



REVA's Bioresorbable Pipeline

*Fantom*TM Sirolimus-Eluting Bioresorbable Scaffold

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Potential conflicts of interest

Speaker's name: Dr. Alexandre Abizaid

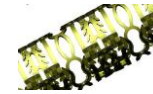
- I do not have any potential conflict of interest
- I have the following potential conflicts of interest to report:

Institutional grant/research support: REVA Medical, Inc.

Consultant: REVA Medical, Inc.

REVA's Technology History

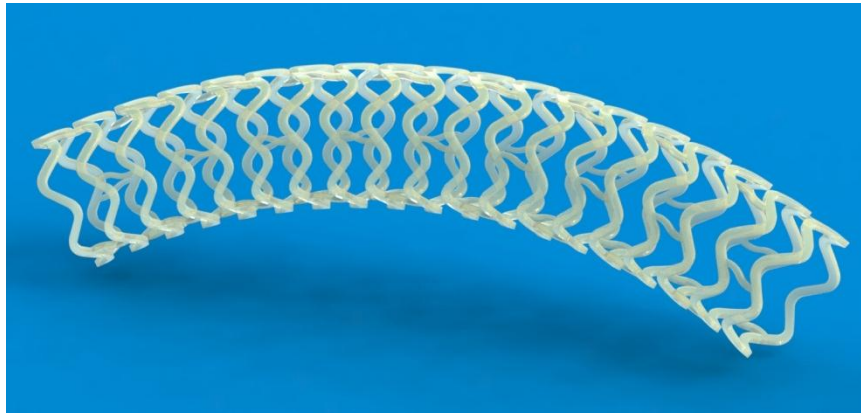
- 1998: Company founded around novel steel slide & lock design
 - For minimal recoil
- 2002: Initiated development of *tyrosine-derived polycarbonate* polymer
 - Rutgers University
 - Foundation for REVA's distinctive attributes for polymer scaffolds
- 2003: 100% effort on bioresorbable scaffolds
 - Evaluated in > 1,000 animals and advanced bench tests
 - Evaluated in > 150 patients beginning in 2007
 - Proved acute performance, safe resorption, visibility, drug delivery
- 2014: Introduction of *Fantom*TM



Transition to *Fantom*

- *ReZolve* elegantly designed...but
 - Design required relatively thicker strut segments
 - Up to 230 microns in locking sections
 - A scaffold with -0- recoil is not necessary
 - REVA polymer advancements led to increased design options
- Physician's demands for ease of use are increasing
 - More deliverable and lower profile devices
 - Devices that require standard inflation techniques
 - Devices that can be visualized more readily

Foundation of the *Fantom* Platform



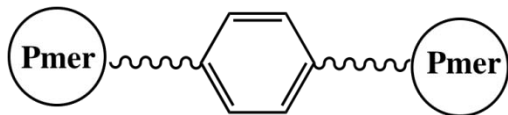
Fantom[™] Sirolimus-Eluting Bioresorbable Scaffold

REVA Polymers vs. Competitive Polymers

Key Structural Polymer Building Blocks

REVA polymer family

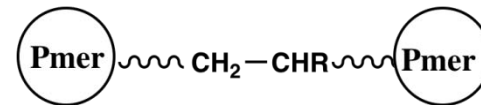
- High-performance biomaterials



- **Based on phenyl ring structure**

Competitive Polymers

- Polylactide-based



- Based on Alkane structure

Phenyl ring structure provides high strength, radiopaque materials without compromising structural properties

Performance Targets

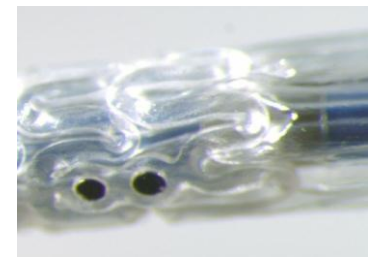
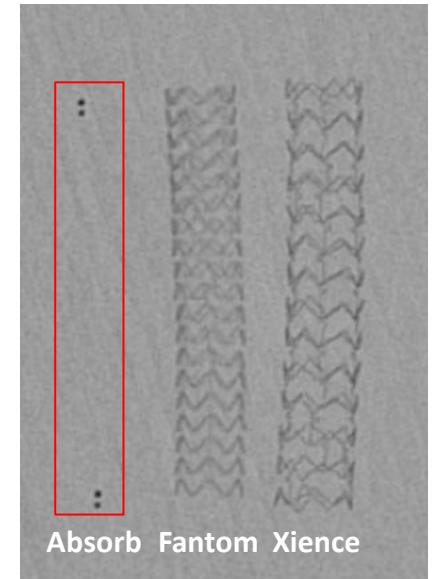
vs. Competitive Polylactide-Based Scaffolds

Attribute	<i>Fantom</i>	<i>Performance</i>
Radiopacity	+++	Complete X-Ray Visibility
Strength	+	Increase in radial strength
Degradation time	=	Equivalent
Crossing profile	+	Reduced Crossing Profile
Inflation performance	++	Single Step Inflation
Expansion Range	+	Meets Clinical Need
Shipping and storage	+	Controlled Shipping Room Temp. Storage

Fantom Bioresorbable Scaffold

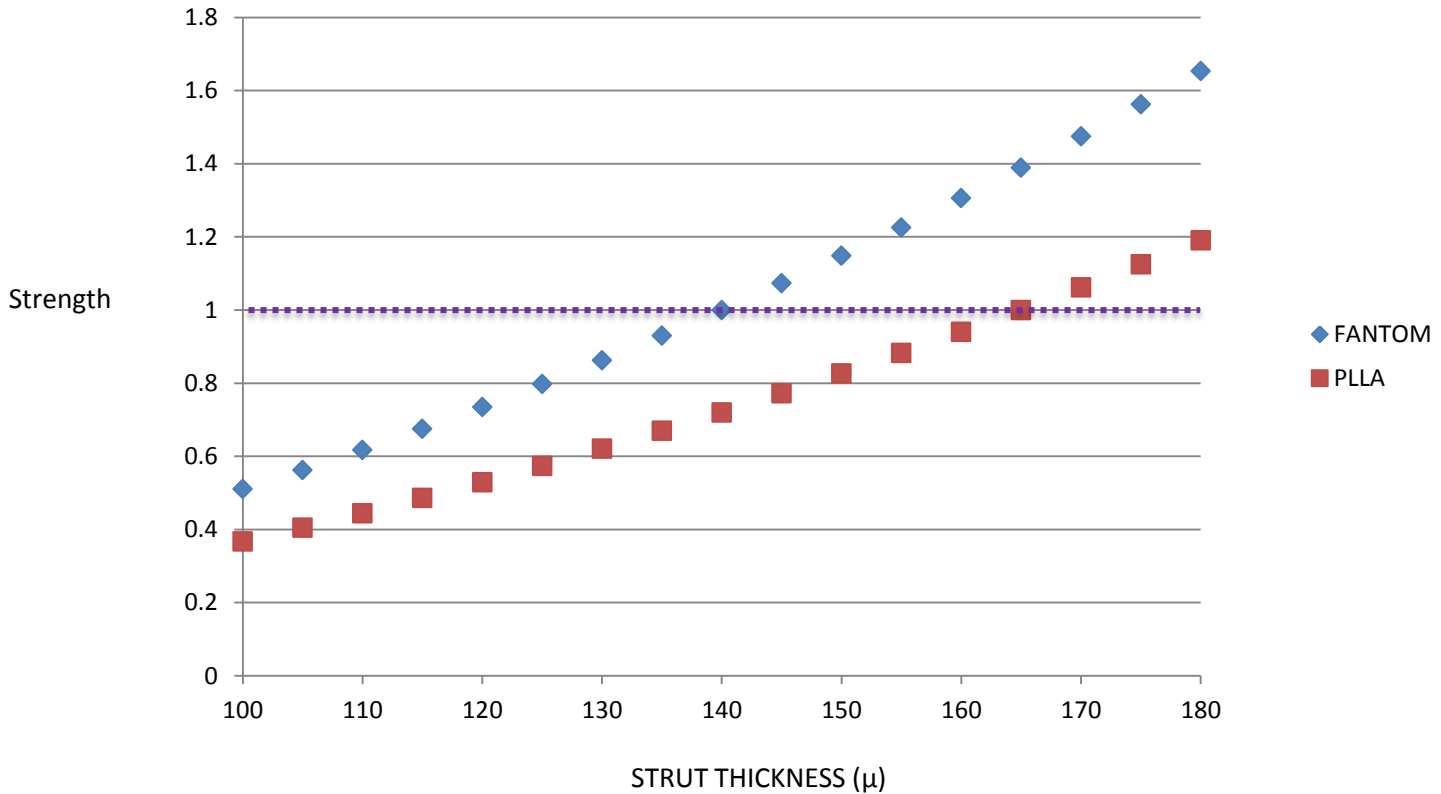
Radiopacity

- *Fantom's* complete (x-ray) visibility increases confidence during the procedure
 - Precise scaffold placement
 - Complete lesion coverage
 - No geographic miss
 - Confirmation of apposition to vessel wall
 - Reduces need for IVUS & OCT catheter use
 - Saving costs to hospital
 - No permanent metal markers left behind



Competitive Scaffolds Visualized Only
by Small Permanent Markers
(Scaffold Itself is Invisible)

Fantom Bioresorbable Scaffold Strength Target & Strut Thickness

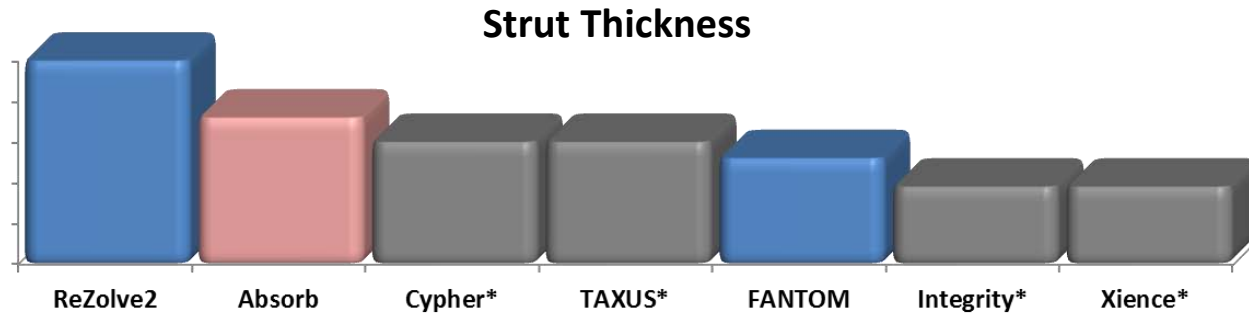


Increased polymer strength enables reduced strut thickness

Fantom's Low Crossing Profile

Approaches Profiles of Metallic Stents

- The design goal is to reduce strut thickness without sacrificing scaffold strength
- REVA's polymer family has the properties to achieve this goal

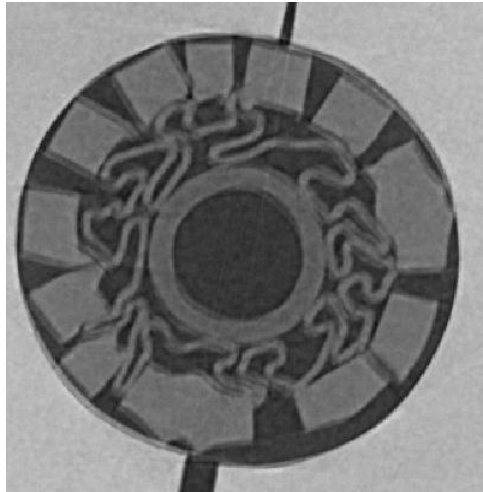


Decreased strut thickness enables reduced crossing profile

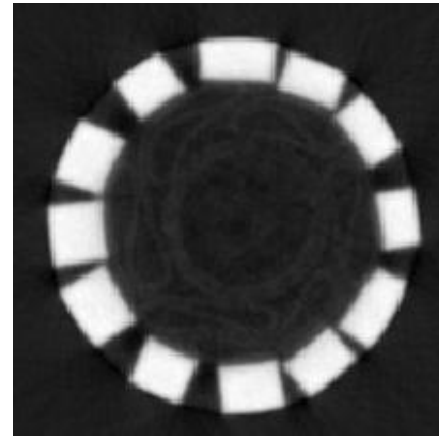
* Metal Drug-Eluting Stent

Effect of Strut Thickness on Crossing Profile

A Small Change Has a Big Impact



PLLA Scaffold
1.4 mm (.055")

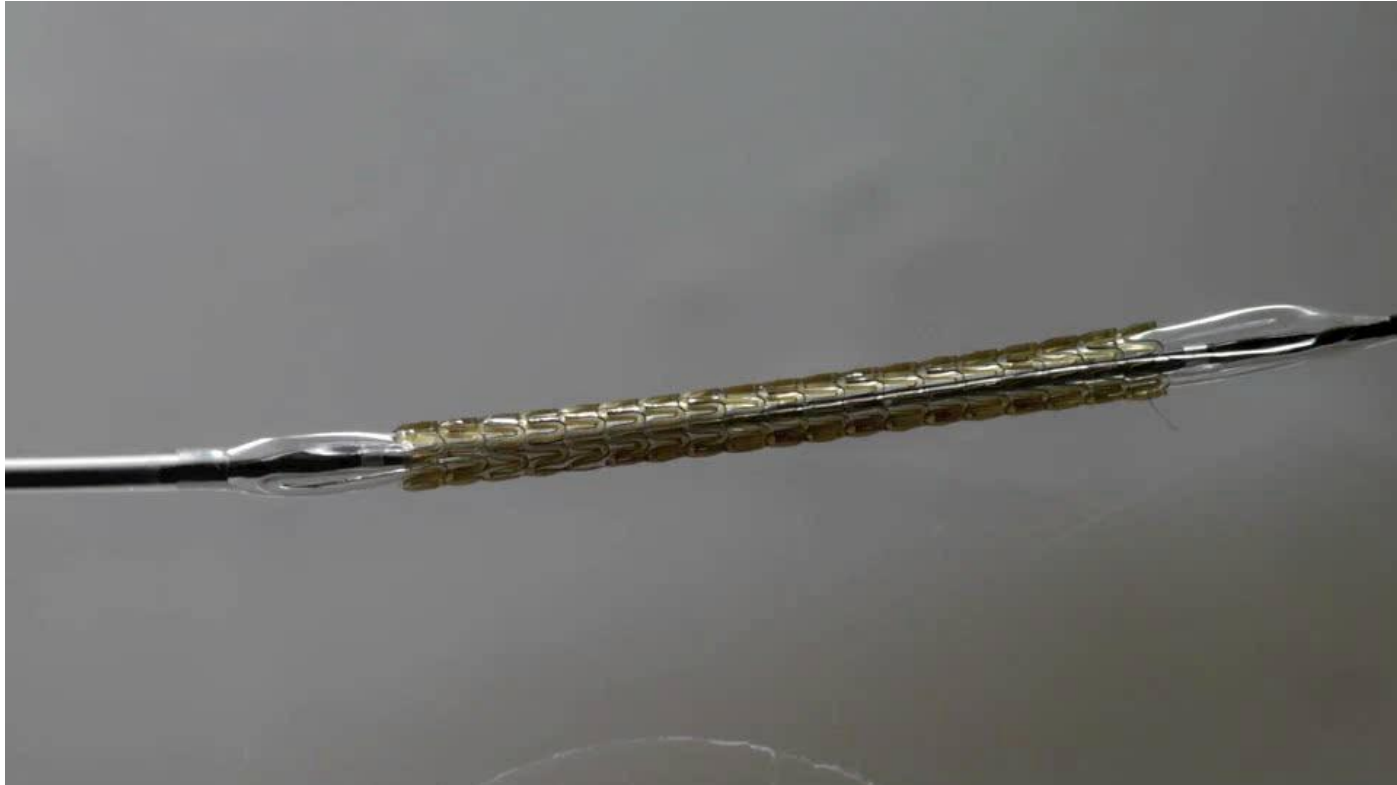


Phantom
<1.27 mm (.050")

A reduction in strut thickness of only 25 μm achieves 10% decrease in profile and significant improvements in deliverability

Fantom Bioresorbable Scaffold

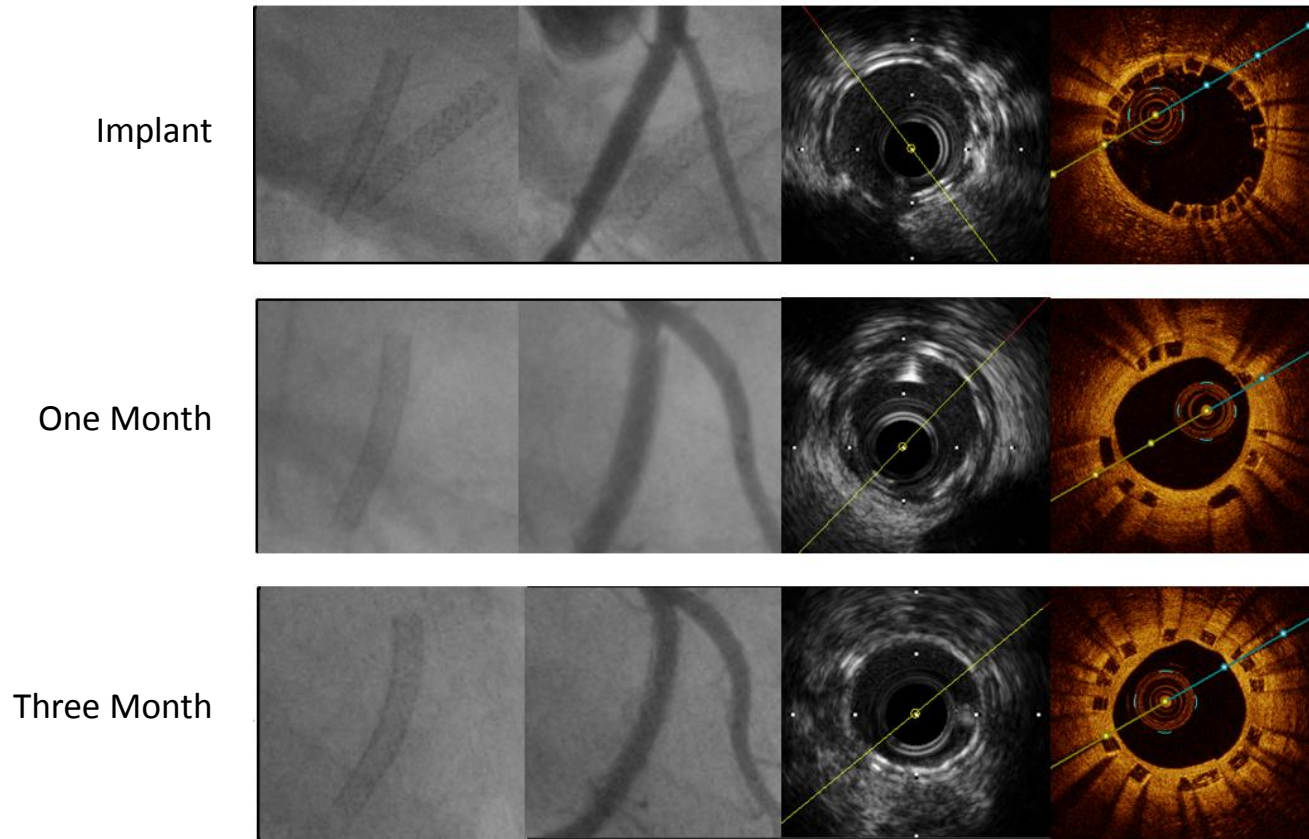
Single Step Inflation



REVAs Advanced Polymer enables single step inflation

Fantom Preclinical Results

Angiographic, IVUS and OCT Images thru 3 months



Visibility, conformability and maintenance of vessel patency

Fantom Clinical Plan

- **First Patient Implants** anticipated Q4'14
- **All CE sites fully enrolling** by early 2015
 - Up to 125 patients
 - Over 20 clinical investigational centers
 - BE, BR, DK, FR, DE, NL and PL
 - Primary endpoints
 - MACE and late lumen loss at six months

Fantom Bioresorbable Scaffold

Visibility • Strength • Ease-of-Use

- Superior Scaffold visibility
- Scaffold strength to treat challenging lesions
- Improved deliverability with reduced profile
- Expansion with one smooth and continuous inflation
 - No requirement for “stepped” inflation
- No procedural time limitations
- No special storage requirements

Human Clinical Evaluation Q4 2014

Thank you