



SafeOrthopaedics

INVESTORS PRESENTATION

April 2018

Safe Orthopaedics: key highlights



Company

- **French company created in 2010**
- Headquarter in Eragny sur Oise (Paris suburbs)
- **36 employees as of Dec 31, 2017**
- Listed on **Euronext Paris Compartment C** (IPO Date on Feb 10, 2015)



Technology

- **Leading the Spine Fracture Market**
- Pioneer and Leader of Spinal Instrumented treatment with **Single Use Technology**
- Broad patents and patent filings portfolio encompassing **17 product families**



Commercial Footprint

- Growing direct presence in Europe, starting with **France and Germany**
- Distributors in Europe & Latin America & Asia
- **2017 Revenue of €3,1m** (+37% versus 2016)



At a glance

- More than **10,000 surgeries performed**
- **€36,3m equity raised** since inception
- **Equity market value of €11,6m** (April 12th, 2018)

A 'Spine' Experienced team



Pierre Dumouchel – Co-founder and CEO

- ▶ 13 years of experience in the spinal medical device industry
- ▶ Master's degrees in Management from the CNAM and in the Engineering of Advanced Materials from the Advanced Institute for Technology and Management



François-Henri Reynaud – CFO

- ▶ 13 years of experience in financial affairs
- ▶ Expertise in fundraising



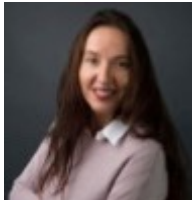
Thomas Droulout – Co-founder and CTO

- ▶ 15 years of experience in the spinal medical device industry, including 10 years in R&D with Spine Vision
- ▶ Master's degrees in Management from the CNAM and in the Engineering of Advanced Materials from the Advanced Institute for Technology and Management



Recruiting on Going – Head of Sales

- ▶ Expected in Q2



Pascale Davis – Global Head of Marketing

- ▶ 18 years of experience in marketing and scientific affairs with Zimmer Biomet, Synthes and SpineArt
- ▶ Degree in Sports Sciences, specialised in anatomy, physiology and traumatology



Recruiting on Going – Operations director

- ▶ Expected in Q2

A 'Worldwide Business' Experienced Board

Dr Alain Coudray

*Chairman of the Board of
Safe Orthopaedics*



Dr Alain Coudray is an international veteran of the Medical device industry with more than 20 years of experience. Since June 2006, he has occupied several important posts with Medtronic, notably as European Vice President of the Cardiac Rhythm Disease Management business unit, then as Vice President Global Corporate Clinical Affairs since 2014. Before joining Medtronic, Dr Coudray was Vice President Central and Eastern Europe & Distributors for Guidant, based in Vienna, Austria. Dr Coudray is an active member of the Advisory Committee of MD Start, an incubator specialised in MedTech and based in Paris, and he has been a member of the Board of EUCOMED (European Medical Devices Industry Association). He has a medical degree from the University of Grenoble, holds an MBA from HEC Paris and completed his training with an executive programme at the Kellogg School of Management in the USA.

Dominique Petit

*Founder of and consultant
to Safe Orthopaedics
Non-voting Board member*



Dominique Petit is the co-founder of Safe Orthopaedics. He started his career with Sofamor, a pioneer in this medical field. He was originator of the design of CD Horizon (Legacy), a product that is still widely marketed by Medtronic today. In 1999, he co-founded SpineVision SA (Paris), for which he was Technical Director for 10 years. Having been involved in designing more than 30 products for the spine, Mr Petit is one of the most experienced engineers in this field. He has worked in collaboration with the most innovative and reputed spinal surgeons in the world.

Michael DeMane

*Chairman of the Board
of Nevro Corp*



Michael DeMane is Chairman of Nevro Corp., a Silicon Valley firm that is a leader in the medical devices sector. Mr DeMane led Nevro as CEO from March 2011 to June 2016, driving this start-up with an initially negligible turnover to the rank of a leading global actor in the spinal cord stimulation market. Mr DeMane has achieved numerous strategic and operational successes at the helm of international firms of all sizes in the medical technologies sector. Over the past 35 years, he has occupied several management posts in the USA, Europe and Asian-Pacific countries. Before joining Nevro, Mr DeMane held several posts with Medtronic, Inc., and worked as a senior advisor with Thomas McNerney & Partners and Oak Hill Capital. He sits on the Boards of several companies including Cardionomic, Rotation Medical and Safe Orthopaedics. Mr DeMane completed the INSEAD Advanced Management Programme in Fontainebleau, France. He also holds a Master's degree in bio-engineering from Clemson University and a degree in chemistry from St. Lawrence University in Canton, New York.

Thierry Laugel

*Chairman of the Board
of Kurma Partners*



Thierry Laugel co-founded Kurma Partners in 2009 after leaving AGF Private Equity. He benefits from 25 years of experience in the life sciences field, working for venture capital firms and in industry. He is a pharmacist, and also holds a PhD and an MBA. Mr Laugel began his career in 1992 as R&D Project Manager for Laboratoires Fournier in Japan. After obtaining his MBA at INSEAD in 1996, he joined Flamel Technologies, just after the company had successfully been introduced on the Nasdaq, and managed its portfolio of candidate products in their development phase. In 1998, he moved to the finance sector, working first of all for the Caisse des Dépôts et Consignations (CDC), then with AGF Private Equity (Allianz Group) where he supervised the team responsible for investments in the health sector. Mr Laugel has managed investments in more than 25 companies, including Actelion, Arpida, Targacept, Adocia, Auris and Erytech. He is currently a member of the Boards of MeioGenix, Pathoquest, Blink Biomedical, Asarina Pharma and Minoryx.

Marie Landel

*Founder of Marie
Landel & Associates*



Marie Landel is a qualified chartered accountant who has been based in Boston since 1990. She has considerable experience in supporting French and European medical technology firms in the USA, benefiting as she does from important networks among funders specialised in healthcare.

A 'European High level' Scientific Advisory Board



Pr Le Huec, France
Head of the Spine Orthopaedics & Traumatology department
CHU, Bordeaux



Dr Franke, Germany
Orthopaedics Surgeon
Magdeburg Hospital



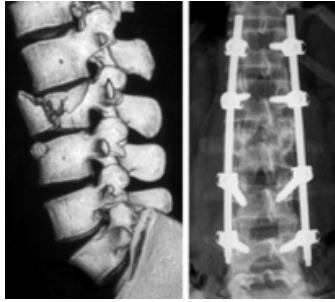
Dr Van Gaalen, the Netherlands
Orthopaedics Surgeon
Diakonessenhuis Hospital, Utrecht



Dr Faundez, Switzerland
Orthopaedics Surgeon
La Tour Hospital - Geneva-Meyrin



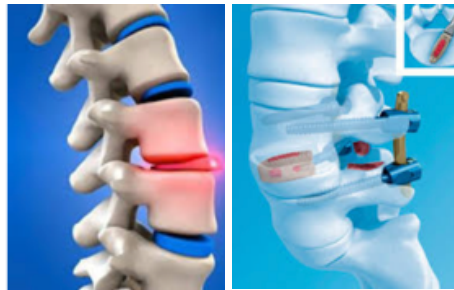
The Spine pathologies



1/ Spinal Fracture:

- High impact fracture, due to an accident,
- Osteoporotic fracture, due to reduced bone quality of ageing patient,
- Malignant fracture, due to reduced bone quality of metastasis patient

UNPREDICTABLE SURGERY, OFTEN THREATENED IN EMERGENCY CONDITIONS
GROWING SEGMENT DUE TO GROWING & AGEING POPULATION & MIS TREND



2/ Degenerative disease

- Disc disease,
- Small deformity due to reduced efficiency of Ligaments, muscles

PREDICTABLE SURGERY, OBSERVED DURING FEW MONTHS BEFORE THREATENED BY
AN INSTRUMENTED SURGERY (WITH IMPLANTS)



3/ Complex Spine Deformity

- Idiopathic scoliosis of teenagers
- Deformity of ageing patient

PREDICTABLE SURGERY, OBSERVED DURING YEARS BEFORE THREATENED BY AN
INSTRUMENTED SURGERY (WITH IMPLANTS)

The Spine pathologies are commonly treated with implants

The classic technologies used for the last 60 years...

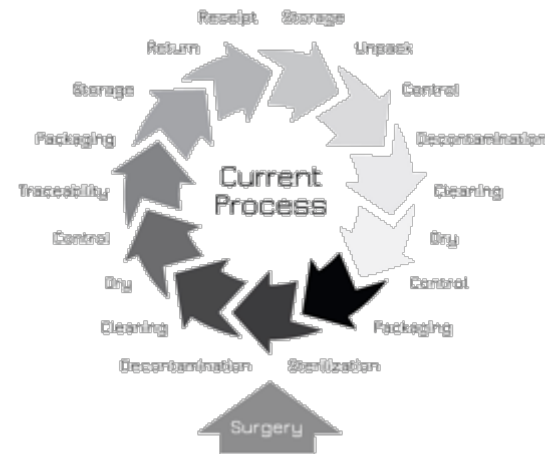
Implants to be sterilized



Reusable Instruments



Manufacturer consigns technologies



Hospital manages the surgical process

The improvement of the Spine Surgeries...

1950

2010

Technologies were enhanced to improve the **post-operation quality of life**



The surgical risk is reduced thank to the **‘Sterile’ environment**

The Minimally Invasive Surgical approach is recommended

The trend of Minimally Invasive Surgery...

The Minimally Invasive approach

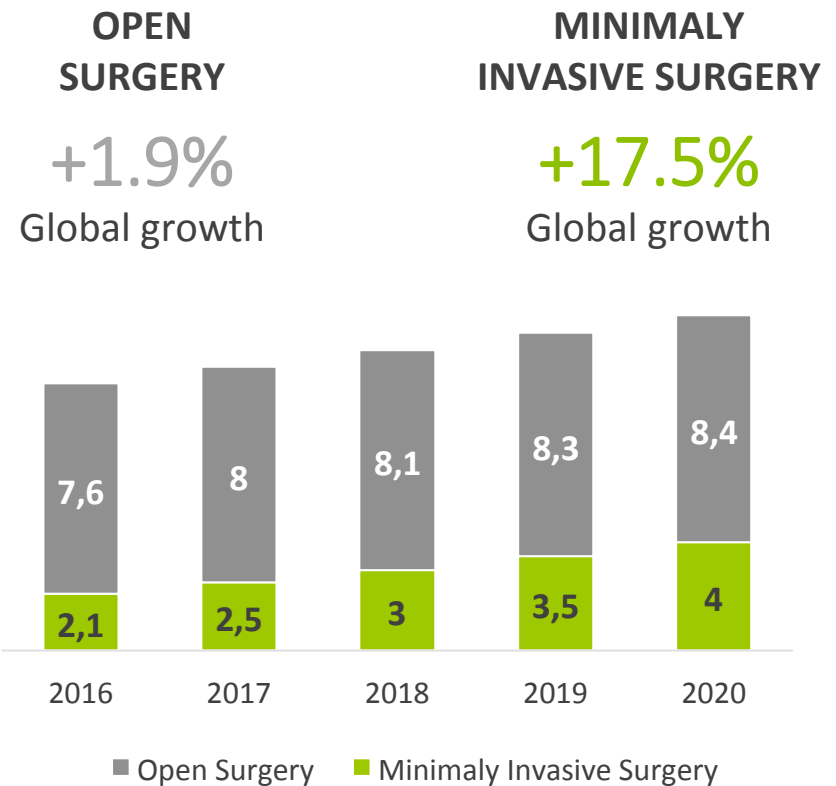
The Minimally Invasive approach provides better clinical outcomes:

- less blood loss,
- less transfusion need,
- less postoperative back pain,
- quicker recovery, and shorter hospital stay



Worldwide Spinal Fusion market (B\$)*

* Data from Millennium 2015



The Minimally Invasive Surgery is the growing trend

The potential market of Minimally Invasive Surgeries...

In 2017, Less than 20%* of the surgeries are managed by Minimally Invasive approach

Pathologies analysis

Based on pathologies analysis and surgeons interviews, the potential conversion to Minimally Invasive Surgeries is:

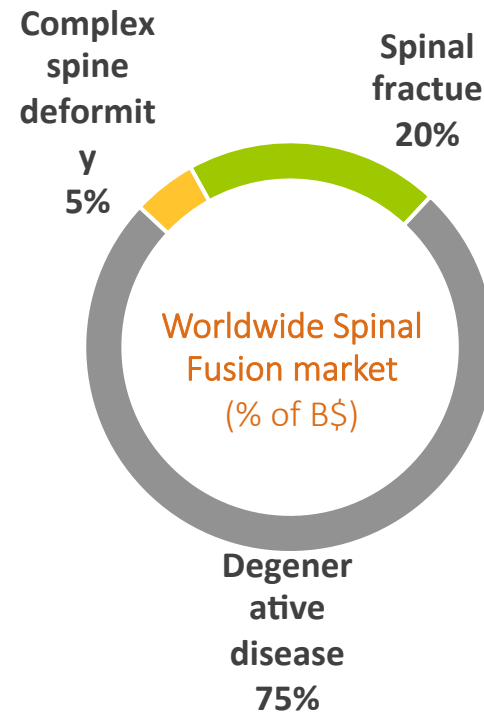
90%
of Spinal fracture

50%
of degenerative disease

Less than 5%
complex Deformity

Market Breakdown

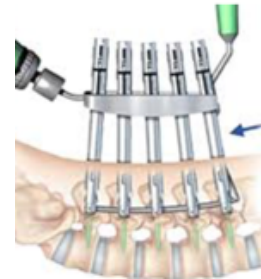
* Data from Millennium 2015



55% of all spinal pathology can be converted to MIS

The Minimally Invasive Solutions...

More than 70 players* promote Minimally Invasive solutions



But all technologies presents the same characteristics



3 boxes
minimum needed, containing
between 35 to 60 complex
instruments :



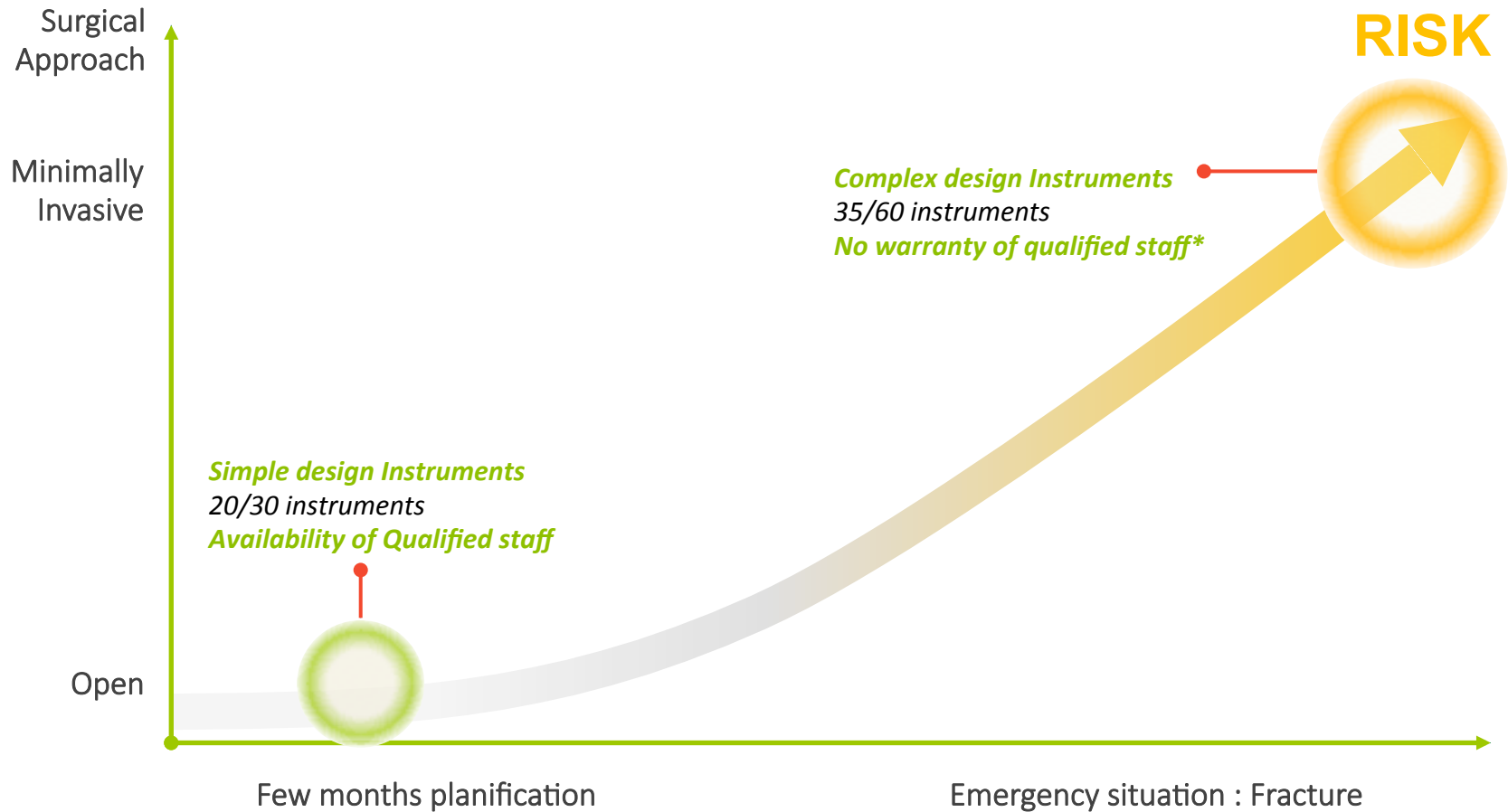
Cannula, small area, small mechanism are designed
=> The Cleaning / Sterilization become complex

Metal instruments are produced by machining process
=> The design & ergonomics option are limited

Thin parts are fragile and damaged after dozens of surgeries
=> The surgical gesture could be less precise
=> The inspection after each surgery is needed

**The Minimally Invasive Solutions can be optimized
& request high qualification of Surgeons and Nurses**

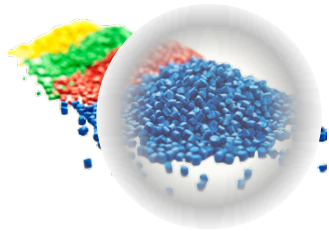
The limits of the reusable technologies



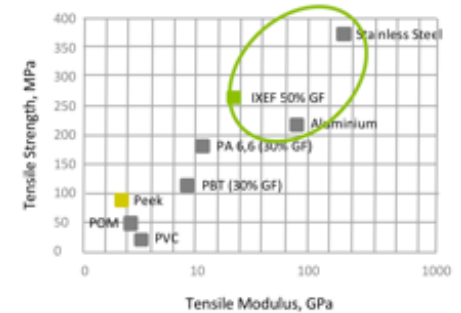
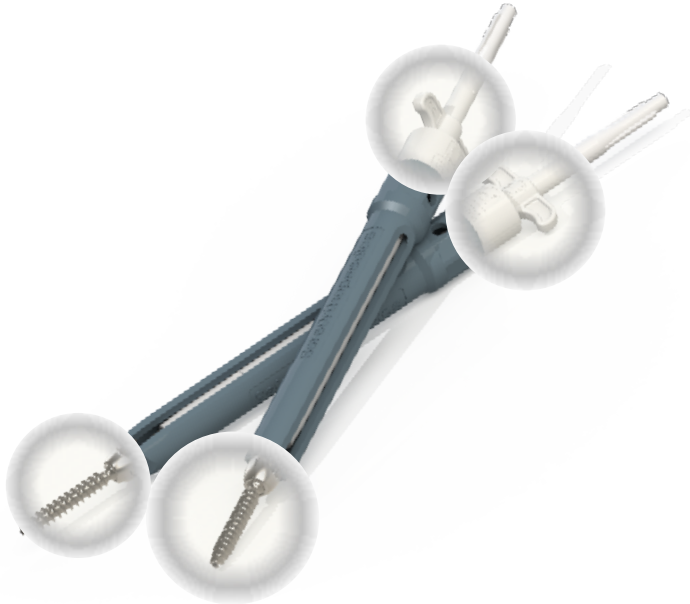
The Minimally Invasive surgery needs new solutions to be streamlined

* Source: Birgit Thiede¹, Axel Kramer², (1) Regional Council, Darmstadt, Germany, (2) Institute of Hygiene and Environmental Medicine, University Medicine Greifswald, Germany; GMS Hygiene and Infection Control 2013, Vol. 8(2), ISSN 2196-5226

Safe Orthopaedics, A new generation of MIS...



*Safe Orthopaedics design new generation of MIS instruments
thank to a **High Performance polymer***



- All shape are possible improving the **ergonomy of instrument**
- Instrument are **Radiolucent**
 - The screw insertion is easier to control
 - X rays exposure is reduced
- Instruments cost is significantly reduced offering the **Single Use** Option
 - No touch procedure = **Less risk of infection**
 - **Preloaded instruments** = Less surgical steps, Surgery time reduced
 - **The instrument are always new: the surgery gesture is more precise**

The Single Use technology offers a Safer Surgical Gesture to Surgeon

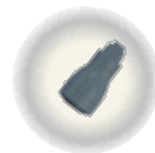
Safe Orthopaedics, A new generation of MIS...

Multi-function Instruments

- High Performance polymer + Molding Process

2 Single Use
Instruments replace
7 reusable instruments

T Position handle or Straight Position handle
Counter Torque Implant Holder
Classic handle or Ratchet System Handle



One single use Kit



Safe Orthopaedics
Spine Specialist

VS.

Classic Reusable
Instrument Kit



1 kit

KIT / BOXES

3 boxes
minimum

17

INSTRUMENTS

35 to 60

1.2kg

WEIGHT

Until 40kg
of containers



**Orthopaedics Technology makes Easier & Safer Minimally Invasive Surgeries
Available Any Time, Any place...**

Safe Orthopaedics, A unique combinaison of MIS Implants

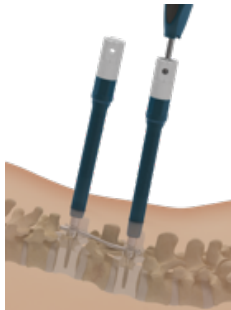
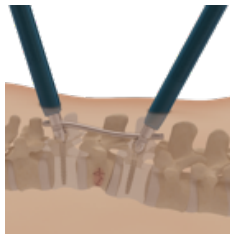
An Unique Combination of Implants Based on Same Instrument Technology



Oak.

AUTOCORRECTION
SCREW

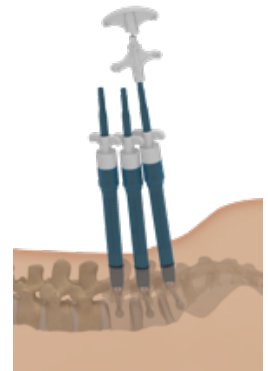
Patented Screw
for high impact fracture



Cypress.





MODULAR ANCHORAGE
SCREW

Expendable Screw for
Osteoporotic fracture,
Growing challenge in the
coming years



Safe Orthopaedics delivers Solutions for all type of Fractures

A unique solution offering unrivaled advantages

		Classic Player	Safe Orthopaedics
 Pathology treatment	<ul style="list-style-type: none"> Fracture Degenerative disease Complex Deformity 	Unadapted Efficient Optimized	Optimized Efficient Unadapted
 Learning curve	<ul style="list-style-type: none"> Surgery preparation Surgeon assistance 	Complex High qualification needed	Easy Less qualification needed
 Clinical outcome	<ul style="list-style-type: none"> Minimally Invasive Surgery Cross contamination risk Infection risk 	Depending instruments consignment Possible Possible	Any time, Any place 100% Reduced 66% Reduced*
 Logistics & Cost	<ul style="list-style-type: none"> Surgical flow Logistics Cost Technology Cost 	Close to 3h per Surgery Expensive Implant Invoiced	80% reduced** Reduced Implant & Instrument invoiced

Safe Orthopaedics offers benefits for all stakeholders

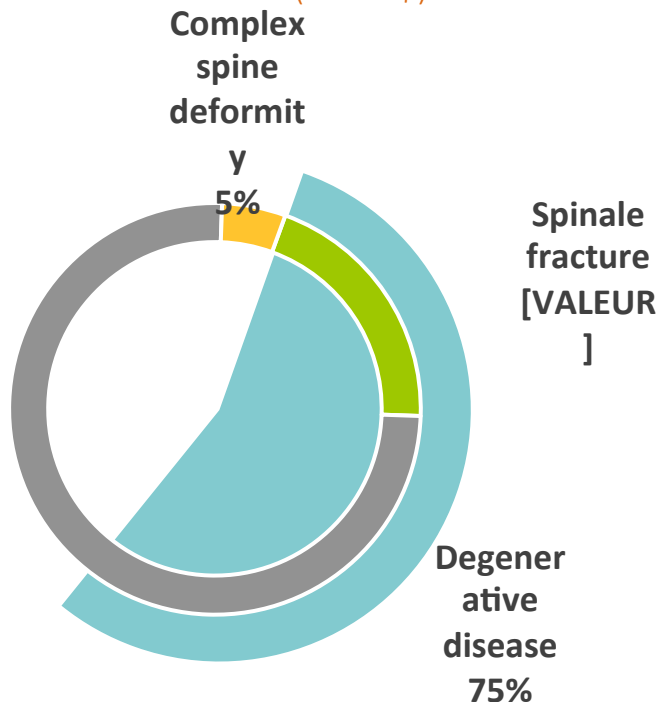
Sources: *S. Litrico et al, Eur J Orthop Surg Traumatol, DOI 10.1007/s00590-015-1692-4, Accepted: 10 August 2015, Springer-Verlag France 2015

**L. Durand et al, Poster presentation at the 26th Europharmat days – Bordeaux, 11th – 13th October 2013 “The benefits of single-use instrumentation in spine surgery.”

The Strategy to convert the Spine Market...

Spinal Fusion market...

Worldwide Spinal Fusion market
(% of B\$)



1/ Promote the Safest MIS treatment for all Spinal Fractures

In 2017

- Safe Orthopaedics leads the Posterior Fixation of all fractures

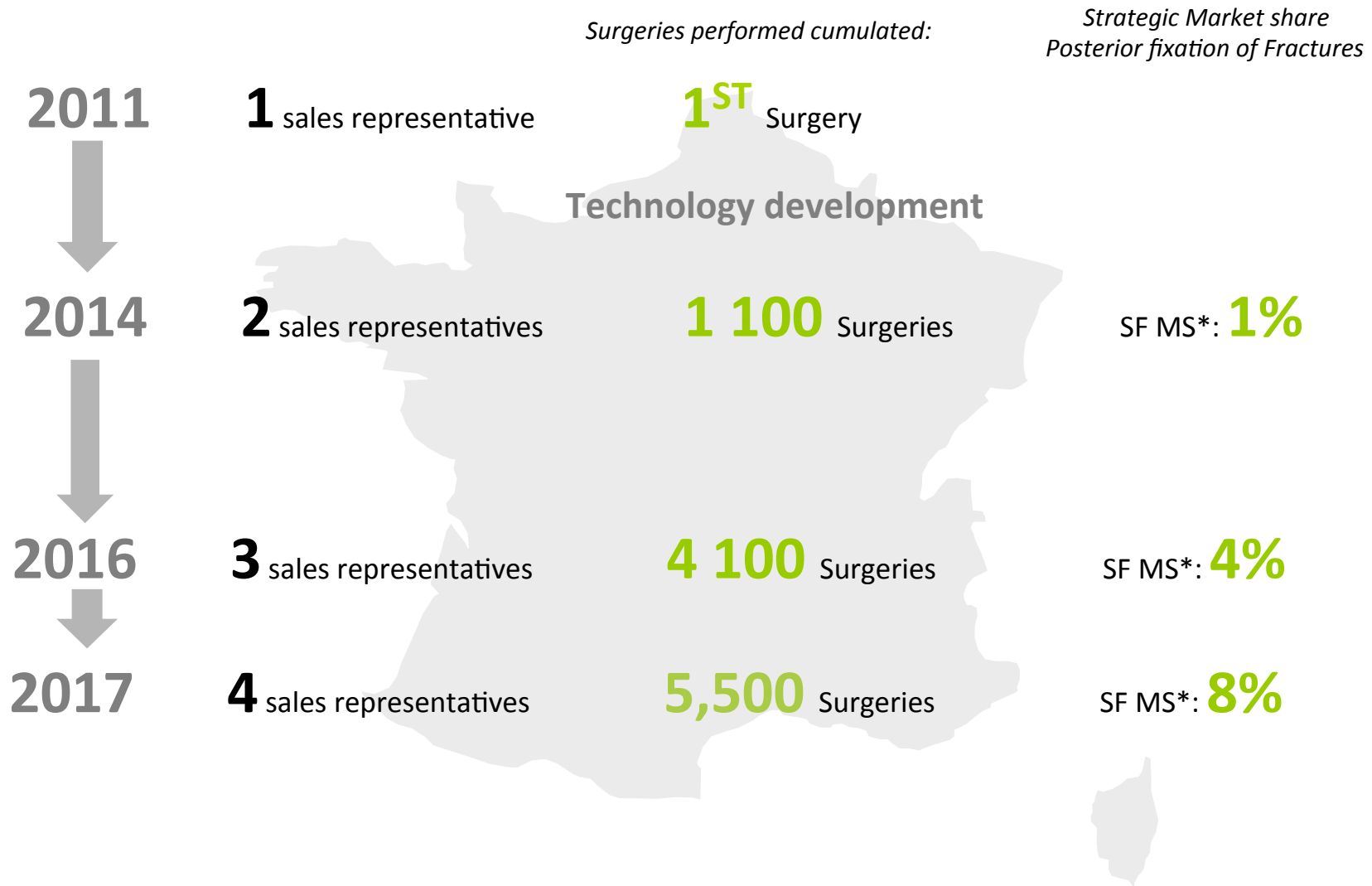
2/ Promote other technologies for degenerative disease

In 2017

- Safe Orthopaedics promotes lumbar and Cervical cages

Safe Orthopaedics aims to Lead the Spinal fracture Segment and speed up the market conversion to Minimally Invasive Surgery

The success in France...



In 2018, the 7 reps are targeting significant market shares

* Market share of Spinal Fracture Posterior fixation

The worldwide expansion...

*In Europe, Safe Orthopaedics promotes its technology
via a strong **distributors network in 12 countries**
(including UK, Spain, Italia)*

***In 2017, A direct sale force
was implemented in Germany***

*In 2016, First countries opened in
Latina America (Mexico, Chile)*

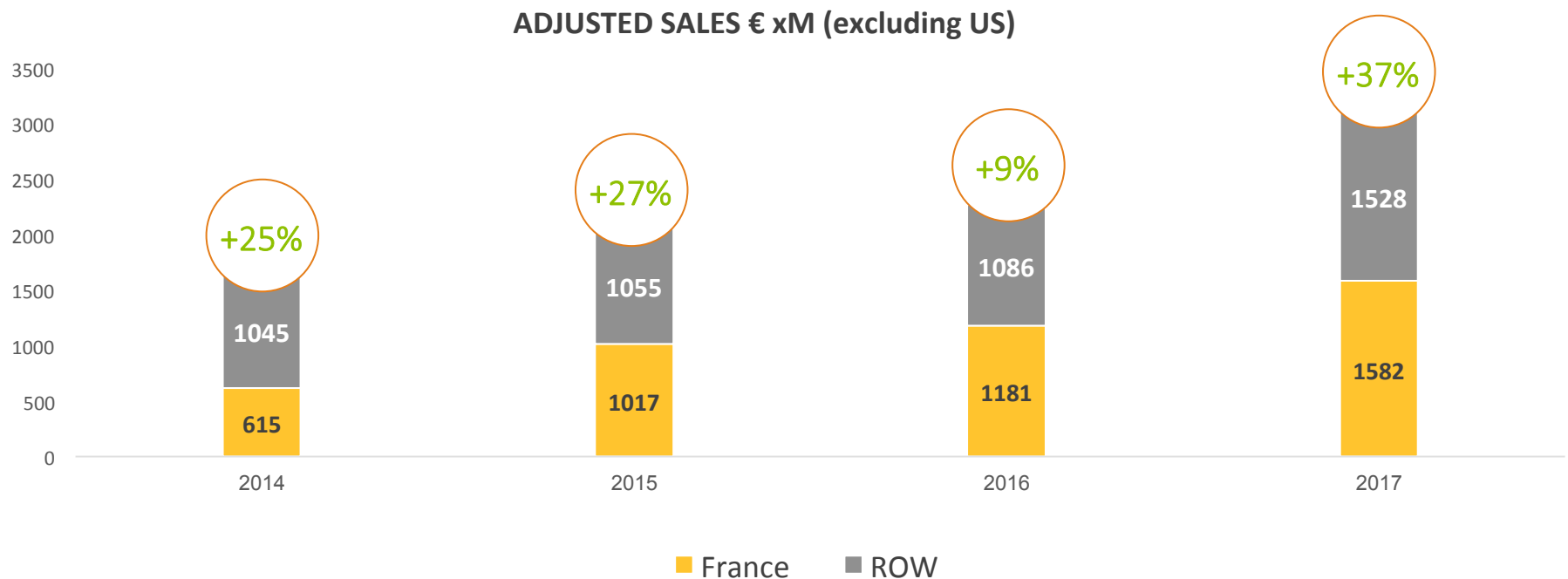
*In 2015, First countries opened in Middle
East (Saudi Arabia, Quatar, Lebanon)*

*In 2016, Safe Orthopaedics
technologies were cleared in
Australia and South of Africa*

In 2018, Safe Orthopaedics technology is used in 20 countries

In 2017, Safe Orthopaedics achieved its strongest business growth

Thank to the reinforcement of sales and marketing team (45% of human resources)
and the worldwide expansion:



**Sales growth was doubled in France, achieving +34%
+42% in the Rest of the world**

The Strategy for creating value in the coming 3 years

2018

France, Germany
and UK

France

- Recruit 2 new reps for an optimized national sales organization

Germany

- Accelerate conversion of surgeons in the first European Spinal fracture market of €80M

UK

- Reinforcement of the sales in a 85% gross margin market

2019

New Technology
& Japan

- Launch and **promote MIS Technology for all Spinal Fractures**
- Open the Japan market**

2020

New Technology
& Finance

- Propose new services for catalyzing the trend of **ambulatory surgeries**
- Prove efficiency of the **“Safe cash model”**

The Safe Cash Model...

Thanks to the Single Use Instrument technology,
Safe Orthopaedics is developing a unique Cash model in the Spine Industry

Classic Reusable Instrument Kit



VS.

Safe Orthopaedics Instrument Kit

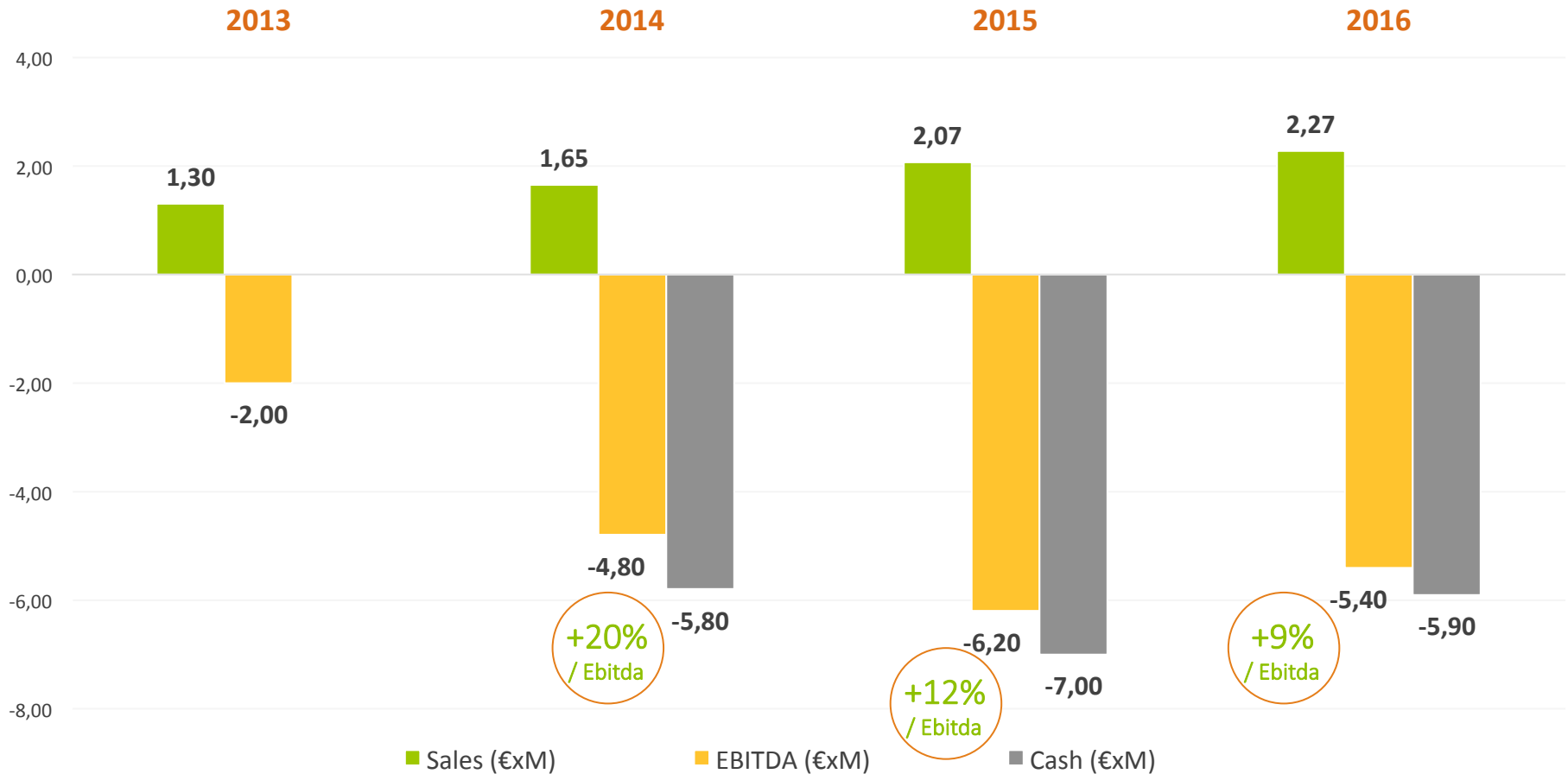


Indirect costs of the reusable instruments kit (CAPEX) are two to three times greater than the cost of the single-use kit

Minimum inventory per customer: 25k€ vs 5k€

Compared to classic model, Safe Orthopaedics generates sales growth with limited investment and reduced working capital

The Safe Cash Model...



**When the EBITDA + will be achieved, Cash will be generated:
A unique cash model in the Spine Industry**

Why invest in Safe Orthopaedics?

- 1/● Unique technology leading the growing spine trends (MIS & Spinal fracture market)
- 2/● Limited risk: Products already on the market, validated by more than 10,000 surgery kits sold
- 3/● New marketing strategy that is paying off
 - Adjusted¹ 2017 revenues: +43%
 - Products listed since April 2017 in every AP-HP hospital in the Paris region
- 4/● Invest to finance the acceleration of this new strategy
 - Step up development in France with new sales hires
 - Replicate the success achieved in the French market in Germany, a market 7 times² bigger than France
 - Launch new products to become the Spinal Fracture leader
 - Finance new direct sales forces & strategic partnership/opportunities in order to accelerate sales and achieve asap the breakeven

1 Adjusted for operations in the United States discontinued since March 1, 2016
2 Source: Millennium (2016 Europe Spinal Implants market analysis)



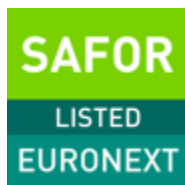
Financials



SafeOrthopaedics
Spine Specialist



Share data (at April 12th, 2018)



ISIN Code FR0012452746

Listing Euronext Paris

Share price 0,485 €

12-month high 1,224 €

12-month low 0,483 €

Number of shares 23,9 millions

Market cap. 11,6 M€

Non-diluted ownership

