



# Investor Event

## Tuesday 16th October 2012

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PASSION • INNOVATION • PERFORMANCE

# Agenda

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## *Overview*

*11.00 Welcome*

*11.10 Invibio Biomaterials Solutions Presentation*

*11.50 Victrex Polymer Solutions Presentation*

*12.30 Q&A*

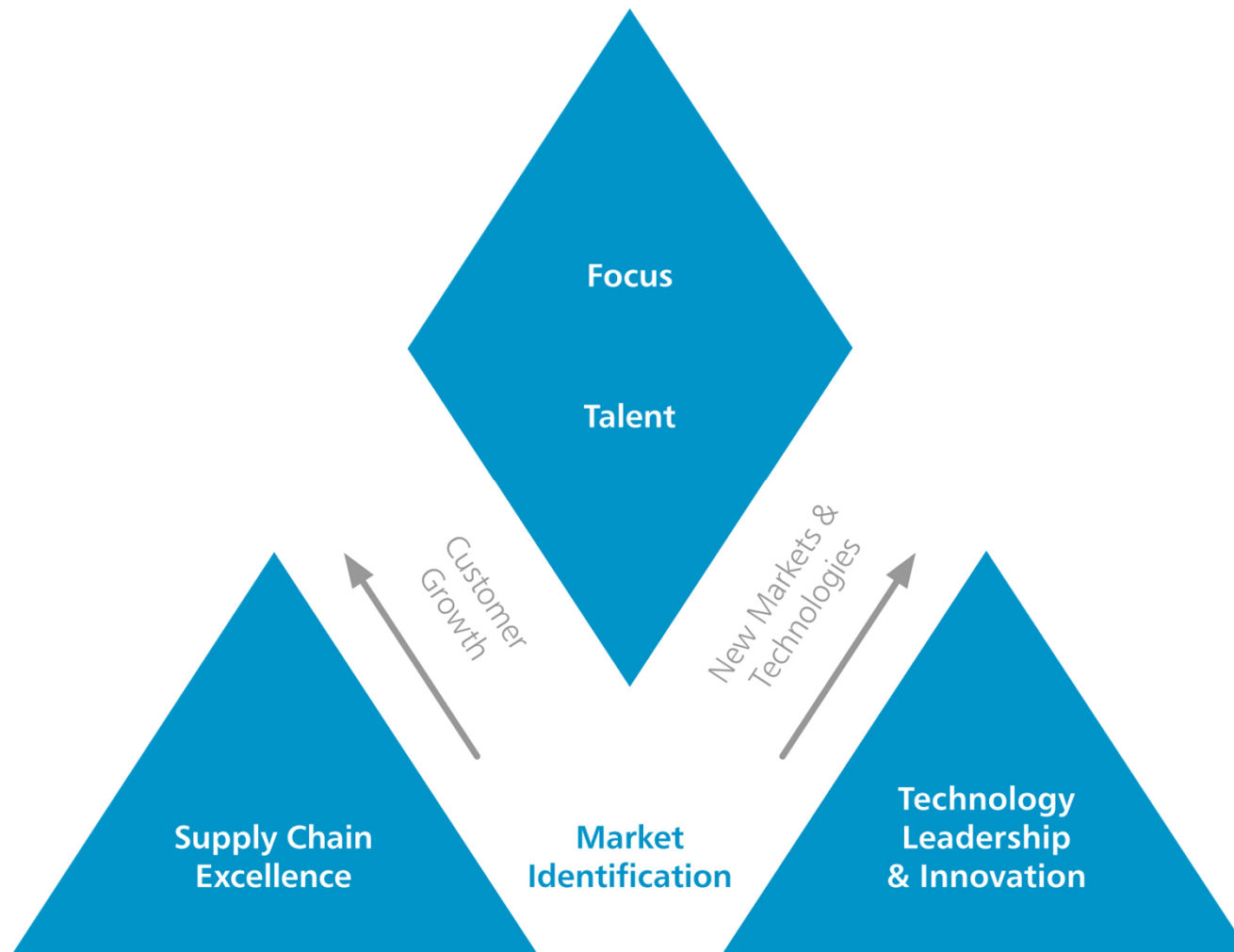
*12.40 Informal Lunch and Discussion with Leadership Team*

*13.20 Tour of Facilities*

*14.40 Wrap-up & Departures*

# Strategy Update

## *Sustainable Earnings Growth*

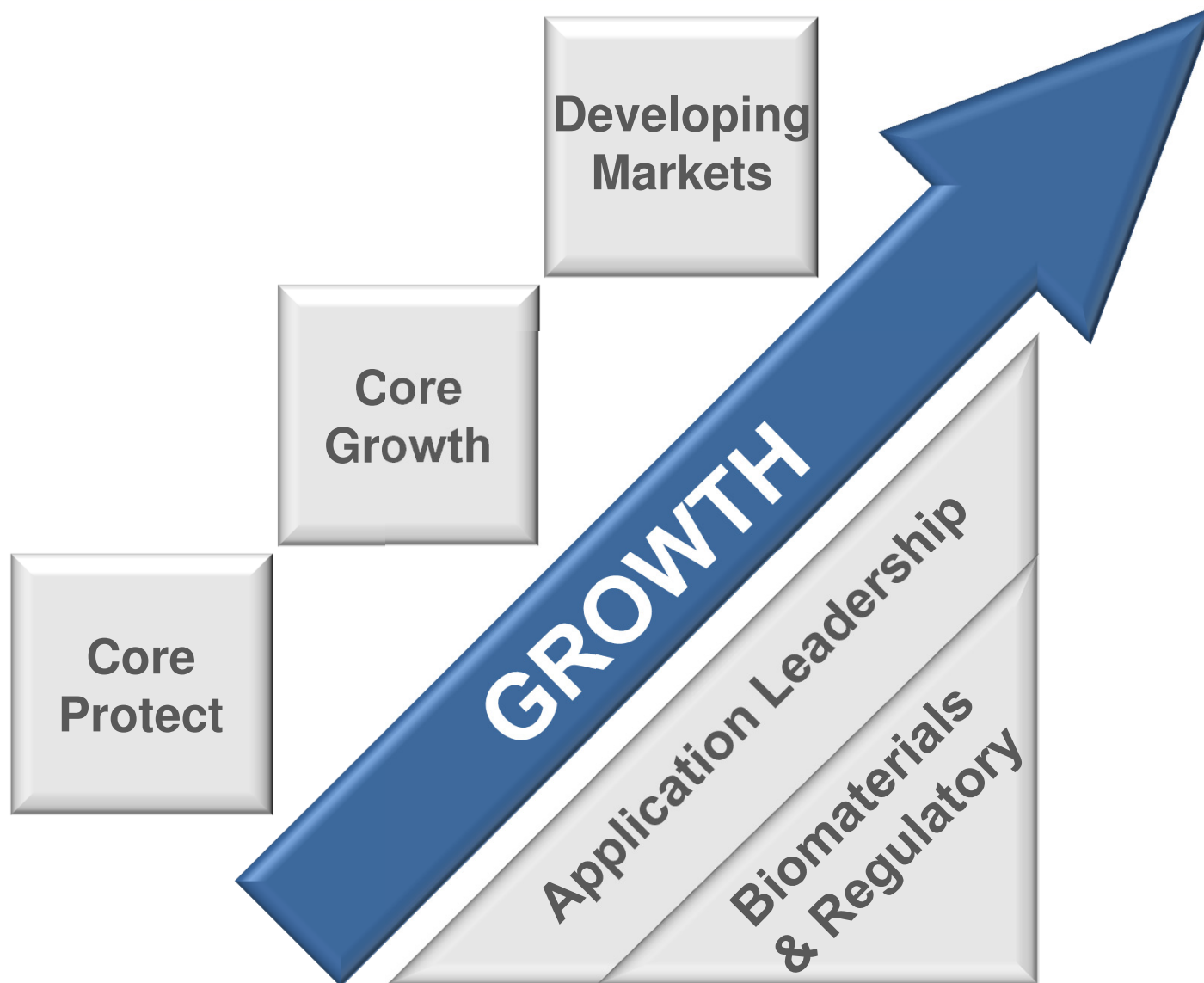


# Invibio Biomaterial Solutions

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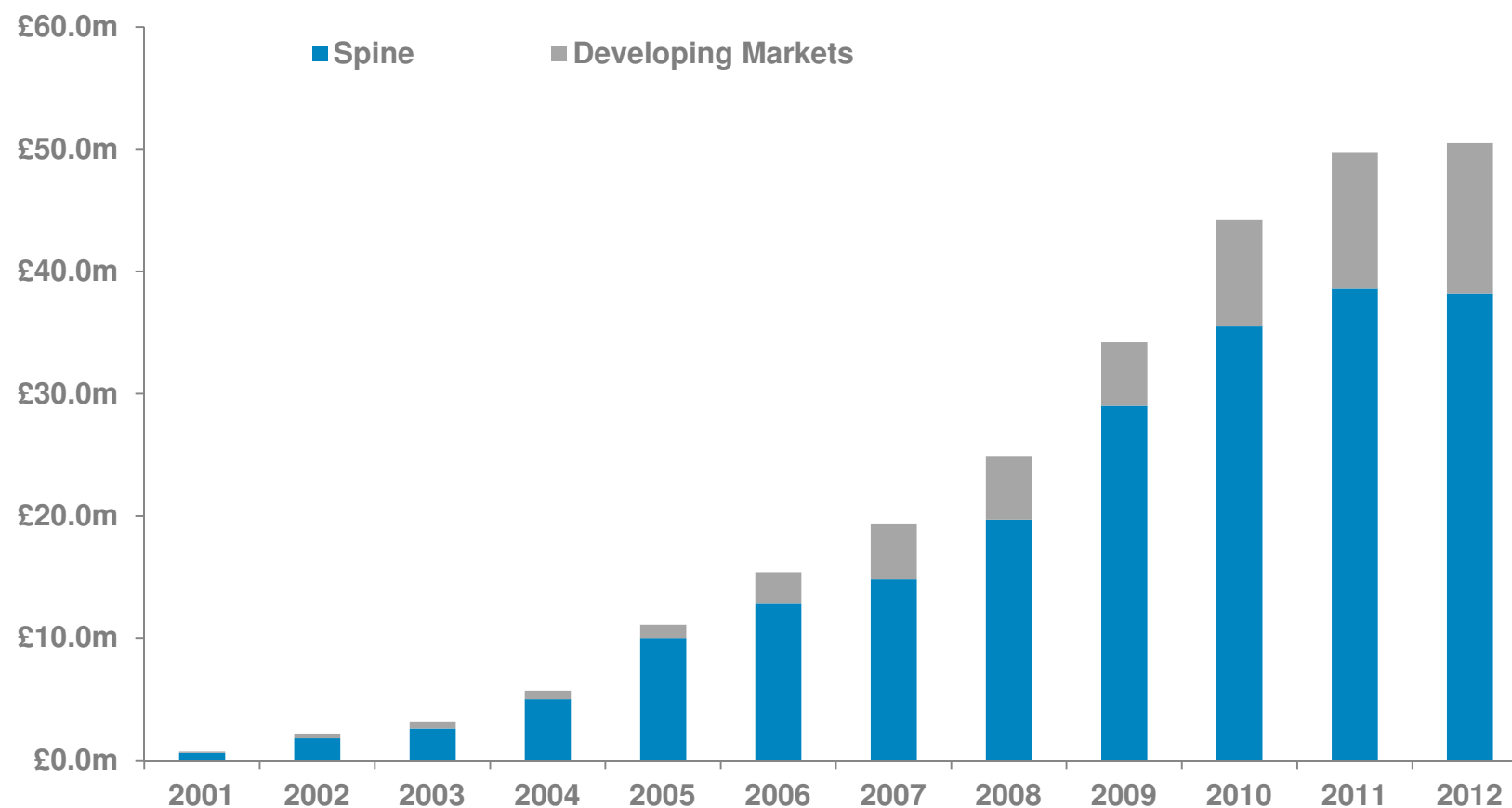
- ✓ *Strategy Overview* *David Hummel*
- ✓ *Regulatory Overview* *Craig Valentine*
- ✓ *Spine Business Overview* *Brian Roberts*
- ✓ *Developing Markets Overview* *John Devine*
- ✓ *Summary* *John Devine*

# Invivo Strategy



# Our Past, Our Future

*Historical success from Spine, fuels broader basis for future growth*



# Medical

## *Invibio Biomaterials – driving innovation, superior performance and solutions in the medical device industry*

### Our markets

- ✓ Medical

### Industry Trends

#### Ageing Global Population

- ✓ People are living longer lives and have a strong desire to maintain their quality of life, even in their elderly years

### Impact

- ✓ Increasing need to replace worn out body parts or to alleviate pain in order to resume normal activities. e.g. 9 out of 10 adults will experience back pain in their life

### Opportunity

#### Spinal treatments

- ✓ Invibio provide materials that alleviate back pain and can be used in a minimally disruptive manner, accelerating patient recovery

#### Arthroplasty

- ✓ Our materials are also used to provide more durable devices in the repair of hip, knee and shoulder joints



# Medical

## *Invibio Biomaterials – driving innovation, superior performance and solutions in the medical device industry*

### Our markets

- ✓ Medical

### Industry Trends

#### Healthcare costs

- ✓ Healthcare costs are rising, especially with the increasing number of older adults

### Impact

- ✓ Healthcare providers worldwide have the desire to treat patients but need to find a way to reduce the costs of patient care

### Opportunity

#### Solutions

- ✓ Invibio constantly seek to provide solutions that address healthcare costs. We work hard with medical device companies to provide more effective devices that can shorten hospital stays or reduce revision surgeries

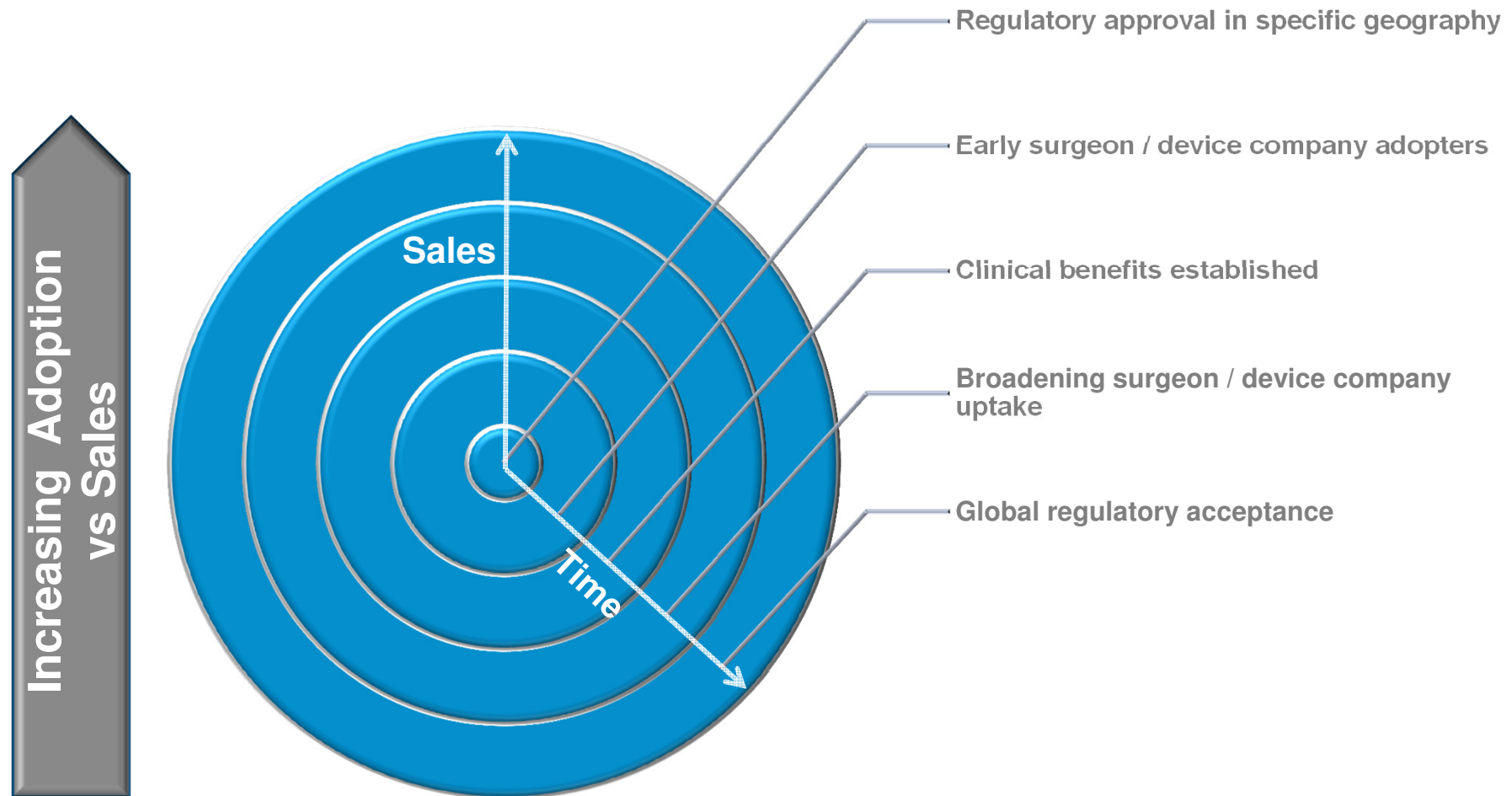
#### Materials

- ✓ Our materials lend themselves to very efficient manufacturing, meaning more cost-effective devices for the population





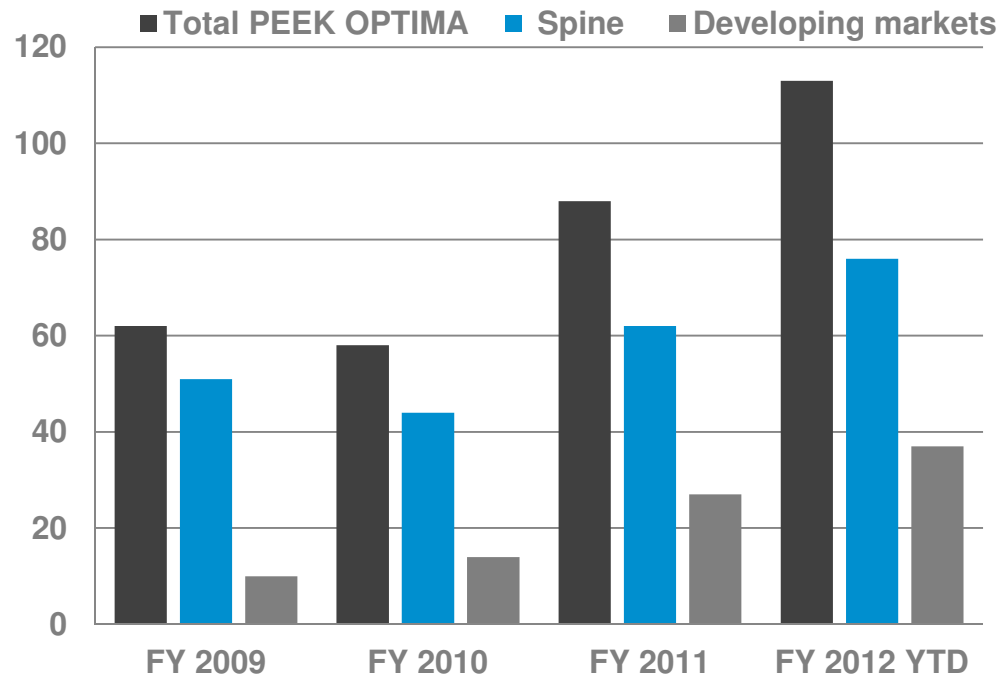
# New Technology Adoption in Medical Devices



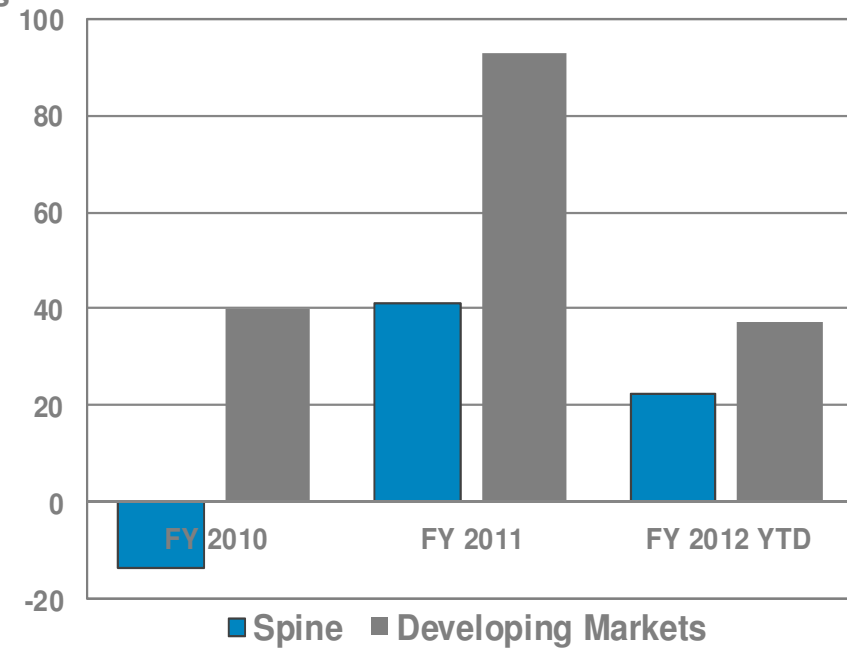
# US FDA 510k Device Clearances

*Use of PEEK-OPTIMA® in new devices continues to grow*

*Total number of clearances*



*% Change*



# Regulatory Focus – Why?

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“Targeting the growing middle class in China, India and other emerging countries may be potentially less risky than creating new products for the flat U.S market”

**Omar Ishrak – Medtronic CEO, August 21<sup>st</sup> Analysts Call**

“In China and India we made about \$120m in sales [over the past year]. The goal here is to grow that five times by the end of 2015.”

**Olivier Buhoun – Smith and Nephew CEO, August 5<sup>th</sup> 2011.**

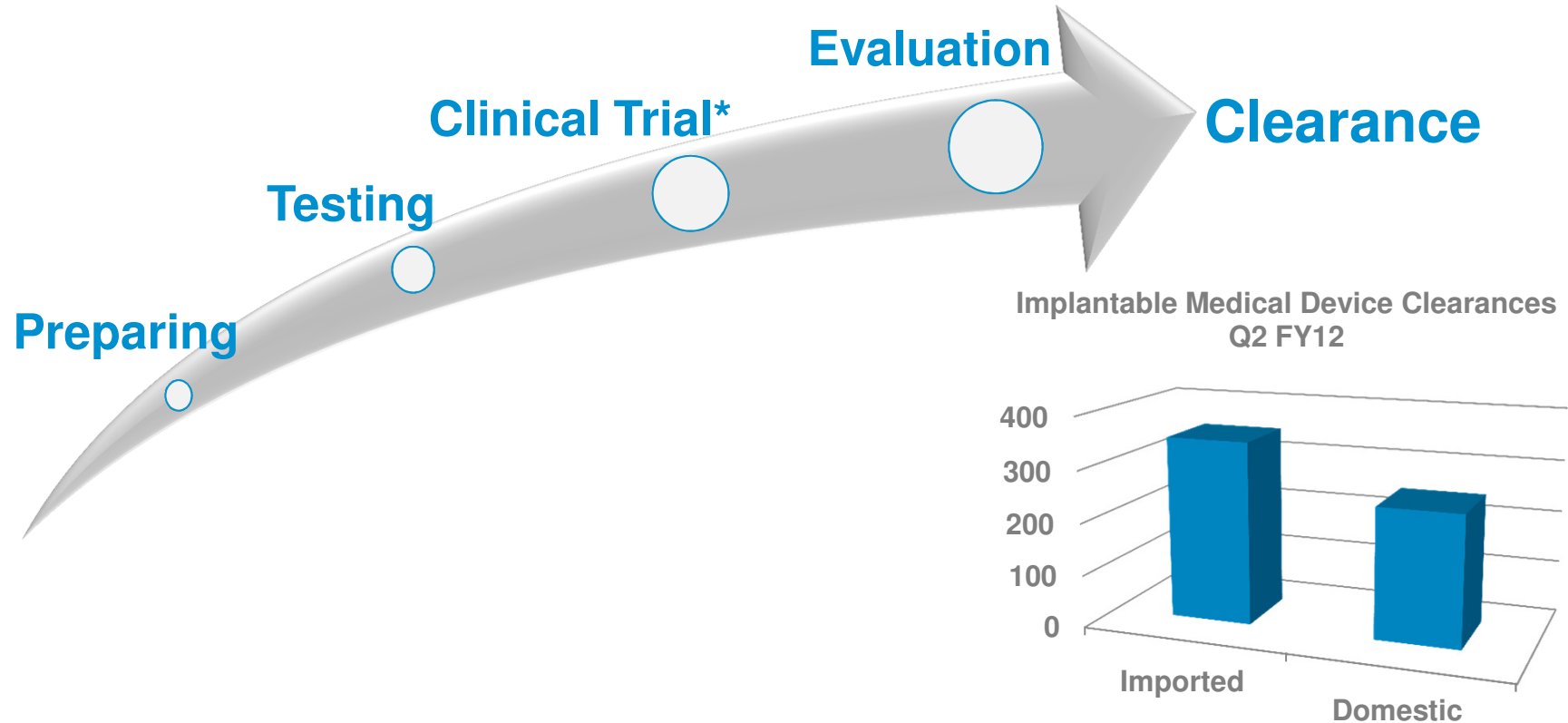
- Global Medical Device Companies are very focussed on emerging market revenue, but they need our help to achieve their long term goals

# Global Regulatory Presence



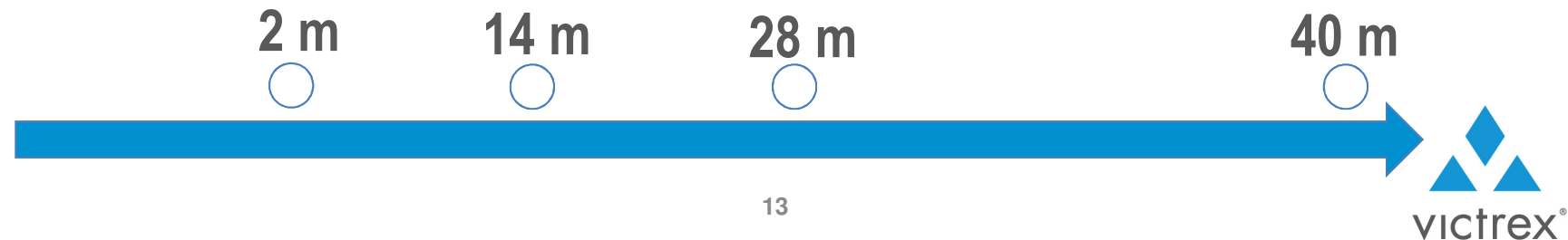
- ✓ *Medical device regulatory professionals*
- ✓ *Regional clearance process expertise*
- ✓ *Regulatory agency knowledge and collaboration*

# Example: China SFDA Clearance Process



*\*13 PEEK-OPTIMA based devices = 3% of clearances*

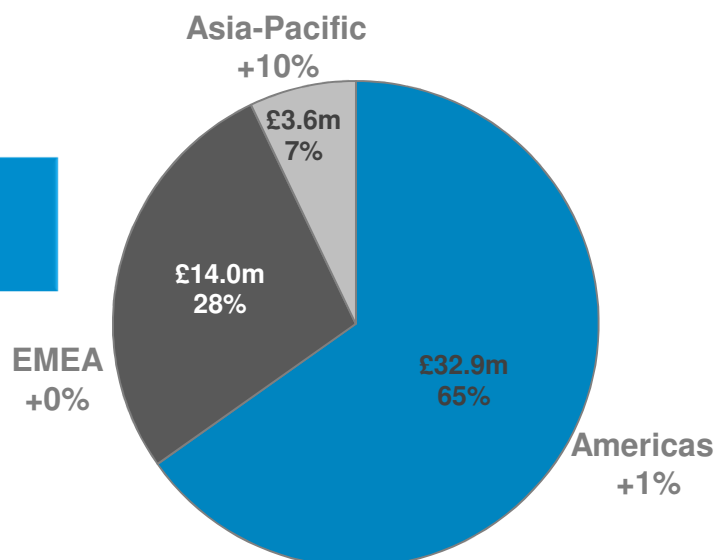
## Domestic Customers



# Our Business – Key Markets

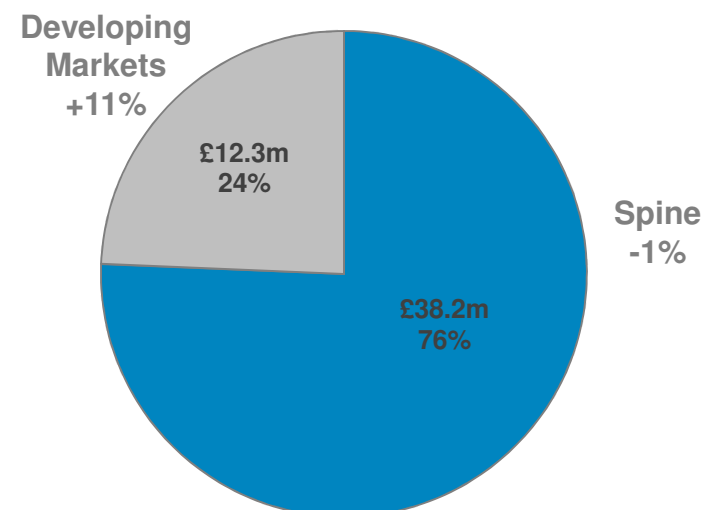
*Accelerating growth outside of core spine and established geographies*

Geographical Segments

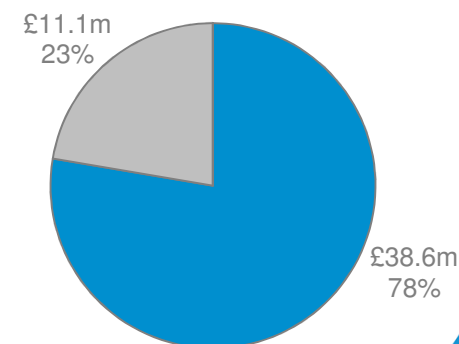
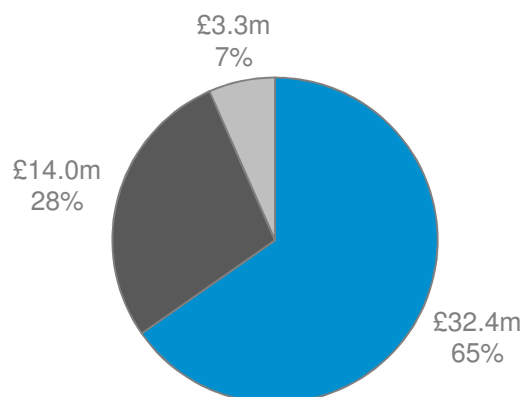


2012: £50.5m  
+2%

Market Segments



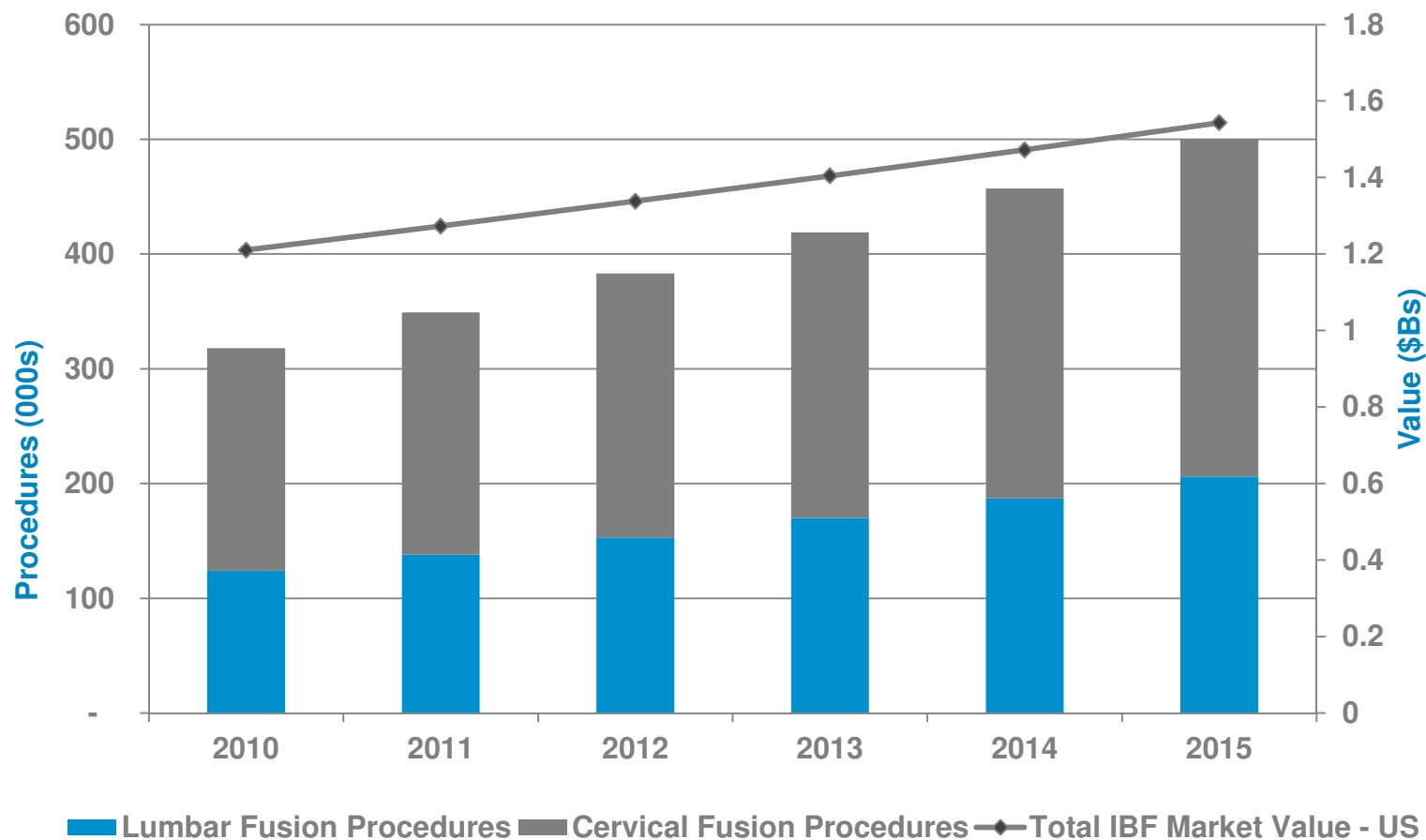
2011: £49.7m

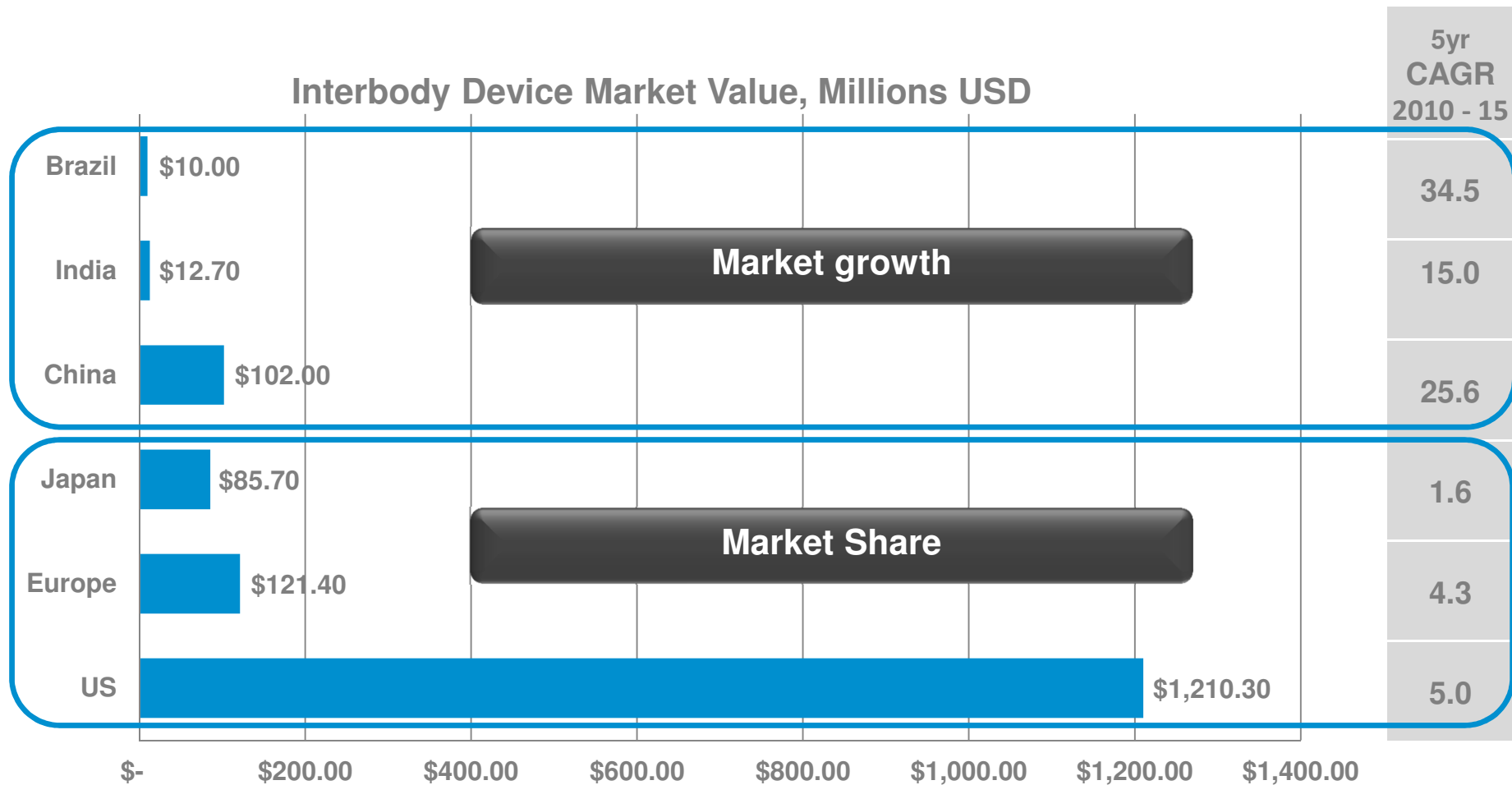


# Spine

## Core US Market

*Cervical growth presents opportunity*







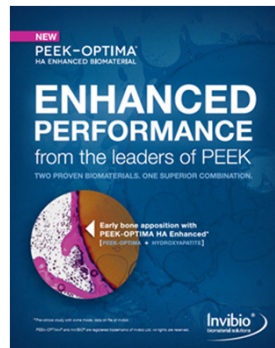
# Spine

# Right to Win

*Leverage position to drive Growth*

## Market Leader

✓ *Blue Chips, start-ups, across Geographies*



## Market Knowledge

✓ *Positioned well to listen and deliver to customer needs beyond today*

## Market Focus

✓ *Focus on solving regional complexities ahead of our customers to drive shared growth*



# Spine

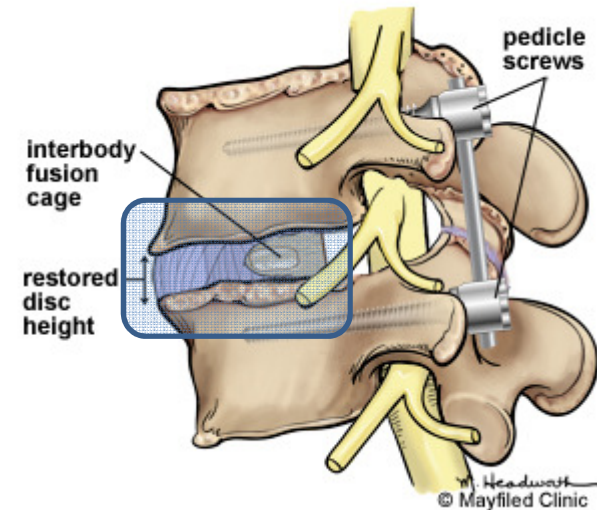
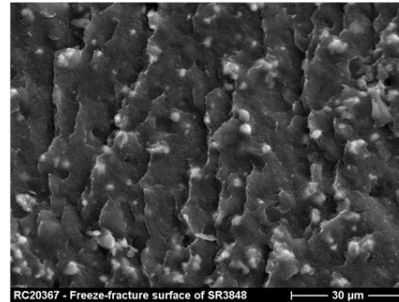
# Interbody Fusion

*Protect & extend leadership*

## Industry Standard



## Next Generation



- ✓ **High penetration** within US /EU markets
- ✓ **Low penetration** in high growth, emerging geographies

- ✓ **Clinical benefits** for patient
- ✓ **Economic advantage** for customer
- ✓ **Differentiation** and **value capture** for Invivo

*More PEEK-OPTIMA per fusion*



- ✓ **Invibio delivers:** *value material, manufacturing, regulatory, testing*
  - ✓ Clinical **benefits** for patient
  - ✓ Economic **advantage** for customer
  - ✓ Invibio **value** capture per procedure

# Developing Markets

# Right to Win

*Growth potential beyond Spine*

## Demonstrated success within Arthroscopy

- ✓ *Increasing penetration in high procedure market*



## Targeted application growth opportunities

- ✓ *Accelerate growth where Surgeon acceptance and clinical benefit have been established*

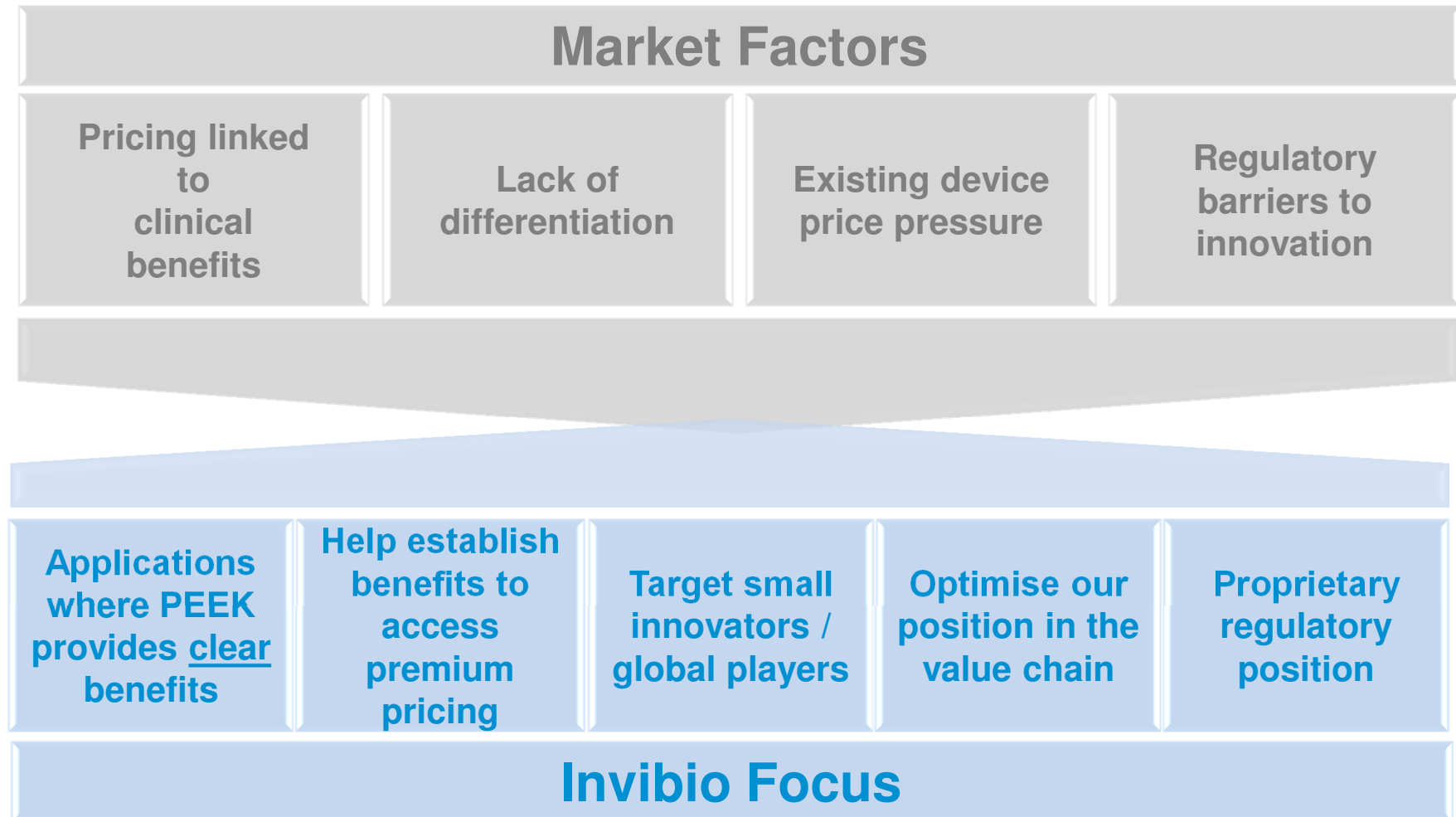


## Future application prioritisation

- ✓ *Clear focus in prioritizing pipeline of new market growth opportunities*



# Business Aligned with Markets



# New Application Leadership-Today

## High value removable dentures

### Proposition

- ✓ *Targeting the 1.5m high value frames per annum market*
- ✓ *JUVORA brand established to sell a CE marked disc direct to dental labs*
- ✓ *Initial market introduction CY13 with 10 tier one labs*



### Benefits

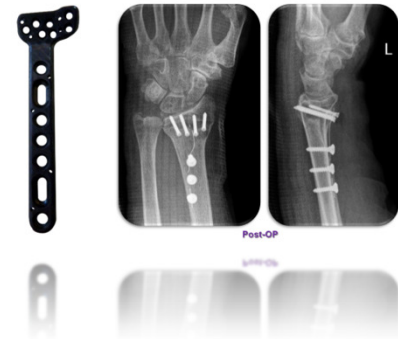
- ✓ *Benefits to patients in terms of comfort, fit and feel*
- ✓ *Low risk, fast clinical feedback application*



# New Application Leadership-The Future

## Trauma Plates and Nails

- ✓ *Initial composite trauma devices are in use and approved via the faster access 510k regulatory route in the US*
- ✓ *Key clinical benefits are fatigue and accelerated healing*



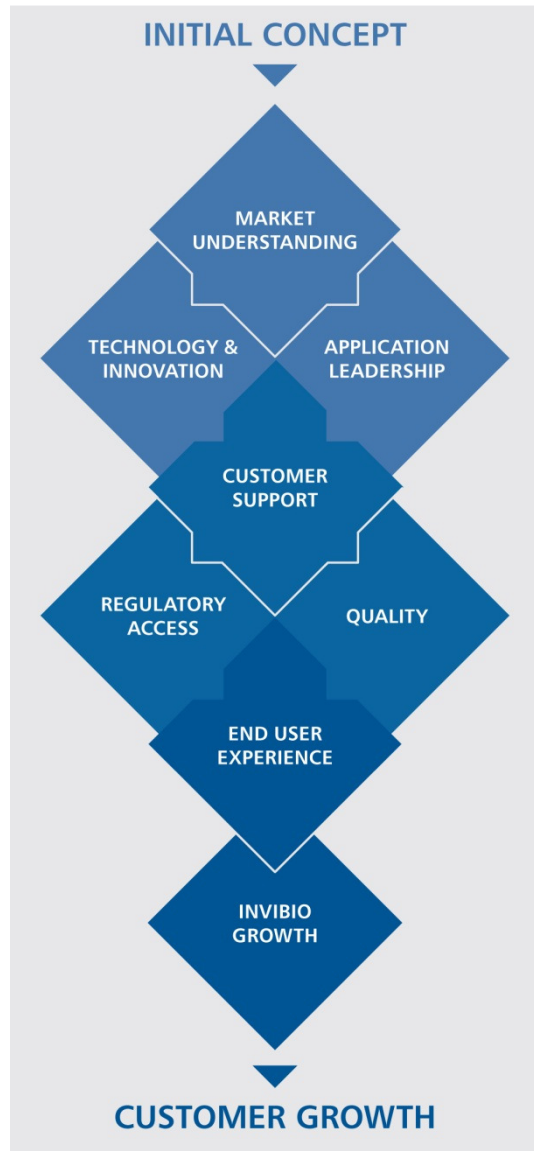
## Femoral Components of Knees

- ✓ *Longer term Class III device but estimated to be one of the most common surgical procedures (1.3m procedures per annum)*
- ✓ *Key clinical benefits need to be established but PEEK-OPTIMA offers device companies the potential to significantly change cost base – IP rich area*



# Summary

## *Initial Concept to Customer Growth*



✓ *Opportunity Development*

✓ *Product Realisation*

✓ *Value Creation*



# Victrex Polymer Solutions



## Key markets and application areas



AEROSPACE



AUTOMOTIVE



SEMICONDUCTOR



ELECTRONICS



INDUSTRIAL



MEDICAL



FOOD PROCESSING



MILITARY

# Victrex Polymer Solutions

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✓ *Strategy & Business Overview*

*Tim Cooper*

✓ *Capacity Investment*

*Kenny Gilmour*

✓ *Summary*

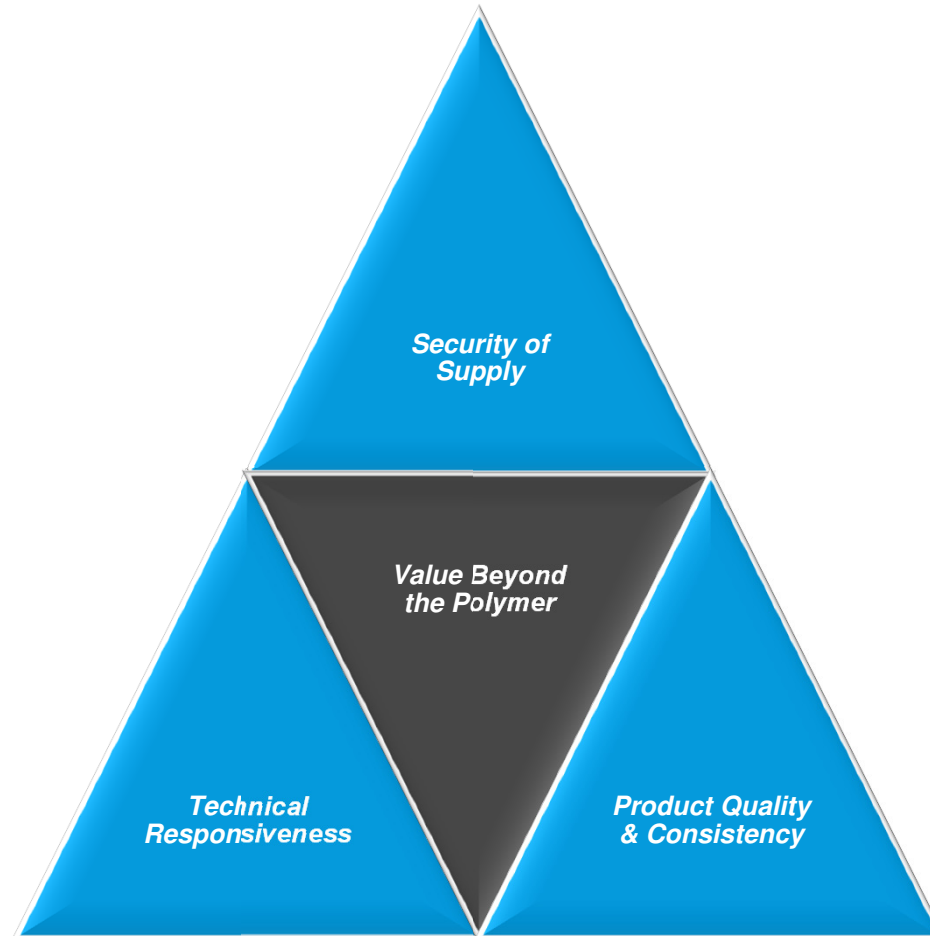
*Tim Cooper*

# VPS Strategy



# Customer Proposition

## *Value Beyond the Polymer*



# Megatrends

## *Responding to the changing world*

Major themes		Industry impacted
Climate change	<ul style="list-style-type: none"> <li>• Clean energy initiatives</li> <li>• Energy efficiency to mitigate climate change</li> <li>• New legislation and environmental control programs</li> </ul>	Industrial Transport
Natural resource scarcity	<ul style="list-style-type: none"> <li>• Natural resources being depleted at increasing rates</li> <li>• Widening efforts to offset supply constraints, e.g. process efficiencies, automation, technological advances</li> </ul>	Oil & Gas Alternative energy Nuclear
Urbanisation	<ul style="list-style-type: none"> <li>• Mass transit and other infrastructure required to satisfy urbanisation</li> <li>• Building efficiency</li> </ul>	Electronics Transport
The new economic growth map	<ul style="list-style-type: none"> <li>• Weak growth outlook for developed economies</li> <li>• Emerging markets expected to be the true driver of world GDP growth</li> </ul>	Electronics Industrial Transport

# Transport

## *VICTREX PEEK – a Key Enabler for Industry Trends*

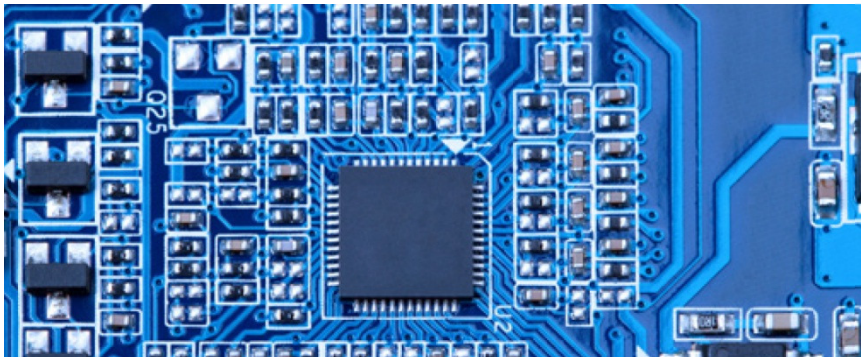
Our markets	Industry Trends	Impact	Opportunity
<ul style="list-style-type: none"><li>Automotive</li><li>Aerospace</li></ul>	<ul style="list-style-type: none"><li>Maximizing<ul style="list-style-type: none"><li>-Performance</li><li>-Reliability</li><li>-Safety</li></ul></li><li>Minimizing<ul style="list-style-type: none"><li>-Fuel consumption</li><li>-Weight</li><li>-Cost</li></ul></li></ul>	<ul style="list-style-type: none"><li>Specification of materials that:<ul style="list-style-type: none"><li>-withstand harsh environments</li><li>- reduce manufacturing costs</li><li>- offer processing flexibility</li></ul></li></ul>	<p>Light weighting via metal replacement</p> <p>Ease of manufacturing by combining several components into a single part</p> <p>Easier assembly for manufacturers and overall reductions in operating costs</p>



# Electronics

## *VICTREX PEEK – a Key Enabler for Industry Trends*

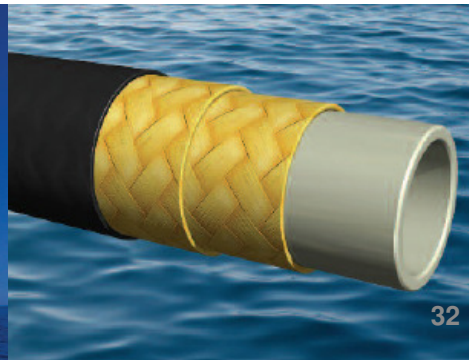
Our markets	Industry Trends	Impact	Opportunity
<ul style="list-style-type: none"><li>• Mobile phones</li><li>• Circuit boards</li><li>• Printers</li><li>• LEDs</li><li>• Connectors</li><li>• Batteries</li><li>• HDD (Hard disk drives)</li><li>• Computers</li><li>• Switches</li></ul>	<ul style="list-style-type: none"><li>• Maximizing<ul style="list-style-type: none"><li>-Performance and reliability</li><li>-Portability</li><li>-Wireless/ high frequency</li><li>-Part life</li></ul></li><li>• Minimizing<ul style="list-style-type: none"><li>-Environmental impact</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Specification of materials that:<ul style="list-style-type: none"><li>-Provide greater design flexibility</li><li>-Can be mass produced</li><li>-Improve acoustic performance</li><li>-Reduce part size</li></ul></li></ul>	<p>Superior processability providing a cost-effective material solution</p> <p>High melt and continuous operating temperatures</p> <p>Use of APTIV film to provide quality acoustic performance in small spaces</p>



# Industrial

## *VICTREX PEEK – a Key Enabler for Industry Trends*

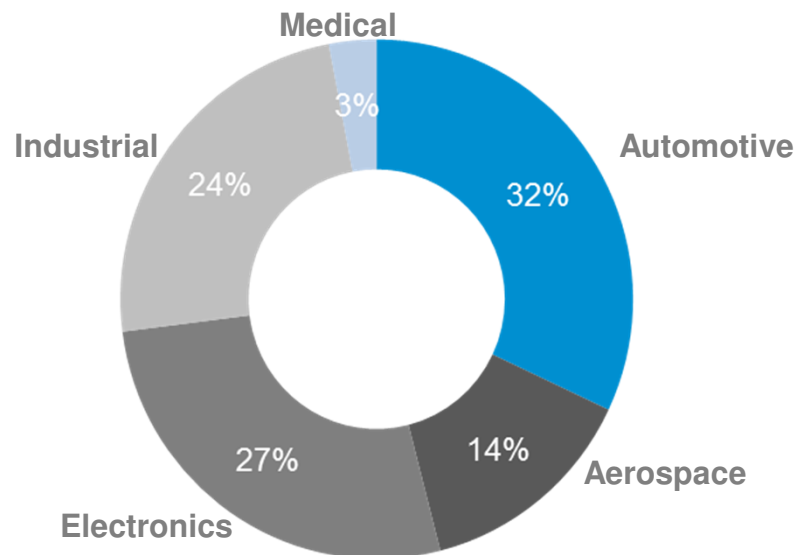
Our markets	Industry Trends	Impact	Opportunity
<ul style="list-style-type: none"><li>• Oil &amp; Gas</li><li>• Food Processing</li><li>• Textile Machinery</li><li>• Renewable Energy</li></ul>	<ul style="list-style-type: none"><li>• Maximizing<ul style="list-style-type: none"><li>-Exploration in higher temperatures &amp; pressures in more chemically aggressive conditions</li><li>-Application development in nuclear, geothermal, hydro, solar and wind power</li></ul></li><li>• Minimizing<ul style="list-style-type: none"><li>-Losses due to downtime associated with component failure</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Specification of materials that:<ul style="list-style-type: none"><li>-Significantly improve efficient resource recovery</li><li>-Deliver reliable performance at higher temperatures, higher pressures &amp; extreme water depths</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Victrex high performance materials are chosen for their unique combination of chemical, electrical, wear, hydrolysis and temperature resistance properties</li><li>• APTIV film provides all the performance properties of VICTREX PEEK polymer in a flexible film format</li><li>• VICOTE Coatings offer excellent wear, abrasion and scratch resistance</li></ul>





# Strong & Diverse Pipeline

## *Development Pipeline by Industry*



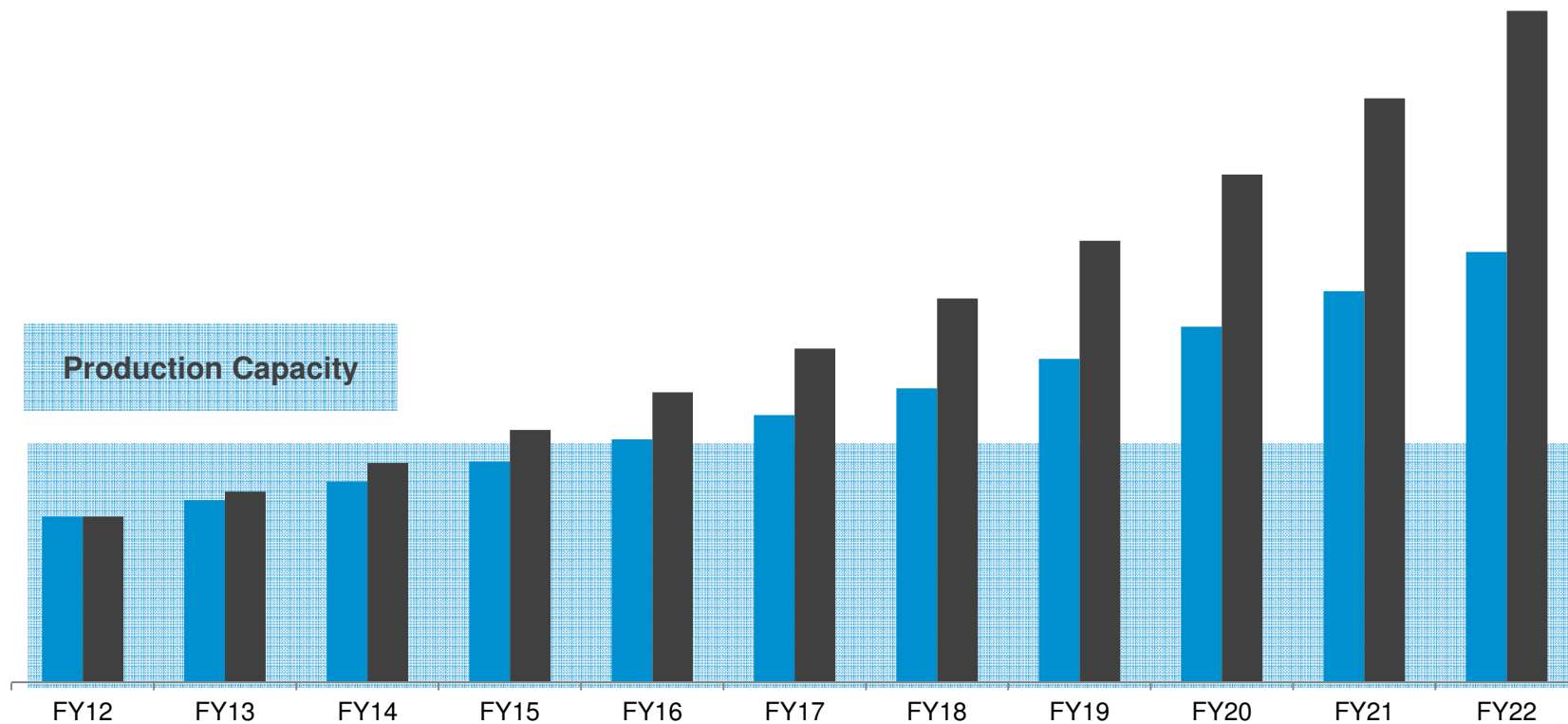
2,460tes MAV  
March 2012

- ✓ *Market led, customer focused, approach to growth*
- ✓ *Leverage our application development and technical organisations*
- ✓ *Strong pipeline across multiple industries*

# Growth Scenarios v Existing Capacity

Annual growth extrapolated at 10%

Annual growth extrapolated at 15%



# Growth Drivers

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- ✓ *Growing market for PEEK*
- ✓ *Strong & diverse pipeline*
- ✓ *Technical Programs*
- ✓ *Capacity headroom*

# Capacity Investment

*Construction of new PEEK capacity announced October 2012*



**2,900tpa  
additional  
capacity**

**£90M investment**

**Completion early  
2015**

# Capacity Investment

## *Hillhouse site location*



**Protect  
know-how**

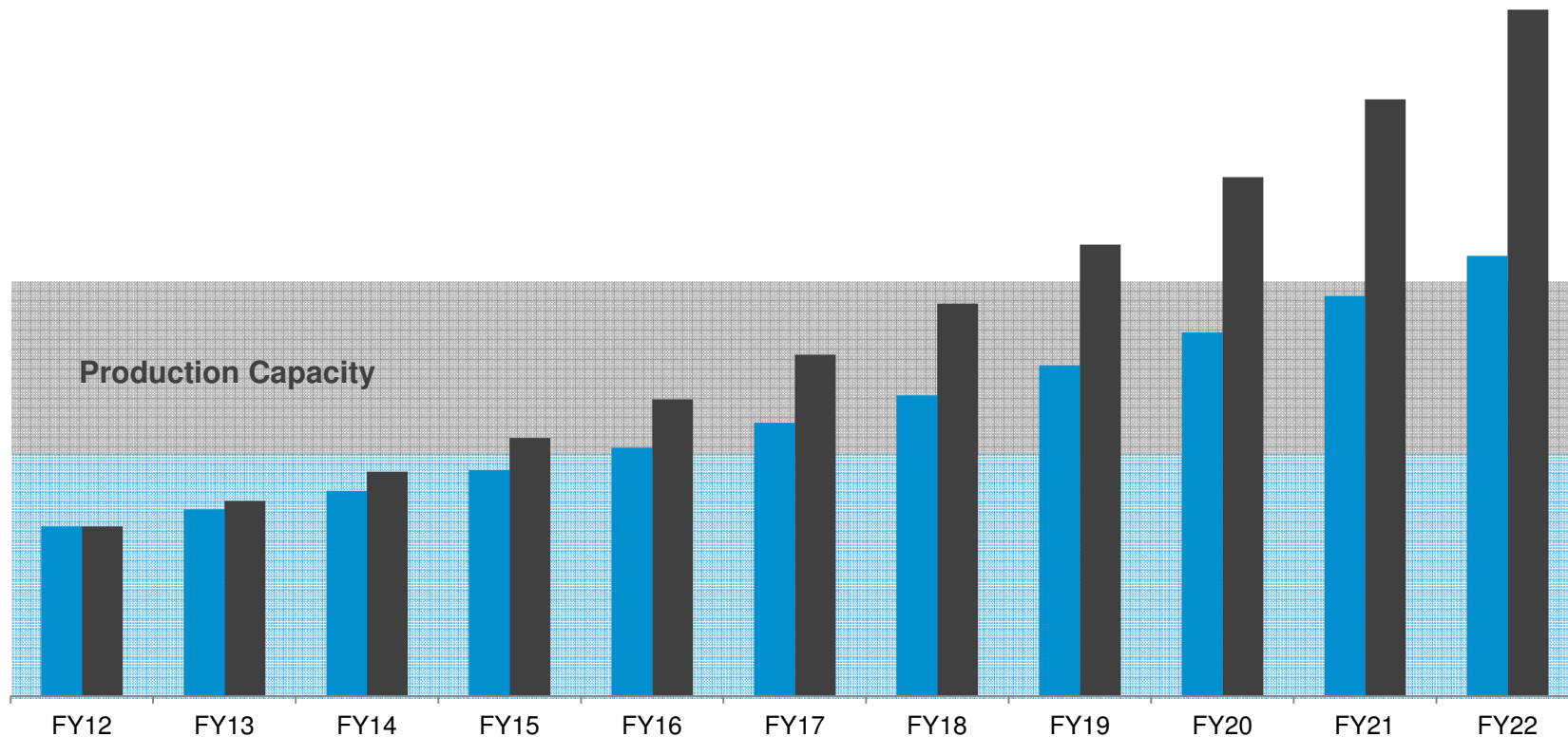
**Reduce risk  
time**

**Leverage  
infrastructure**

# Growth Scenarios v Increased Capacity

Annual growth extrapolated at 10%

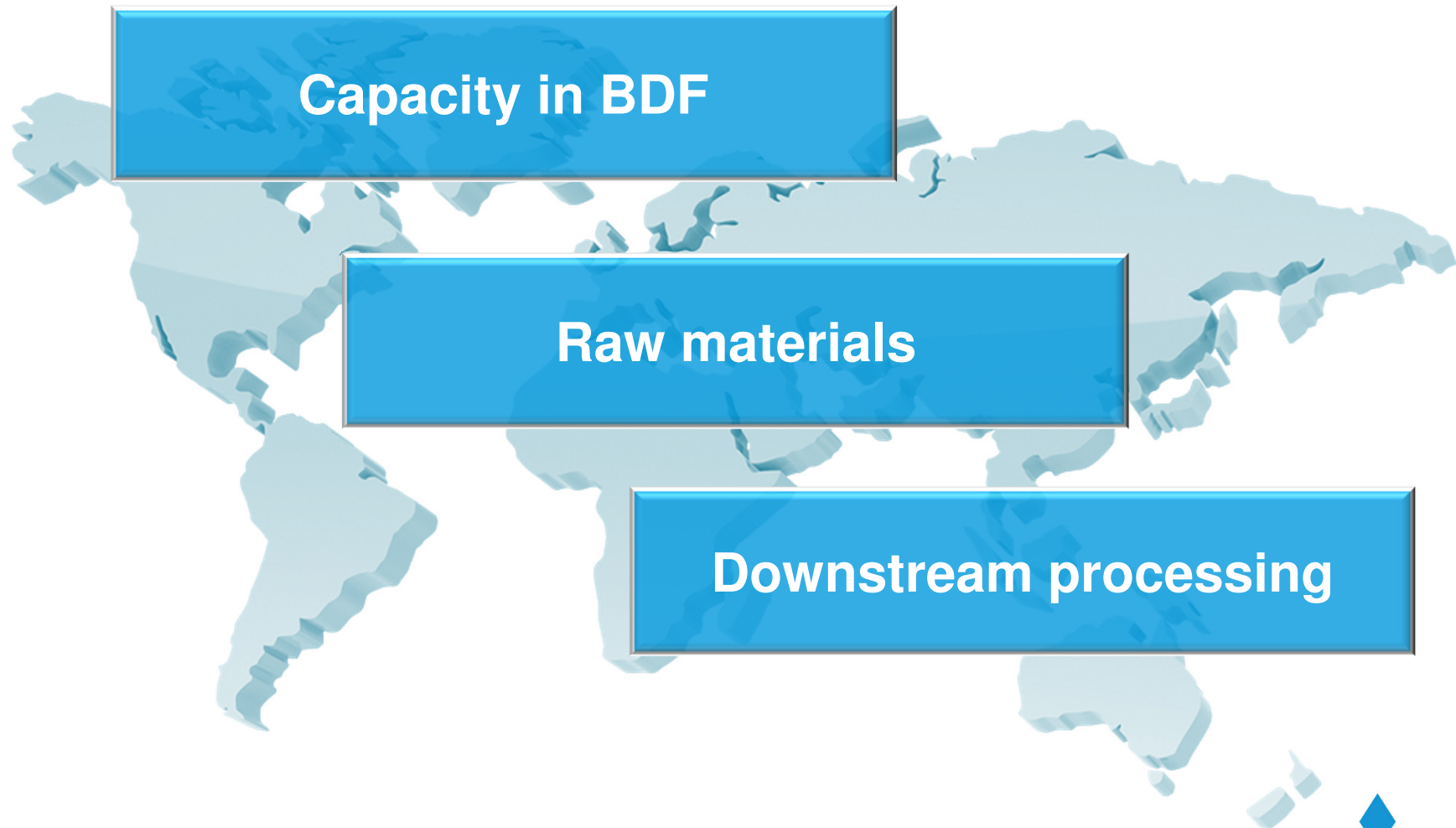
Annual growth extrapolated at 15%





# Supply Chain

*Investment in supply chain to support growth*



# Summary

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**Capacity**



**Confidence**

**Value**



**Sustainability**

**Market trends**

**Market focus**



**Growth**





*Questions?*





## ***Tour of facilities***

***12:30***

***Informal lunch***

***13:20***

***Group 1 – VPS Technical Centre***

***Group 2 – Invibio Manufacturing Facility***

***13:40***

***Group 1 – Invibio Manufacturing Facility***

***Group 2 – VPS Technical Centre***

***14:00***

***Peek Production Facilities***

***14:50***

***Return to VTC & depart***