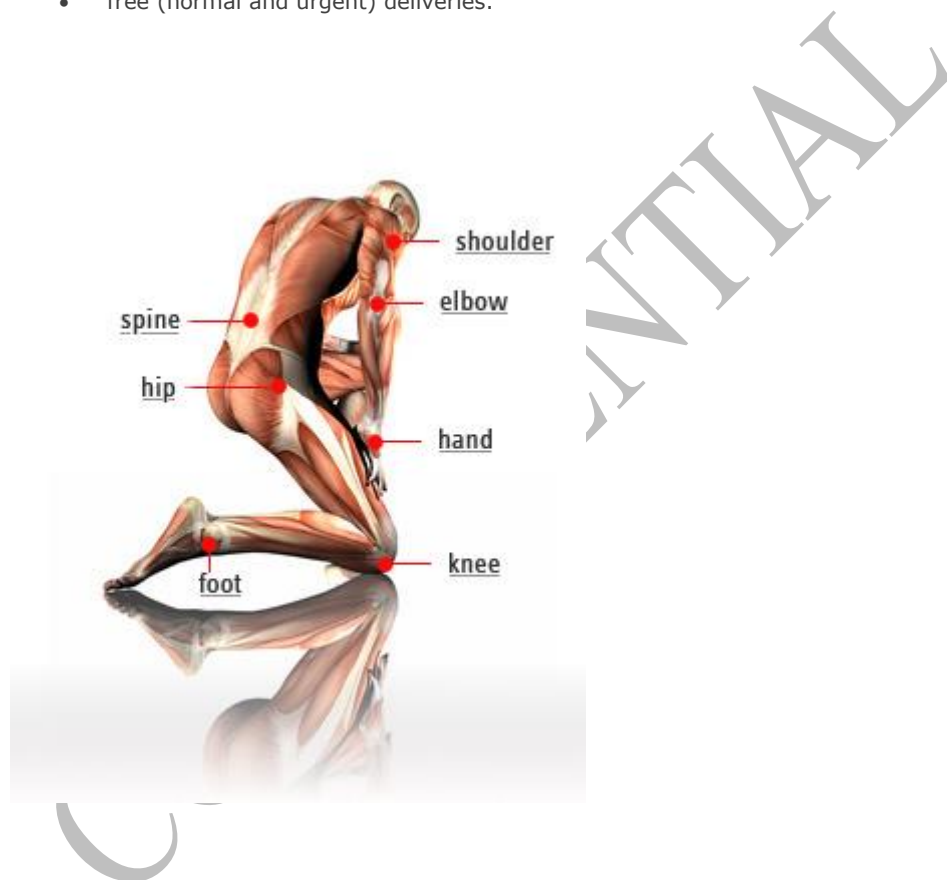


STRICTLY CONFIDENTIAL- business plan - information memorandum

All products are joint replacement products (implants) or osteosynthesis products for spine. Instruments are not included in the product range. ABCYX has chosen not to include trauma material (material for osteosynthesis after fractures) in the range of ABCYX-products (extensive range of all types of plates and screws in all shapes and sizes, to be delivered on consignment basis to hospitals).

In Belgium, doctors, patients and hospitals get for a comparable price a significantly greater service, almost entirely borne by their suppliers (such as ABCYX):

- free sets of instruments and implants, consignment and free replacement or repair of instruments;
- free technical assistance/advice and free sets of instruments (implants) ;
- training and support of the doctors;
- free (normal and urgent) deliveries.



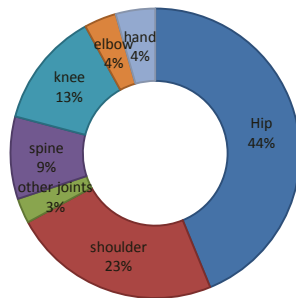
**PRODUCTS CATEGORIES  
AND TOP 10  
PRODUCTS**

Within the product range, hip, shoulder, spine and knee are the biggest segments. ABCYX has a complete portfolio of solutions perfectly adapted to any specific surgical requirement (all joint replacement products are available). In the segment of hip, shoulder, elbow and hand implants ABCYX has an important market share in Belgium.



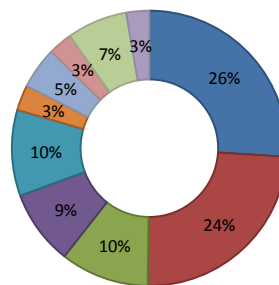
STRICTLY CONFIDENTIAL- business plan - information memorandum

2010 - Revenues by Product Category



ABCYX's 10 best selling products represent 90% of the turnover (2010).

Top 10 products in % - 2010



(\*) top 10 products representing 90% of sales (2010)

SH= Shoulder, SP=Spine

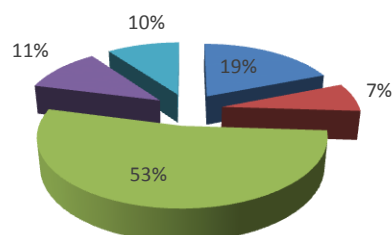
#### GEOGRAPHICAL PRESENCE

The markets for ABCYX are situated in Europe.

Over the past twenty years, ABCYX has gradually developed its geographical presence in Europe. It realizes the majority 53% of its turnover in South-Europe.

ABCYX has now 25 sales representatives in Europe, spread over five geographic regions.

2010 - Revenues - geographic distribution in %

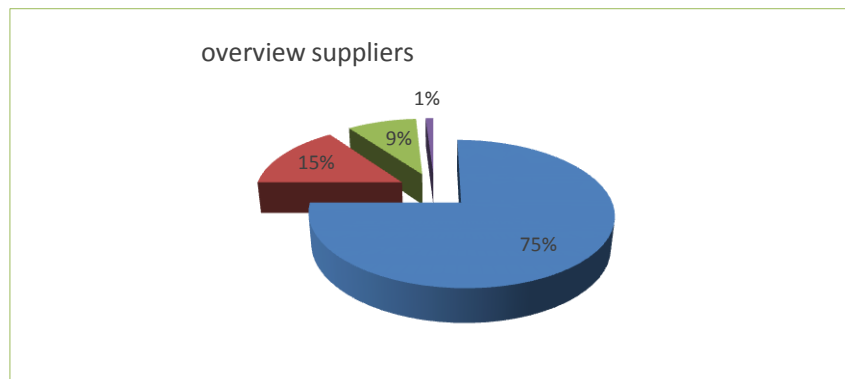






The Top 10 and Top 20 customers are representing 45 % and 55% respectively of the sales in 2010, with a total of customers in 2010 of 1981. This clearly indicates a homogeneous distribution of the customers in this year.

## SUPPLIERS



ABCYX obtained exclusivity to sell the products of the suppliers X, Y and Z.

- X designs, develops, manufactures, and markets orthopedic medical devices for surgeons. The company offers arthroplasty such as hip, knee, shoulder, elbow, wrist fracture, hand, foot surgery, and ankle products
- Y is a medical device company, engaged in research and develop spinal products for surgeons in orthopedic devices market.
- Z is specialised in designing, manufacturing and the sales of implants: hip prosthesis, knee prosthesis.

A strong and long-term collaborative relationship with these suppliers has given ABCYX the opportunity to provide a complete portfolio of solutions perfectly adapted to any specific surgical requirement.

By combining the expertise of these suppliers with the expertise and dynamism of the ABCYX team, ABCYX has been able to consistently deliver the best innovative prosthetic solutions throughout a relentless commitment to customer service and satisfaction.



## The Market and Competition

### A. THE MARKET OF ORTHOPAEDIC IMPLANTS

#### GLOBAL MARKET EXPECTATIONS

Overview global orthopedic implants market (2009):

In \$ Billions

ORTHOPEDIC IMPLANTS	Sales	% of Market	Growth rate
Spinal Devices	6,9	23,3%	11%
Knees	6,6	22,3%	2%
Trauma & Craniomaxillofacial	5,4	18,3%	6%
Hips	5,4	18,3%	1%
Orthobiologic	2,9	9,8%	7%
Hyaluronic Acid	1,1	3,7%	7%
Extremities & Bone Cement	1,1	3,7%	6%
<b>TOTAL</b>	<b>29,5</b>	<b>100%</b>	<b>5%</b>

Reconstructive market

Knees	6,6	22,3%	2%
Hips	5,4	18,3%	1%
Extremities & Bone Cement	1,1	3,7%	6%
<b>TOTAL</b>	<b>13,2</b>	<b>100%</b>	<b>2%</b>

Stryker Fact Book 2009-2010

The global orthopedic implants market is forecast to grow from \$25,9 billion in 2008 to \$41.8 billion by 2016 at the Compounded Annual Growth Rate (CAGR) rate of 7.8% during 2009–2016. Joint reconstruction will remain the largest orthopedic implants category, which is expected to grow at 7.4% CAGR during 2009–2016 to reach \$22.9 billion. The spinal surgery category is expected to grow steadily at 10.2% during 2009–2016, to reach \$11.3 billion by 2016. The trauma fixation category is expected to grow to \$7.7 billion at a CAGR of 6.0% during 2009–2016 (GBI Research's new report – 2010- "The Future of Orthopedic Implants, Analysis and Forecasts to 2016").

Orthopedic Implants Global Market, 2009-2016 – revenue in \$bn

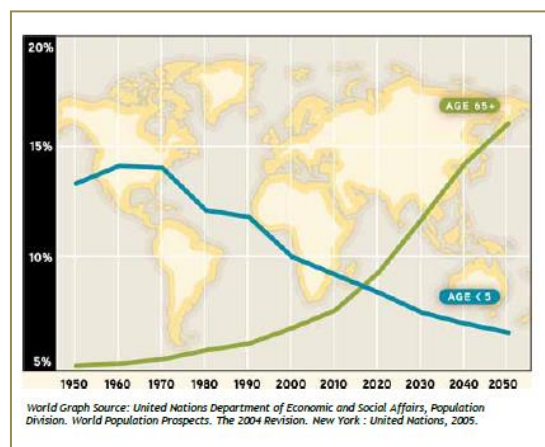




The market will be driven by:

- the aging population;
- technological advancements in implant designs and materials which are resulting in improved durability and;
- younger patients undergoing surgery in the future.

Musculoskeletal problems are strongly associated with age. As the body ages, the bones and muscle tissue start degenerating, thus giving rise to various indications manifested by pain in joints and the back. These problems are especially acute for developing countries, where the percentage of adults over 65 years in the total population is rapidly increasing.



"Nearly 500 million, or 8% of people worldwide, are over the age of 65. It's expected to grow to 1 billion by 2030, accounting for 13% of the population. Most rapid increases in elderly occurring in developing countries".

According to the WHO, osteoarthritis accounts for more than 50% of the musculoskeletal disease burden. In 2002, nearly 9.6% of the men, and 18% of the women above the age of 60 suffered from symptomatic osteoarthritis. Similarly, worldwide, there are a growing number of people suffering from back pain. The prevalence of back pain has been estimated to be the highest among middle age individuals ranging from 30 years to 50 years. The annual incidence of low back pain in the US and Europe has been found to be approximately 5% of the total population. 200 million people worldwide are at risk for a fragility fracture, and 40% of women and 14% of men older than 50 years will experience a fragility fracture. Many people who have had a fragility fracture will have another later in life. The number of patients who fracture their hip, a common form of fragility fracture, is expected to increase by 190% between 2000 and 2051.

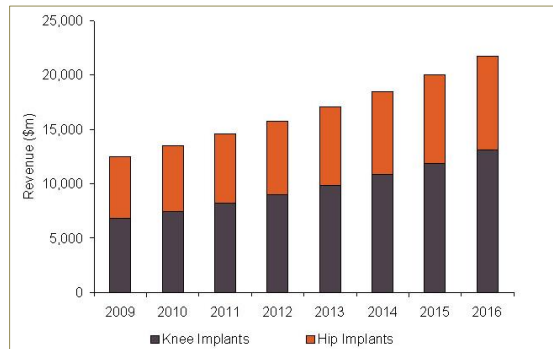
A number of other factors are responsible for the growth in the incidence of musculoskeletal conditions. Urbanization and sedentary work have been linked with the rising incidence of back related problems. The lack of exercise and dietary changes are leading to a rise in the incidence of obesity, which is a major risk factor for the development of knee osteoarthritis and back pain. Smoking, to an extent, has also been associated with the loss of bone density, leading to an increased incidence of fractures.

These factors will result in a tremendous growth in the demand for orthopedic surgeries in the future (GBI Research's new report – 2010- "The Future of Orthopedic Implants, Analysis and Forecasts to 2016").



**GLOBAL HIP/KNEE  
IMPLANT MARKET -  
EXPECTATIONS**

"Hip and Knee Implants - Market Forecast 2016" – Globaldata – August 2010 – revenue in \$m



The global hip and knee implants market is forecast to grow at an 8% Compound Annual Growth Rate (CAGR) to reach \$21,742m by 2016. The knee implants market is estimated to grow at 10% CAGR during 2009–2016 to 13,083m in 2016. The hip implants market is forecast to grow at 6% over the next seven years to reach \$8,659m in 2016.

The market is expected to be driven by the aging population and the consequent growing incidence of age related diseases such as osteoarthritis. Moreover, more young patients between the age groups of 45-65 years are also opting for surgery to maintain their active lifestyles. New procedures and advanced implants are resulting in better procedure outcomes, implants lasting longer and faster recovery. This is driving more young patients towards surgery.

New procedures such as minimally invasive surgery and hip resurfacing are increasing the attractiveness of surgery for younger adults. Similarly, advancements in implant technology have led to enhanced durability and function, with new implants claiming to last up to 20-25 years compared to 15 years currently. Procedures such as hip resurfacing and partial knee replacement, which conserve the undamaged portion of the bone and use minimally invasive surgery, are gaining popularity. These procedures use smaller incisions, with the patient benefiting from reduced blood loss and tissue injury, resulting in potentially faster recovery times. Presently, due to the limited lifespan of the artificial joint, young people who are under the age of 40 are generally not recommended surgery, since they will outlive the implant. With superior implant materials increasing the durability, an increasing numbers of young patients are now going in for the surgery option. Advanced designs have led to the development of high joint stability and functionality, which provide a much better degree of movement. These technological improvements, aimed at returning the maximum degree of function to joints, have made surgery a more viable option for young, active patients.

Bone conservation is becoming an important aspect in total hip arthroplasty. Minimal utilization of bone stock during a primary hip replacement provides more options for potential future revision hip surgery. Apart from preserving the bone and soft tissue, bone conserving implant stems can be effective, and potentially increase long term outcomes as compared to some of the conventional femoral stems. Therefore, with increasing emphasis on bone conservation procedures, orthopedic implant manufacturers are introducing a number of bone conserving hip joints. Such improved stem designs helps preserve patient's natural bone during surgical procedures. Therefore, the industry is witnessing increasingly popularity of resurfacing hip surgery with patients opting for alternative approach to total joint replacement surgery.

However, the recession has slowed the hip implant market growth. Furthermore, the on-going efforts to reduce healthcare costs is leading to intense pressure on the pricing model. Thus, there is an increased pressure on the manufactures to reduce the implant



## STRICTLY CONFIDENTIAL- business plan - information memorandum

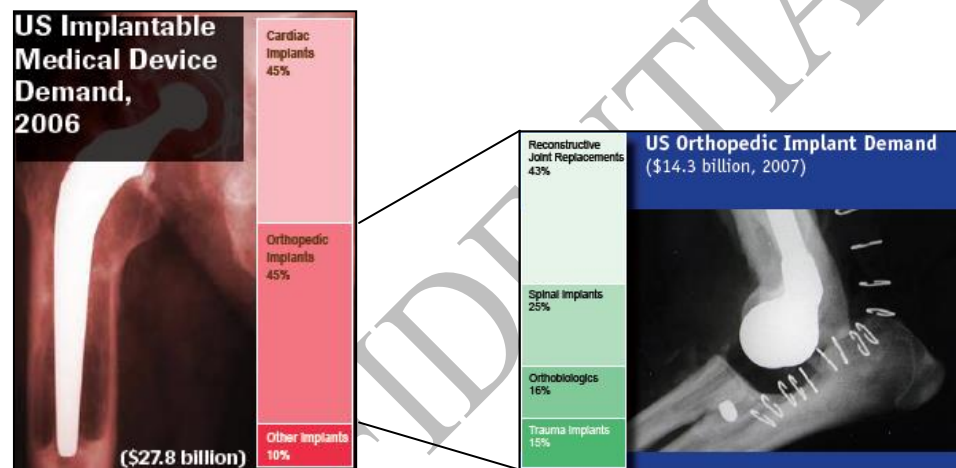
prices, which may affect the growth of hip implant market. Nonetheless, the increasing cases of hip related diseases coupled with growing aging population (who are more prone to hip related degenerative conditions) is likely to

continue to increase the demand for hip implants. Additionally, with advances in bio-materials and techniques, and increasing number of young patients undergoing hip arthroplasty offer potential growth opportunity in the Hip Implant market. ("Global Hip Implant market 2009-2013" – Market report -Healthcare and Medical -20 Apr 2010).

### US/EUROPEAN MARKET

The US and European hip and knee implant markets are the two largest markets for hip and knee implants globally, with the US accounting for nearly 50% and Europe contributing to around 30% of total procedures worldwide.

US implantable Medical Device Demand (2006) and US Orthopedic Implant Demand (2007)



(Orthopedic Implants – US Industry Study with Forecasts for 2012 & 2017 –Freedonia – 2008)

Knees and hips, which are highly vulnerable to degeneration caused by arthritic conditions, will continue to account for the vast majority of reconstructive joint replacements. Continuing advances in materials and design will improve the safety and performance features of knee and hip implants and encourage their expanding use in the treatment of severe arthritis. Among other reconstructive joint replacements, shoulder systems will post the strongest demand and realize the best growth opportunities based on advantages over alternative therapies in the reduction of pain and restoration of mobility (Orthopedic Implants – US Industry Study with Forecasts for 2012 & 2017 – Freedonia – 2008)

Advances in product technologies and related surgical techniques, coupled with an increasing prevalence of chronic back conditions, will create strong growth opportunities for spinal implants. Demand for these products is forecast to rise more than eleven percent annually. Fixation devices and artificial discs used in spinal fusion and motion preservation surgeries, especially procedures for the repair of vertebrae and replacement of degenerative discs, will account for the largest share of the market and best growth opportunities. Due to outcome advantages over alternative drug and physical therapies, surgery is emerging as the preferred treatment option for many spinal cord injuries and abnormalities.



## STRICTLY CONFIDENTIAL- business plan - information memorandum

This trend reflects the increasing availability of high value-added devices such as fusion cages and artificial discs. As breakthroughs in biotechnology and nanotechnology lead to the commercialization of new and improved products, orthobiologics will realize strong growth opportunities. Demand for these products is forecast to grow 9.1 percent annually

to 2012. (Orthopedic Implants – US Industry Study with Forecasts for 2012 & 2017 – Freedonia – 2008).

### EUROPEAN UNION LEGAL FRAMEWORK

Rules relating to the safety and performance of medical devices were harmonised in the EU in the 1990s. The "New Approach", defined in a European Council Resolution of May 1985, represents an innovative way of technical harmonisation. It aims to remove technical barriers to trade and dispel the consequent uncertainty for economic operators allowing for the free movement of goods inside the EU.

The core legal framework consists of 3 directives:

- Directive 90/385/EEC regarding active implantable medical devices;
- Directive 93/42/EEC regarding medical devices;
- Directive 98/79/EC regarding in vitro diagnostic medical devices.

They aim at ensuring a high level of protection of human health and safety and the good functioning of the Single Market. These 3 main directives have been supplemented over time by several modifying and implementing directives, including the last technical revision brought about by Directive 2007/47 EC.

The government of each Member State is required to appoint a **Competent Authority** responsible for medical devices. The Competent Authority (CA) is a body with authority to act on behalf of the government of the Member State to ensure that the requirements of the Medical Device Directives are transposed into National Law and are applied. In Belgium the "Federal Agency for Medicines and Health Products – Health Products Division" acts as a CA.

### B. BELGIAN MARKET

#### BELGIAN HEALTH SYSTEM

- i) BELGIAN HEALTH SYSTEM (Gerkens S, Merkur S. Belgium: Health system review. *Health Systems in Transition*, 2010, 12(5):1-266)

Belgium currently enjoys qualitatively good health care. Patients have the freedom to choose their sickness fund, health care provider and health care institution. Waiting lists are not considered to be a problem in Belgian hospitals as they are in other European countries. The compulsory health insurance offers general coverage of health risks and guarantees wide access to care. Moreover, for more vulnerable population groups, several measures have been put in place to ensure their access to high-quality care. These features explain to a significant degree the population's satisfaction with the organization of health care in Belgium.

#### POPULATION AND DEMOGRAPHIC INDICATORS

Belgium has one of the highest population densities in Europe. Its 10 666 866 inhabitants (in 2008) live in a total land area of 30 528 km<sup>2</sup> (349 people per km<sup>2</sup>).

Individuals aged 65 years and older made up 17.1% of the population in 2008 compared to 14.3% in 1980.



## Population and demographic indicators, 1980–2008 (selected years)

	1980	1990	2000	2005	2006	2007	2008
Total population (thousands; 1 January)	9 855	9 948	10 239	10 446	10 511	10 585	10 667
Population, female (% of total)	51.1	51.1	51.1	51.1	51.1	51.0	51.0
Population ages 0–14 years (% of total)	20.3	18.1	17.6	17.2	17.1	17.0	16.9
Population ages 65 and above (% of total)	14.3	14.8	16.8	17.2	17.2	17.1	17.1

The further increase in life expectancy and the expected substantially positive immigration balance should lead to a rise in the Belgian population of 24% between 2000 and 2060. Moreover, the ageing of the population will be amplified in the future. The population over 65 will increase from 16.8% of the population in 2000 to 26.3% in 2060 (+48%). Very old people (80+) will represent 10% of the population, compared to 3.5% in 2000. Therefore, the ageing intensity ratio, measuring the proportion of "very old people" (80+) in the group of old people (65+), will increase to 39.5% in 2060.

## Population projections, 2000–2060

	2000	2010	2020	2030	2040	2050	2060
Total population (in thousands, situation in January)	10 239	10 807	11 538	11 982	12 227	12 439	12 663
Brussels-Capital (% of total)	9.4	9.9	10.4	10.5	10.3	10.4	10.5
Wallonia (% of total)	32.6	32.4	32.5	32.9	33.4	33.8	34.2
Flanders (% of total)	58.0	57.7	57.1	56.6	56.3	55.9	55.4
Balance of external migration	13 732	55 991	39 119	17 407	19 473	26 176	28 707
Life expectancy at birth, females	81.42	83.86	85.51	87.03	88.43	89.73	90.94
Life expectancy at birth, males	75.08	77.87	79.61	81.17	82.63	83.99	85.27
Population 65 and over (% of total)	16.8	17.2	19.2	22.7	25.0	25.7	26.3
Population 80 and over (% of total)	3.5	4.9	5.5	6.5	8.5	10.1	10.4

## HEALTH INDICATORS

In Belgium, life expectancy at birth is 82.6 years for females and 77.1 years for males (2007). Since 1980, life expectancy has increased on average by three months per year. Belgian life expectancy is in line with EU27 averages of 82.2 years for females and 76.1 years for males.

## Mortality and health indicators, 1980–2007 (selected years)

	1980	1990	2000	2005	2007
Life expectancy at birth, total <sup>a</sup>	73.3	76.1	77.8	79.1	79.9
Life expectancy at birth, males <sup>a</sup>	69.9	72.7	75.0	76.2	77.1
Life expectancy at birth, females <sup>a</sup>	76.7	79.5	81.4	81.9	82.6



**HEALTH  
EXPENDITURE**

In 2007 (latest available year), total health expenditure as a percentage of GDP in Belgium was 10.2%. The growth in health expenditure in Belgium is similar to that in other western European countries and can be explained by several factors, such as the increasing number of elderly people, higher expectations, growth in real GDP and increasing implementation of new technology in the health care sector.

**TRENDS IN BELGIAN  
HEALTH SYSTEM**

The growth in health expenditure in Belgium attained a yearly average real growth of 4.4% from 2000 to 2007 and is similar to that in other western European countries.

Several factors will continue to put pressure on health expenditure, such as the evolution of medical technology and drug innovations, increasing population expectations for new and rapidly available treatments, financial remuneration of health care providers and an ageing population, consequently providing a need for structural changes in the Belgian health system. Indeed, on the basis of the expected evolution of demographic as well as non-demographic effects, public expenditure on health is expected to rise to 11.5% in 2060. (Conseil supérieur des finances – Comité d'étude sur le vieillissement, 2009).

The challenge for the future of the Belgian health system will be to ensure the efficiency and performance of the health system at a sustainable cost. Public authorities will have to continue to promote the objectives of accessibility, quality and sustainability. The reforms that will be carried out in the coming years will probably build further on previous achievements and recent reforms.

Further changes will also aim at simplifying the system in order to make it more homogeneous.

A final consideration will be what role the EU will play in the design and strengthening of future health systems. A great challenge will be the maintenance of a system mainly based on solidarity in an increasingly global world. However, stimulating cross-border collaboration and supporting the sharing of resources and experiences could provide an additional asset to health systems for improving their overall performance.

**ORTHOPEDIC  
IMPLANTS IN  
BELGIUM**

ii) ORTHOPEDIC IMPLANTS IN BELGIUM

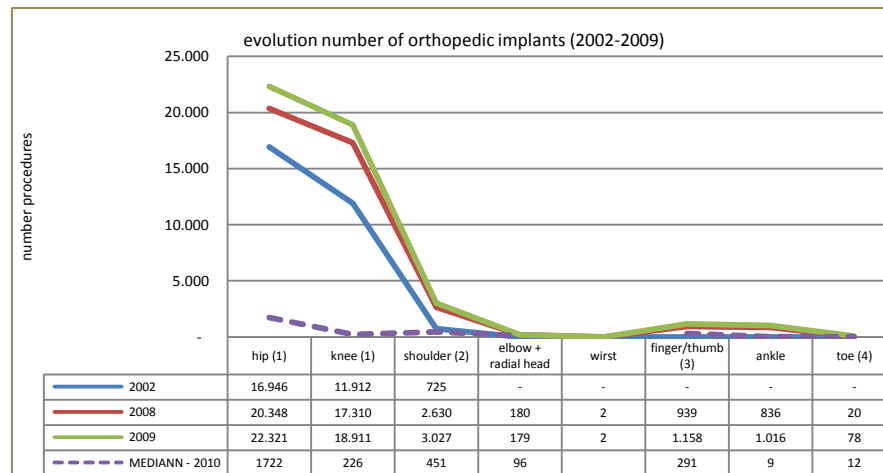
The orthopaedic implant markets in Europe and also in Belgium face challenges such as price erosion, budgetary constraints and reimbursement issues. However, the need for orthopaedic implants is rising due to surging obesity rates, an expanding ageing population and the rising number of minimally invasive orthopaedic procedures.

Within the orthopaedic implants market, hip, knee and shoulder are the biggest segments.

Hip and knee replacements are mature markets in Belgium with hip procedures growing at a rate of approximately 3,5% a year between 1990 and 2007.

Between 2008 and 2009, hip, knee and shoulder replacements even grew with a rate of 9,6%, 9,2% and 15,1% respectively.

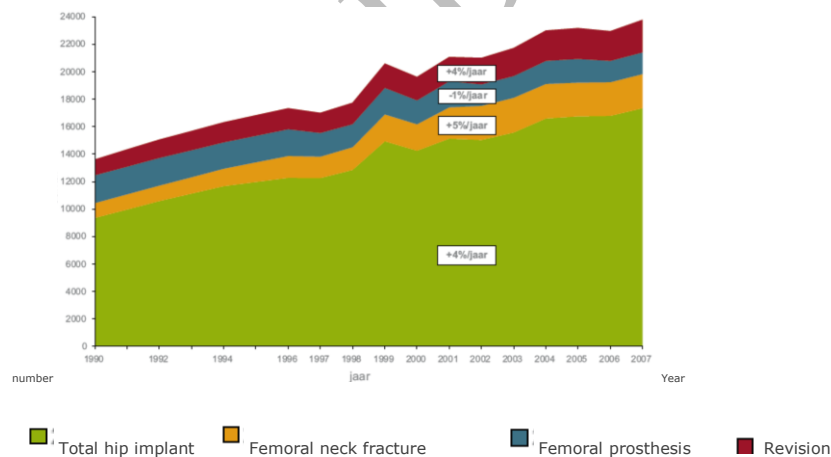




- (1) Total implants - incl. revisions
- (2) Excl. glenoids
- (3) ABCYX - number hand implants
- (4) ABCYX - number foot implants

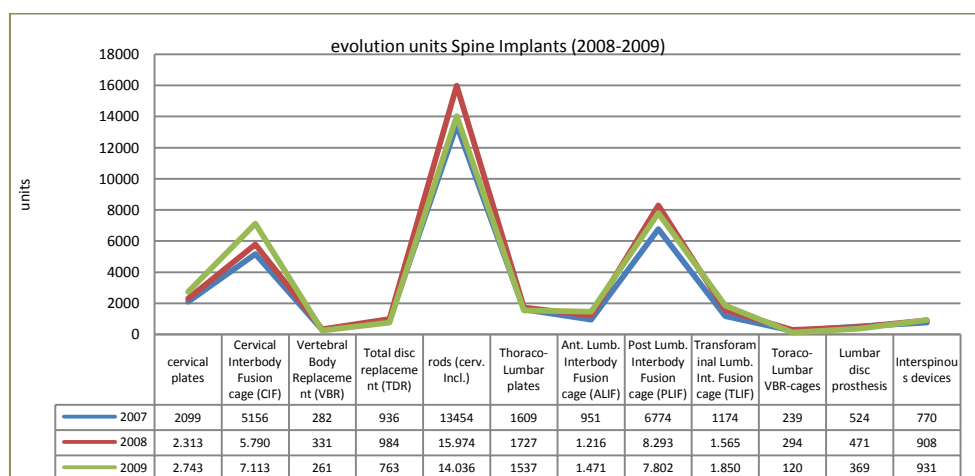
The number of total hip implants for the last 10 years has increased every year with on average 508 procedures per year. This represents a growth of 41% over the past 10 years (average growth: 3.5% per year).

number of hip implants in Belgium



Not only the number of total hip implants rose last 10 years. The number of revisions had also a huge increase of more than 60%. The number of procedures for fracture had a smaller growth over the last 10 years (24%) and stabilized over the last 5 years (0.05% per year) ("Totale heupprothesen in België: een vervolganalyse" –CM-Informatie – June 2009).

Also the global demand for spinal implants has grown significantly during the past three years:

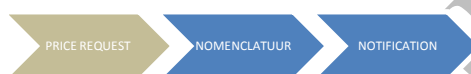


Source: Unamec

### C. REGISTRATION, PRICE-SETTING AND REIMBURSEMENT

The Registration, price-setting and reimbursement of implants is subject to extensive regulation. ABCYX has the expertise in house to handle these complex issues (barrier to market entry to new entrants).

#### PRICE SETTING



To introduce a new implant on the market, a company must submit a pricing and reimbursement dossier to the Federal Public Service Economic Affairs, which has 90 days to decide on the price. The determination of the maximum price for an implant product falls under the responsibility of the Federal Minister of Economic Affairs.

Companies have to provide detailed information on the new implant in terms of: technical specifications and clinical evaluation; CE marking; financials of the company; arguments in support of the requested price; information on market and competitive conditions etc ...

#### NOMENCLATUUR



"NOMENCLATUUR"-RIZIV (NIHDI - National Institute for Health and Disability Insurance)

The company has to apply to NIHDI/RIZIV to put the implant on the ("limitatieve") list of products which are reimbursed by the compulsory health insurance.

The NIHDI establishes the rules for the reimbursement and determines the tariffs of the health care services and medicines in Belgium. The services that are covered by compulsory health insurance are described in the nationally established fee schedule (called "NOMENCLATUUR VAN DE GENEESKUNDIGE VERSTREKKINGEN"). For each service, an identification number, contractual fee and reimbursement rate are specified.



## STRICTLY CONFIDENTIAL- business plan - information memorandum

Services not included in the fee schedule are not reimbursable. Sickness funds are legally bound to reimburse any claim from their insured members for care delivered by any recognized health care provider at the agreed fee levels.

### NOTIFICATION



As of the 1<sup>st</sup> of May 2009, a new legislation applies for the reimbursement of implants and invasive medical devices. This legislation prescribes a notification for implants with an EC-certificate. Only the implants for which the condition of notification is fulfilled, may be subject to a contribution of the compulsory insurance.

The implants which are not notified, even though they are subject to the conditions of notification, cannot be billed to the beneficiaries. If the beneficiary is hospitalized, the implants will be entirely at the charge of the budget financial means of the hospital.

This notification does not assess the quality of the products already available on the market, but gives the compulsory insurance for health care the possibility to have an overview of all the implants that already exist on the Belgian market and their prices.

Knowledge of the available implants is the foundation of a correct reimbursement system (transparency and "value for money").

The categories of implants which have to be notified are established in the Royal Decree (implants as defined in Directive 93/42/EC - Directive 2007/47/EC - see definition).

Notification for each implant, except for:

- custom-made implants
- implants used in clinical studies, before EC labeling
- osteo-integrated implants used in dental surgery

### D. COMPETITION AND COMPETITORS

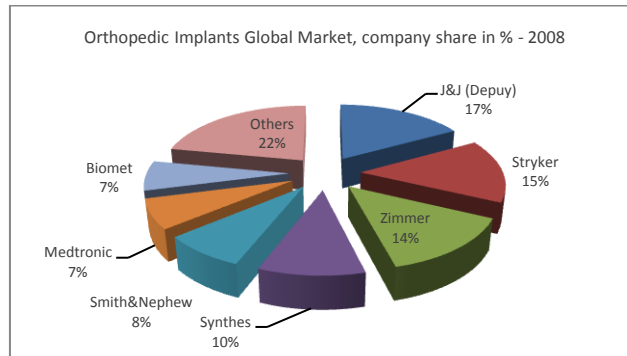
### GLOBAL MARKET

The market for orthopaedic devices is highly competitive and subject to technological change. The products are subject to intense competition. The principal competitive factors in the markets are:

- product features and design;
- reputation and;
- service (free (technical) assistance and sets of instruments).

J&J (Depuy, Inc.), Stryker Corporation (Stryker), Zimmer Holdings, Inc. (Zimmer), Synthes, Inc. (Synthes), Smith & Nephew plc (Smith & Nephew), Medtronic, Inc. (Medtronic), and Biomet, Inc. (Biomet) were the leading companies in the global orthopedic implants market in 2008. The market is dominated by multinational players, accounting for about 80% of the total market. Depuy was the market leader and accounted for 17% of the market in 2008. Stryker, Zimmer, and Synthes, Medtronic, Smith & Nephew and Biomet accounted for 15%, 14%, 10%, and 8%, 7% and 7% respectively (GBI Research's new report – 2010- "The Future of Orthopedic Implants, Analysis and Forecasts to 2016").





The global market for orthopedic implants is dominated by the presence of a few multinational players. The industry is seeing a number of diversification activities lately, where leading players are expanding their presence in high growth markets such as spine surgery (GBI Research's new report – 2010- "The Future of Orthopedic Implants, Analysis and Forecasts to 2016").

Zimmer, DePuy, and Stryker were the top three hip and knee implant manufacturers in 2009, together accounting for nearly 60% of the market. Zimmer is the market leader with a 22% market share. In recent years, Zimmer has witnessed a decline in the market share due to product recalls. DePuy, on the other hand, has gained market share especially in hip implants, and now accounts for 21% of the global hip and knee market. Stryker, Biomet and Smith & Nephew account for 16%, 10% and 10% respectively. Other players include a number of local manufacturers, especially in the Asia Pacific countries such as Australia, Japan and China. (GlobalData: "Hip and Knee Implants - Global Pipeline Analysis, Opportunity Assessment and Market Forecasts to 2016" – GlobalData -: August 2010).

There is not only competition from large diversified orthopaedic manufacturers, such as DePuy, Zimmer and Stryker, but also from established mid-sized orthopaedic manufacturers, such as Arthrex, Wright Medical and ArthroCare.

Tornier, another manufacturer of implants, is a well respected 70-year old global player (NASDAQ – IPO February 2011) in shoulder, elbow, wrist, hand, ankle and foot (extremities) along with niche products in hip and knee. The Company sells over 70 product lines in about 35 countries. Acquired by Warburg Pincus in 2006, Tornier invested heavily in developing US sales channels, product innovation and select acquisitions, which (i) augmented its leading position in shoulder implants and (ii) added sports medicine, biologics and other implants to its arsenal.

Many of the companies developing or marketing competitive orthopaedic products are publicly traded or are divisions of publicly traded companies and may enjoy several competitive advantages (greater name recognition, established relationships with surgeons, hospitals and third-party payors, broader product lines and the ability to offer rebates or bundle products to offer greater discounts or incentives to gain a competitive advantage, established sales and marketing and distribution networks and more experience in conducting research and development, manufacturing, preparing regulatory submissions and obtaining regulatory approval for products).

Finally, there is also competition from smaller, entrepreneurial companies with niche product lines or more effective or less expensive products;



## STRICTLY CONFIDENTIAL- business plan - information memorandum

### BELGIUM

In Belgium the market for orthopedic implants is also dominated by the presence of orthopedic implant manufacturers:

- i) multinational players like SMITH & NEPHEW, STRYKER, SYNTHES, WRIGHT MEDICAL, ZIMMER, DEPUY, BIOMET and INTEGRA LS;
- ii) and European companies like B. BRAUN, IMPLANTCAST, MEDACTA, LINK and MATHYS.

They have subsidiaries or sales agencies in Belgium.

- iii) independent local distributors like ABCYX, B&CO, NOOTENS and CORMED are active in Belgium and commercialize orthopedic implants.

NAME	location	Developm./ production/ small	market (2)	International group	stock	listed website
SMITH & NEPHEW NV	Brussel	X	W	SMITH & NEPHEW	X	<a href="http://global.smith-nephew.com/">http://global.smith-nephew.com/</a>
STRYKER NV	Zaventem	X	W	STRYKER	X	<a href="http://www.stryker.com/en-us/index.htm">www.stryker.com/en-us/index.htm</a>
SYNTHES NV	Brussel	X	W	SYNTHES	X	<a href="http://www.synthes.com">www.synthes.com</a>
WRIGHT MEDICAL BELGIUM NV	Ruisbroek	X	W	WRIGHT MEDICAL	X	<a href="http://www.wmt.com/International/Europe/Belgium.asp">www.wmt.com/International/Europe/Belgium.asp</a>
ZIMMER BVBA	Wemmel	X	W	ZIMMER	X	<a href="http://www.zimmer.com">www.zimmer.com</a>
DEPUY BELGIUM & LUXEMBURG (J&J)	Dilbeek	X	W	J & J	X	<a href="http://www.depuy.com">www.depuy.com</a>
BIOMET BELGIUM BVBA	Wilrijk	X	W	BIOMET		<a href="http://www.biomet.be">www.biomet.be</a>
INTEGRA LS (BENELUX) NV	Vilvoorde	X	W	INTEGRA LS	X	<a href="http://www.integralife.com">www.integralife.com</a>
ARSEUS MEDICAL	Wilrijk		EUR	ARSEUS	X	<a href="http://www.arseus-medical.be">www.arseus-medical.be</a>
LINK BELUX NV (WALDEMAR)	Zaventem	X	W	LINK		<a href="http://www.waldemarlink.de">www.waldemarlink.de</a>
B. BRAUN MEDICAL NV	Diegem	X	W	B. BRAUN		<a href="http://nederlands.bbraun.be">http://nederlands.bbraun.be</a>
IMPLANTCAST Benelux BV	Scharwoude-N	X	EUR	IMPLANTCAST		<a href="http://www.implantcast.nl">www.implantcast.nl</a>
MATHYS ORTHOPAEDICS BELUX NV	Leuven	X	W	MATHYS		<a href="http://www.mathysmedical.com">www.mathysmedical.com</a>
MEDACTA BELGIUM BVBA	Nivelles	X	W	MEDACTA		<a href="http://www.medacta.com/europe/subsidiaries/belgium">www.medacta.com/europe/subsidiaries/belgium</a>
MEDIANN NV	Zaventem		B/L			<a href="http://www.mediann.be">www.mediann.be</a>
B&CO Inc. NV (HOSPITAL INNO.)	Herzele		B/N/L			<a href="http://www.hospitalinnovations.be">www.hospitalinnovations.be</a>
ETABL. HENRI NOOTENS NV	Brussel		B			<a href="http://www.nootens.com">www.nootens.com</a>
A.C.M. IMPLANTS NV	leuven	X	X	B		<a href="http://www.acmi.be">www.acmi.be</a>
CORMED NV	Aarschot					<a href="http://www.cormed.be">www.cormed.be</a>
SURGICAL CONCEPTS	ORTHO-TEAM	ORTHOGESE /BJR		ORTHOLENGTH NV		BELGAFIX BVBA
<a href="http://www.surgicalconcepts.nl">www.surgicalconcepts.nl</a>		<a href="http://www.orthogese.be">www.orthogese.be</a>		N/A		<a href="http://www.belgafix.be">www.belgafix.be</a>

Source: VARAFIN analysis

(1) limited number of implants in product range

(2) W= worlds, EUR= Europe, B=Belgium, L= Luxembourg



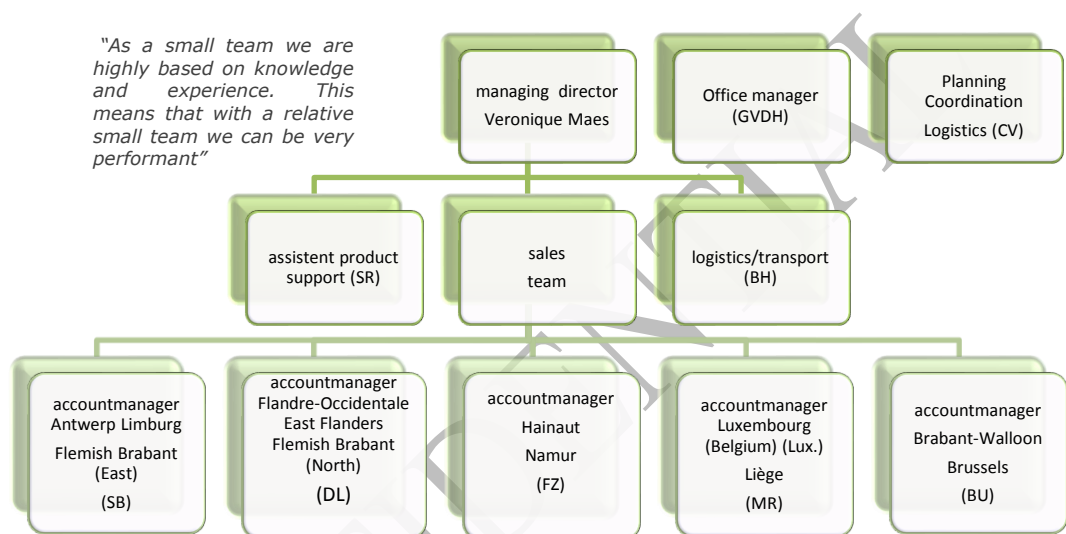
## Team

### ORGANIZATION

Presently, ABCYX employs 30 people, of which 5 person as independent contractor.

ABCYX has as a small organization a flat organizational structure allowing the personnel to have a say in what and how things are done in the company. This flat organizational structure has three basic benefits: communication, flexibility, and degree of supervision.

ABCYX has a team of experienced people to manage the business. The key people in the company today are:



The managing director, Veronique Maes has more than 30 years experience in the market of implants. She has an in depth knowledge about the market and an intimate knowledge about what the customer wants. Her technical and business ability is best proven by the track record of the company. Before founding ABCYX, she was as Product Specialist responsible for the launch of new surgery products in US for X.

The company has five sales representatives, covering five regions, supported by an assistant product support.

### BOARD OF DIRECTORS

The Board of Directors of ABCYX is presently composed as follows:

Directors		Function
Veronique Maes		Founder-Director



STRICTLY CONFIDENTIAL- business plan - information memorandum

Piet Van Praet		Director
----------------	--	----------

<b>Veronique Maes</b>	
Professional experience	<u>ABCYX NV</u> – Managing Director – founder 1980-present General Management Product and Contract Management/Business Development/Daily management and coaching of personnel/Follow-up of strategy/Account management of key accounts /Negotiation with existing and new suppliers/Management of development groups for new products /Reporting of sales figures towards suppliers Legal procedures NIHDI/RIZIV, Ministry of Health and Ministry of Economic Affairs.
	<u>X</u> – Account Manager April 1966-July 1980 Account Management Product Management & development/Product Specialist

CONFIDENTIAL



## Financials

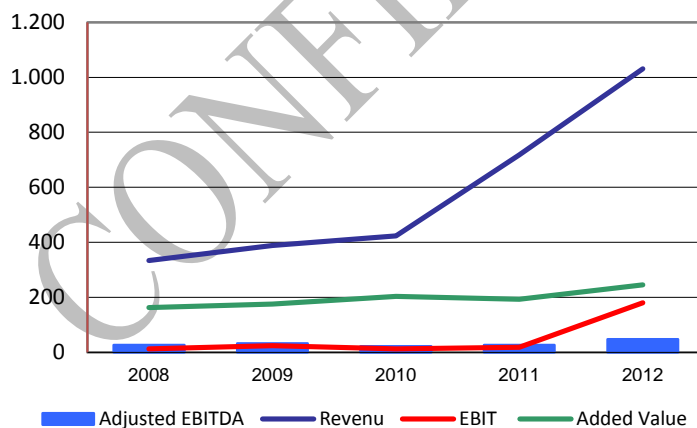
### FINANCIAL FINANCIAL HISTORY

#### P&L evolution

The table below shows the P&L evolution of ABCYX over the past 5 years.  
(in € '000.000)

	2008	2009	2010	2011	2012
Revenue	334	388	423	418	444
Cos	170	213	220	227	234
Added value	163	174	204	193	216
EBIT	16	24	12	17	43
EBITDA	21	30	18	21	46

The graph below illustrates the constant positive evolution of the activities:  
(in € '000.000)



#### Operating Revenues

The Company generated a turnover of € 444 mio for the year 2012 with a positive EBITDA of € 46 mio.

Revenues in 2012 grew 6.1% relative to 2011, to € mio 444 and is approximately in line with the sector growth rate.





### Profitability

Operating charges decreased slightly 1,1% in 2012, compared with the rate of revenue growth. Personnel costs, which compromise an important component of the cost base, declined as a portion of revenues from 17,7% in 2009 to 16,2% in 2010.

Cost of purchased materials and services as a portion of revenues is on a declining trend, coming in a 52.7% during 2012, versus 54,3% in 2011.

Profitability alongside revenue growth, is of ever-increasing focus for ABCYX, as evidenced by the growth in EBITDA for 2012 to €46 mio, compared to €21 mio for 2009, a 10,5% margin in 2012, versus 5.1% margin in 2011.

Higher revenues and stronger margins have boosted EBITDA in 2012 by 114% compared to 2011.

Financial costs were slightly higher in 2012 compared to 2011.

ABCYX's profit before taxation increased in 2012 to €40 mio compared to €14 mio in 2011.

### PROFIT & LOSS SHEET

Profit & Loss In € '000.000	2010	2011	2012
Turnover :	423	418	444
Other operating income	1	2	5
<b>OPERATING INCOME</b>	<b>424</b>	<b>420</b>	<b>450</b>
Raw materials, consumables and goods for resale	220	227	234
<b>ADDED VALUE</b>	<b>204</b>	<b>193</b>	<b>216</b>
Services and other goods (excl. management fee ABCYX INVEST BVBA)	1.05	85	85
Remuneration, social security and pensions	68	74	72
Management fee ABCYX INVEST BVBA	12	12	12
Other operating charges	0.6	0.5	0.5
<b>OPERATING CHARGES</b>	<b>186</b>	<b>171</b>	<b>169</b>
<b>INCOME BEFORE DEPRECIATION (EBITDA)</b>	<b>18</b>	<b>21</b>	<b>46</b>
Depreciation and amounts written off	5	4	3
<b>OPERATING PROFIT (EBIT)</b>	<b>12</b>	<b>17</b>	<b>43</b>
Financial income	1	1	1
Financial charges	4	2	-3
<b>INCOME BEFORE EXTRAORDINARY RESULT</b>	<b>8</b>	<b>14</b>	<b>40</b>
Extraordinary result	-1		
<b>INCOME BEFORE TAXATION</b>	<b>8</b>	<b>14</b>	<b>40</b>

### Balance sheet



STRICTLY CONFIDENTIAL- business plan - information memorandum

ABCYX's total assets stood at €240 mio at the end of December 2012, compared to €194 mio at the end of 2011.

Cash and cash equivalents stood at €1.5 mio at the end of December 2012. Bank borrowings were higher compared with 2011 due to the purchase of packing machinery.

Receivables and payables remain fairly constant throughout the years, notwithstanding the increased turnover. Stock level increased in 2012 to €85 mio compared to €76 mio in 2011.

Net working capital has increased to 4,9% of revenues at the end of 2012 compared to 0,6% at the end of 2011.

Other debts are dividends paid to the shareholders.

**BALANCE SHEET**

In € '000.000	2010	2011	2012
<b>ASSETS</b>			
<b>Fixed Assets</b>	<b>79</b>	<b>54</b>	<b>40</b>
Formation expenses			
Intangible fixed assets			
Tangible fixed assets	79	54	40
Financial fixed assets			
<b>Current Assets</b>	<b>195</b>	<b>188</b>	<b>199</b>
Amounts receivable after one year			
Stocks and contracts in progress	63	76	85
Amounts receivable within one year	110	110	112
Other Receivables			0.5
Short term deposits			1
Cash at bank and in hand	1.5	1.5	1.5
<b>Deferred charges and accrued income</b>	<b>5</b>	<b>4</b>	
<b>TOTAL ASSETS</b>	<b>203</b>	<b>194</b>	<b>240</b>
<b>EQUITY AND LIABILITIES</b>	<b>7</b>	<b>7</b>	<b>17</b>
<b>Capital and reserves</b>			
Capital	7	7	7
Profit carried forward	0.5	0.5	0.5
<b>Provision for liabilities and charges</b>			
<b>Debts</b>	<b>192</b>	<b>183</b>	<b>222</b>
Amounts payable after one year			30
Amounts payable within one year			
Current portion of amounts after more than one year falling due within one year	4	2	3
Financial debts	12	27	22
Trade debts	153	1.34	133
Amounts payable regarding taxes, remuneration and social security	16	11	15
Other debts	5	8	15
<b>Accrued charges and deferred income</b>	<b>2</b>	<b>2</b>	<b>1</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>203</b>	<b>194</b>	<b>240</b>



STRICTLY CONFIDENTIAL- business plan - information memorandum

CONFIDENTIAL



STRICTLY CONFIDENTIAL- business plan - information memorandum

## Annexes

---

Ref.	Item	Description
1	-	NIHIL

CONFIDENTIAL