Orchestra BioMed™

Accelerating high-impact technologies to patients through risk-reward sharing partnerships

Nasdaq: OBIO

Corporate Overview | November 2026

LEGAL NOTICE

Forward-Looking Statements

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INVESTMENT SUMMARY

Accelerating innovation to patients through partnerships

CAPITAL-EFFICIENT ROYALTY PARTNERSHIP MODEL

We drive R&D through pivotal trials in strategic collaboration with **partners that can optimize global commercialization**

TWO PIVOTAL-STAGE PROGRAMS TARGETING LARGE MARKETS

Our flagship technologies, **AVIM Therapy & Virtue SAB,** target significant needs in **large, established cardiovascular markets**

WELL-FUNDED & BACKED BY INDUSTRY LEADERS

Medtronic, Terumo and **Ligand** have provided **>$185M**[1] of **strategic capital,** with our current cash providing **runway through 2028**

RECENT & UPCOMING CATALYSTS

- **Surpassed full BACKBEAT Pivotal Trial enrollment**
- Present BACKBEAT primary endpoint data
- Potential FDA approval of AVIM Therapy
- Complete Virtue Pivotal Trial enrollment
- Medtronic AVIM Therapy commercial launch*
- Present Virtue primary endpoint data

**Assuming FDA approval. [1]Strategic capital reflects total amounts invested in and paid to OBIO by its partners.*

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OUR MODEL

Our partnership model optimizes execution and capital efficiency

WE FOCUS ON BEING GREAT AT:

- **High-impact innovation**
  differentiated technology with strong IP
- **Expert clinical execution**
  global pivotal trials that support regulatory approvals and optimized reimbursement
- **Value-creating partnerships**
  capital-efficient collaborations that create growth opportunities



WE RELY ON GREAT PARTNERS FOR:

- **Global commercialization**
  established sales, distribution, and support
- **Market leadership**
  trusted relationships, and deep field expertise
- **Operational & financial scale**
  proven manufacturing & strong balance sheets

We develop & prove novel therapies

We secure high-margin royalties without the cost structure

They commercialize at global scale

They secure significant revenue upside without R&D burden on their P&L

OUR MODEL IN ACTION

How we are actively bringing high-impact innovation to life



AVIM THERAPY

Atrioventricular Interval Modulation

Therapy for uncontrolled hypertension, the #1 comorbidity in the **$4 billion pacemaker market**[1]

Patented therapy delivered by a pacemaker that can **immediately, substantially and persistently lower blood pressure**

Medtronic

Global strategic collaboration

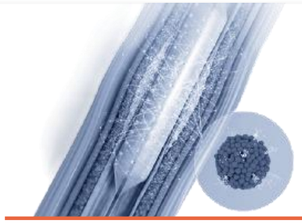
$500M+ annual OBIO royalty opportunity

FOCUSED STRATEGIC APPROACH

We target unmet needs within large, established markets

We build powerful new therapies based on proven technologies

We find novel ways to share risks and rewards with global leaders



VIRTUE SAB

Sirolimus AngioInfusion Balloon

Superior “leave nothing behind” treatment for the **$7.5 billion coronary artery disease market**[2]

Liquid delivery of submicron-encapsulated SirolimusEFR™ directly into artery during angioplasty

TERUMO

Coronary ROFR agreement,

OBIO strategic optionality preserved

[1]Global Market Insights, Pacemakers Market Report (2024). [2]Company estimates.

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Strategic investments & payments from industry leaders

> $185M total strategic capital
invested in & paid to OBIO by its partners

~17%** owned by strategic partners*
led by Medtronic at ~13%**

Medtronic
$81.6M
Equity & $20M strategic capital

LIGAND
$41M
$35M for revenue participation right
plus $6M equity investment

TERUMO
$65M
Payments & equity investments

LARGE, LONG-TERM EQUITY HOLDERS

rtw
~17%
Ownership**

PERCEPTIVE ADVISORS
~10%
Ownership**

**Strategic capital reflects total amounts invested in and paid to OBIO by its partners. Ownership per public 13D/13G filings and Company records. **Ownership percentages in this presentation assume all pre-funded warrants have been exercised for common stock and are otherwise calculated in accordance with SEC beneficial ownership disclosure rules.*

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AVIM THERAPY

Atrioventricular Interval Modulation Therapy



AVIM Therapy: A potent hypertension therapy delivered by a pacemaker

*Designed to **lower blood pressure** and **improve cardiac function** through well-characterized mechanisms*

IMMEDIATE

Short AV delays reduce blood pressure

Short AV intervals reduce ventricular filling and cardiac preload, **driving an immediate, substantial drop in systolic pressure**

SUSTAINED

Longer AV delays maintain BP reduction

Interspersed longer AV intervals engage the baroreceptor reflex to modulate autonomic tone and reduce afterload, **maintaining the blood pressure reduction over time**

KEY ADVANTAGES

- Delivered on a **standard dual-chamber pacemaker** *(no additional procedure)*
- Programmable & **not dependent on patient adherence**

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Hypertension is leading cardiovascular risk factor, affecting ~1.4B adults WW[1]

Every 20 mmHg increase in systolic blood pressure approximately doubles risk of death from cardiovascular disease[2]

#1 Modifiable risk factor for death worldwide[3]

47% of ischemic heart disease attributable to elevated systolic BP[4]

54% of stroke attributable to elevated systolic BP[4]

LOWER BLOOD PRESSURE BENEFITS EVERY MAJOR ENDPOINT

RELATIVE RISK REDUCTION PER 10 MMHG DECREASE IN OFFICE SYSTOLIC BP[5]

Major CV events	-20%
Stroke	-27%
Heart failure	-28%
Coronary HD	-17%
Mortality	-13%

LAUNCH MARKET - TARGET PATIENT PROFILE

>1M

patients per year who receive pacemakers also have hypertension



Hypertension

#1

comorbidity in the pacemaker population

Pacemaker patients are older & at higher cardiovascular risk

[1]World Health Organization, Global Report on Hypertension 2025 (an estimated 1.4B adults aged 30–79 with hypertension in 2024, 33% of that age group; ~23% controlled). [2]Lewington et al., Lancet 2002;360:1903–13 (each 20 mmHg higher usual systolic BP associated with approximately two-fold higher vascular mortality). [3]WHO Global Report on Hypertension; GBD Risk Factor analyses (leading modifiable risk factor for death worldwide). [4]Lawes et al. / WHO, Lancet 2008 (attributable fractions for ischemic heart disease and stroke). [5]Ettehad et al., Lancet 2016;387:957–67 (123 trials, 613,815 patients; relative risk reductions per 10 mmHg lower systolic BP). Phillips et al., J Am Coll Cardiol 2018;71:1601–10.

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The global pacing market leader will drive AVIM Therapy commercialization

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DEVELOPMENT & CLINICAL EXECUTION

- Invented AVIM Therapy; owns 120 HTN patents plus more in heart failure
- Executed MODERATO I & II pilot studies along with all mechanistic studies
- Sponsoring & funding the BACKBEAT pivotal trial

OBIO earns an uncapped, double-digit royalty-based revenue share of every AVIM Therapy-enabled device sold

Medtronic

MANUFACTURING & COMMERCIALIZATION

- Exclusive global rights to pacemaker-indicated patients; global leader in pacemakers
- Incorporating AVIM Therapy in next-gen transvenous device (and in potential future leadless technology)
- Responsible for regulatory approvals, manufacturing and global sales, marketing & support

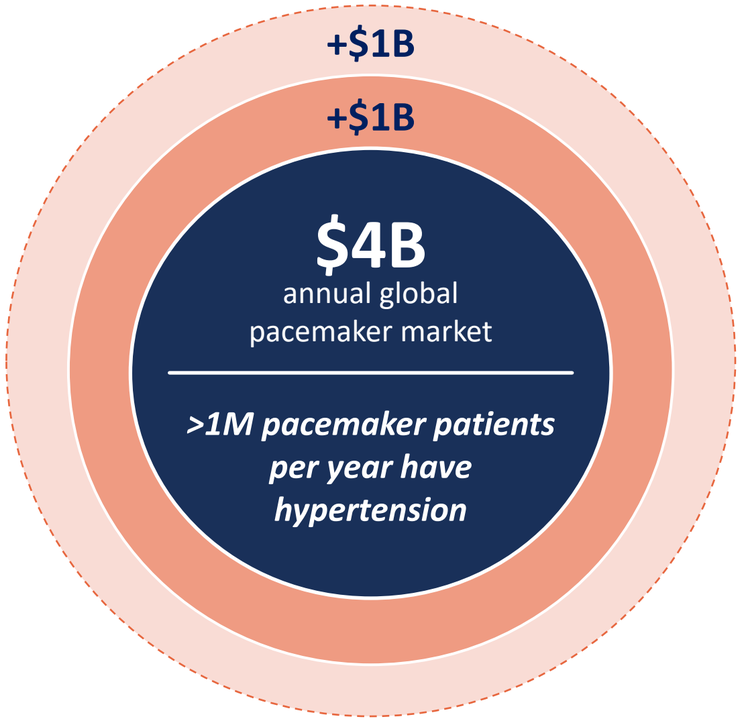
$81.6M invested in Orchestra BioMed
Right of First Negotiation for non-pacemaker HTN

[1]*Global Market Insights, Pacemakers Market 2024: 'Medtronic led with over 54% market share in 2024' (global); U.S.-specific share: iData Research U.S. Cardiac Rhythm Management report / Medtronic data. Per-device economics per OBIO 10-K (FY2025).*

Large, established market of pacemaker patients with hypertension

*Substantial **uncapped royalties** can drive significant OBIO topline growth and accelerated profitability*

AVIM CAN GROW THE COMMERCIAL VALUE OF THE PACEMAKER MARKET



Existing market: $4B
~1.4M pacemaker implants per year;
>1M addressable patients with HTN

+$1B: AVIM premium positioning

+$1B: potential U.S. enhanced reimbursement[1]

~ $6B potential annual global market

Medtronic benefits include potential **increased revenue, profit** and **market share**

OBIO ROYALTY OPPORTUNITY

$500M+
Annual potential global royalties[2]

$500-$1,600
Estimated royalty per device (uncapped)[3]

- Assumes existing reimbursement structures
- $500 minimum per device royalty outside the U.S.
- Materially higher minimums in U.S., Japan and China

Significant potential upside with enhanced US reimbursement

Market sizes are Company estimates; existing market reflects ~1.4M global pacemaker implants per year. [1]Target ASP supportable by NTAP (inpatient) and TPT (outpatient); eligibility follows from FDA Breakthrough Device Designation and is not guaranteed. [2]Royalty per device company estimate based on current license terms. Royalty opportunity figures are based on $500 per device minimum (lowest minimum for outside the US excluding Japan and China) multiplied by 1M estimated patients per year getting pacemakers that also have hypertension.

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More than a decade of evidence supporting AVIM Therapy

PRECLINICAL & FIRST-IN-HUMAN | **RANDOMIZED CLINICAL EVIDENCE** | **PARTNERSHIP & PIVOTAL TRIAL**

2012

Feasibility Study in Canine HTN Model

Preclinical proof of concept

Acute Feasibility Study in Subjects with HTN

First acute mechanistic evidence in humans

2016

MODERATO I First-in-Human Implant Pilot Study

Multi-center, single-arm study

TCT Innovation Shark Tank Award

Cardiovascular Research Foundation®

Best Abstract at ICI

2019

MODERATO II — Pilot Study

Prospective, multi-center, randomized, controlled, double-blind pilot study

Primary endpoint late-breaking presentation at TCT

Cardiovascular Research Foundation®

2021

MODERATO II Two-Year & ISH Results

Presented at TCT

Cardiovascular Research Foundation®

Peer-reviewed publication of MODERATO II results

Journal of the American Heart Association

American Heart Association.

2022

Strategic Collaboration with Medtronic

Development and commercialization of investigative AVIM Therapy for hypertensive pacemaker patients

Medtronic

2024 - PRESENT

PIVOTAL

BACKBEAT Pivotal Trial

Prospective, multi-center, randomized, controlled, double-blind pivotal trial of AVIM therapy

Surpassed full enrollment in September 2026

Targeting primary data readout in Q2 2027 at HRS 2027

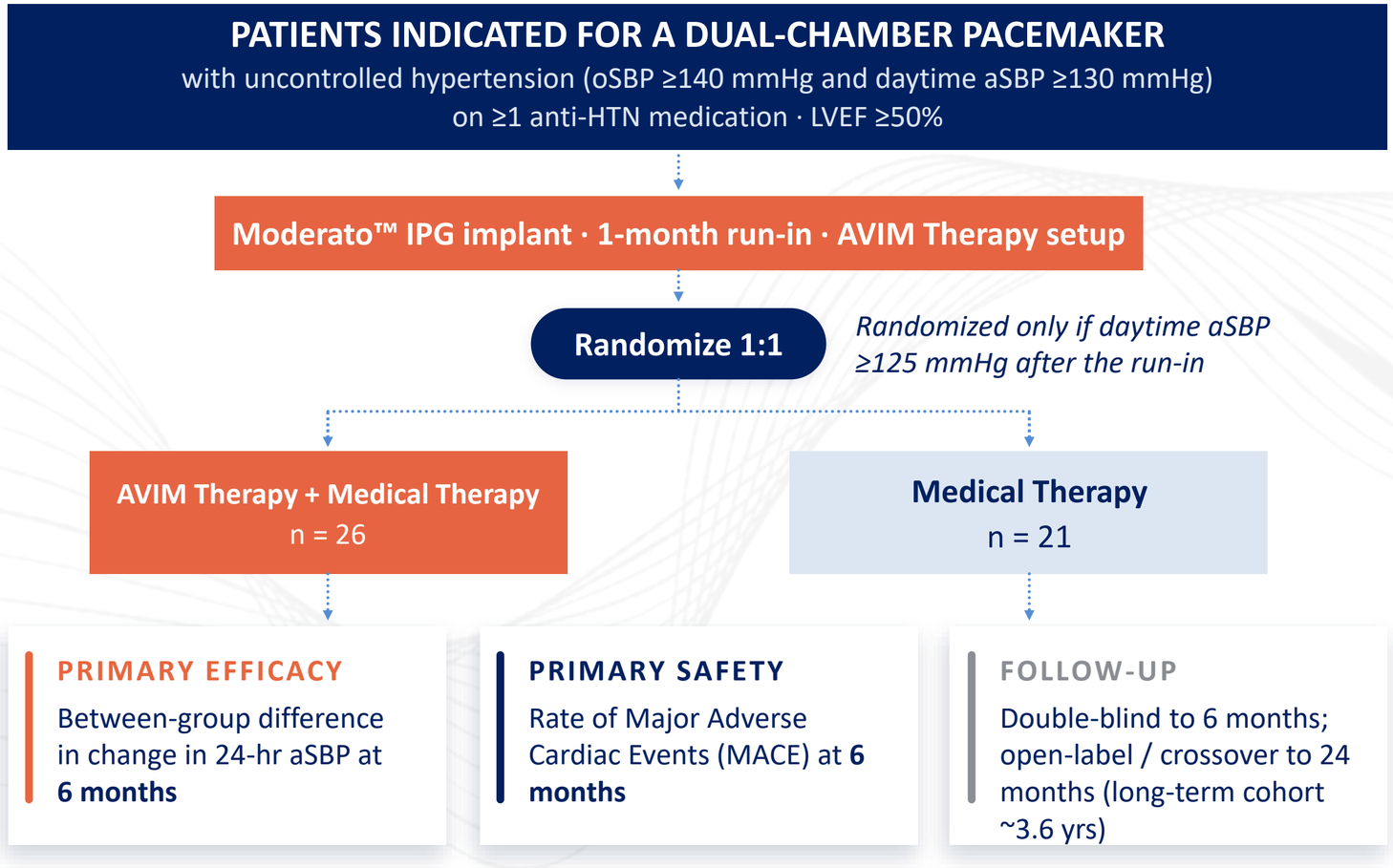
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The MODERATO II Study – informed the design of BACKBEAT

MODERATO II

RANDOMIZED, DOUBLE-BLIND PILOT STUDY

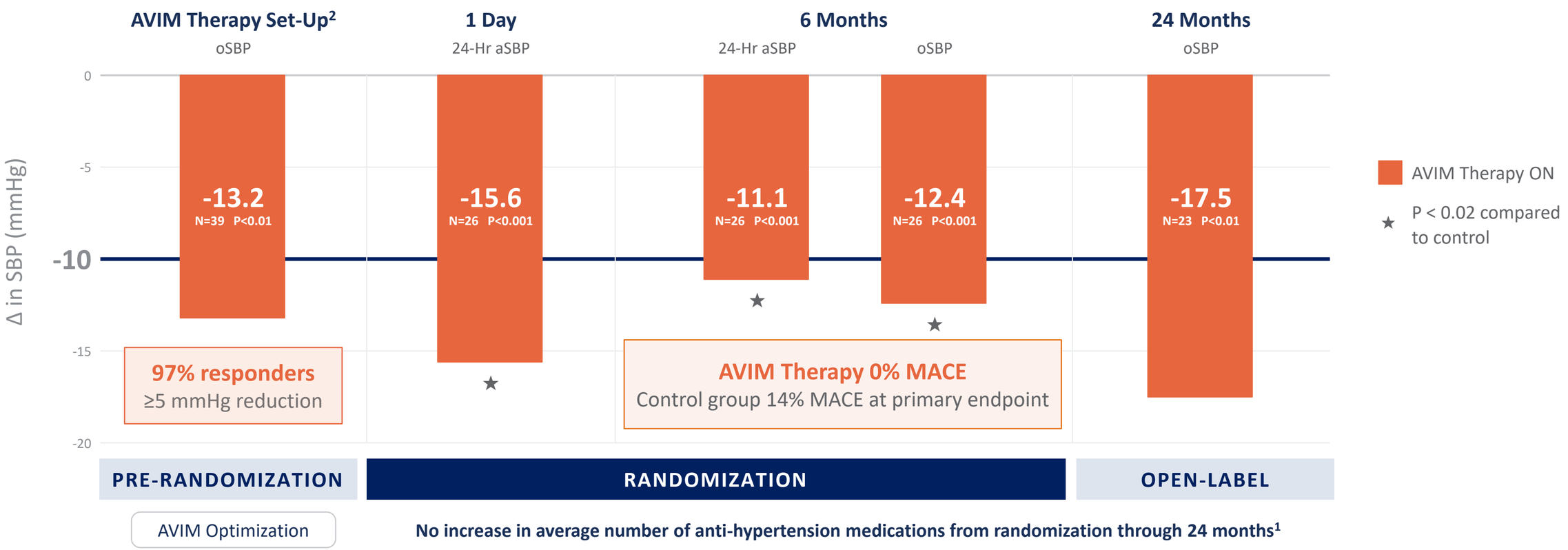
- Randomized 1:1, double-blind, controlled
- 47 patients randomized after a 1-month run-in
- Multi-center: 12 sites across 7 countries in Europe
- Intended to inform the design and power of the BACKBEAT pivotal trial



Sources: Kalarus et al., JAHA 2021;10:e020492; Burkhoff, MODERATO II 2-Year Results, TCT 2021. Definitions: aSBP (ambulatory systolic blood pressure), oSBP (office systolic blood pressure), LVEF (left ventricular ejection fraction), MACE (major adverse cardiac events), IPG (implantable pulse generator).

MODERATO II demonstrated immediate, substantial and sustained BP reduction

*AVIM Therapy **significantly reduced systolic blood pressure** compared to control with no medication changes & low MACE[1]*



[1]Kuck, AVIM Therapy as a Treatment for Hypertensive Heart Disease, HRS 2026. [2]Includes AVIM therapy and control patients at pre-randomization using BACKBEAT Trial set-up methodology. Definitions: MACE (Major Adverse Cardiac Events), aSBP (ambulatory Systolic Blood Pressure), oSBP (office Systolic Blood Pressure), Hr (Hour).

AVIM is designed to address the needs of high-risk, comorbid, older patients

*MODERATO II results show AVIM Therapy offers **disease-modifying potential benefits** for hypertensive heart disease*

ALWAYS-ON BLOOD PRESSURE CONTROL

70% of treated patients age 65+ remain above BP goal; non-adherence is the principal driver[1]. AVIM Therapy is programmable, adjustable and not dependent on patient adherence

REDUCED PULSE PRESSURE IN ISH

In Isolated Systolic Hypertension patients (ISH), **AVIM Therapy significantly reduced pulse pressure**, an independent risk factor for heart failure and stroke[2,3]

IMPROVED DIASTOLIC FUNCTION

AVIM Therapy demonstrated **improved myocardial relaxation & diastolic compliance** in patients with echocardiographic markers of Diastolic Dysfunction[4]

INDUCED POSITIVE REVERSE REMODELING

In 12-month echocardiographic follow up, AVIM Therapy **induced positive reverse remodeling**[5]

[1]Adapted from CDC, Estimated Hypertension Prevalence, Treatment, and Control Among US Adults: Tables, 2023. [2]Burkhoff, MODERATO II Study 2-Year Results, TCT 2021. [3]Vaccarino et al., Am J Cardiol 2001. [4]Fudim et al., JACC: Advances 2025;4(7):101896. [5]Chovanec et al., JACC Clin Electrophysiol 2025;11:2493–2504. ISH = isolated systolic hypertension.

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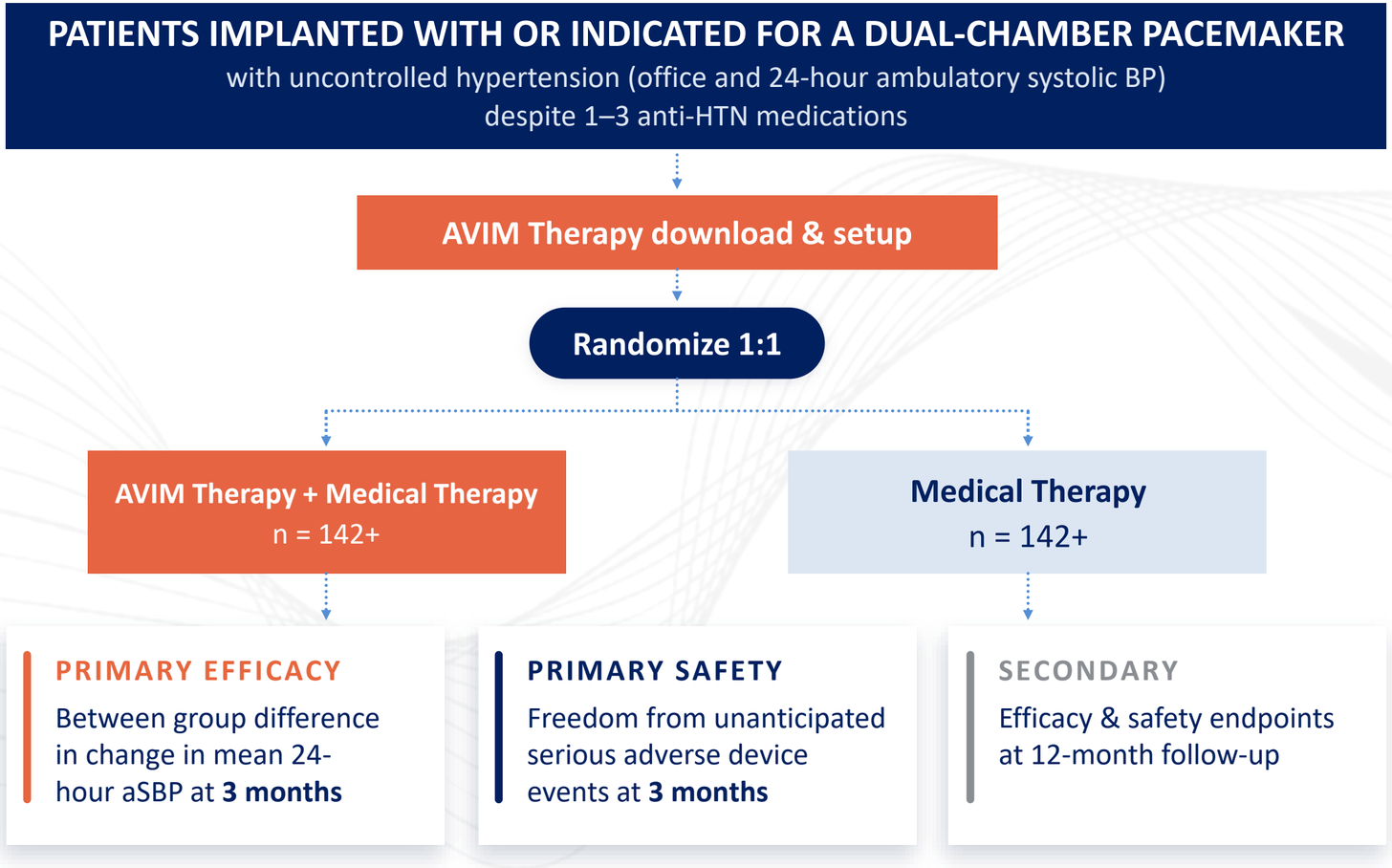
The BACKBEAT Global Pivotal Trial – surpassed full enrollment target

BACKBEAT
GLOBAL PIVOTAL STUDY

- Double-blind, randomized, 1:1
- FULLY ENROLLED (349 patients randomized)
- Enrollment from 92 sites in 15 countries; ~50% of patients from the US
- >90% statistical power (safety & efficacy); based on 284 evaluable randomized patients

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Sponsored by Orchestra BioMed in collaboration with Medtronic



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BACKBEAT Trial & AVIM Therapy Catalysts

Surpassed full enrollment
BACKBEAT Global Pivotal Trial

COMPLETE

Primary endpoint data
Present BACKBEAT primary endpoint data at HRS 2027

Q2 2027

FDA review of PMA supplemant
OUS regulatory submissions

2H 2027

Potential FDA approval and commercial launch

1H 2028

Potential OUS commercial launches

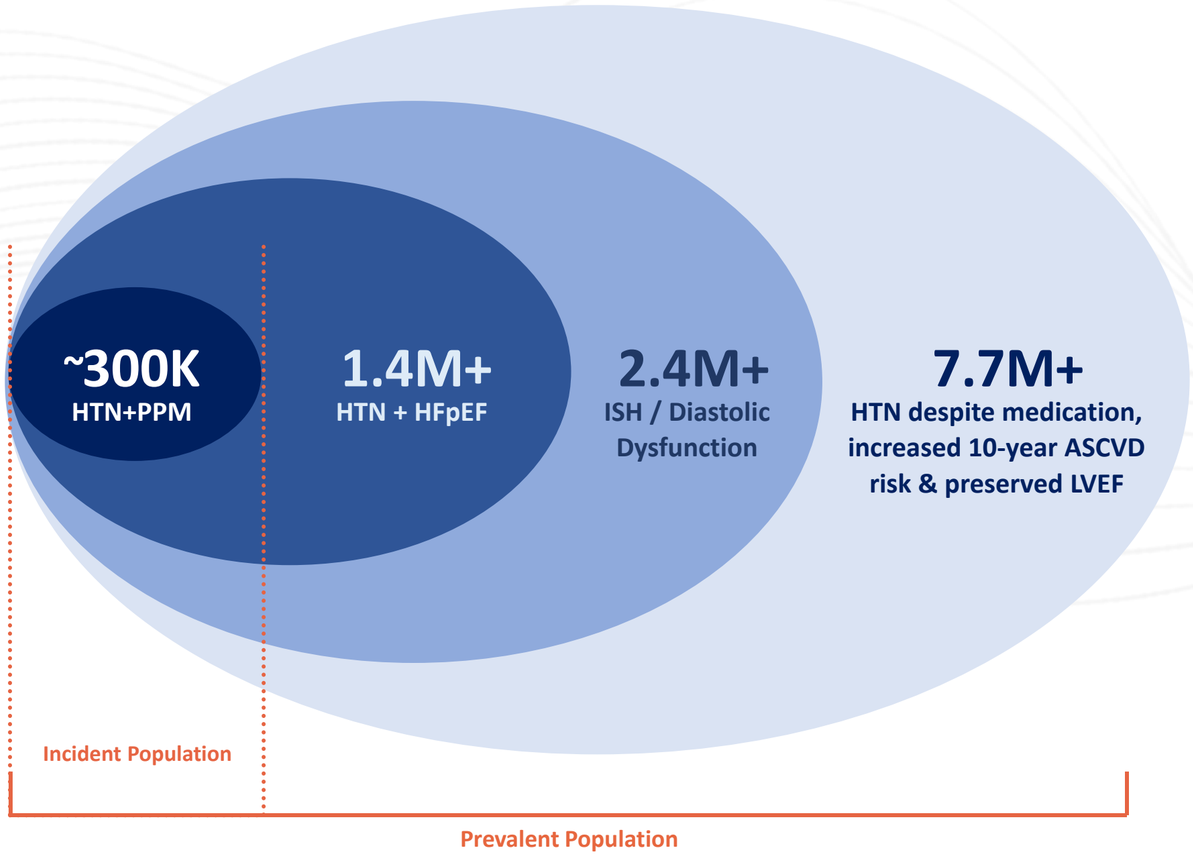
2H 2028

Dependent on trial outcomes and regulatory/partner timing

Significant expansion opportunity beyond the pacemaker market

*Second FDA BDD highlights **AVIM potential to treat hypertensive heart disease** in high-risk, non-pacemaker patients*

U.S. patient population meeting FDA Breakthrough Designation criteria[1]



ANNUAL ESTIMTED ADDRESSABLE EXPANSION POPULATION[2]

~1.1M in the US | **~2.6M** OUS

ANNUAL ESTIMATED EXPANSION MARKET SIZE[3]

~$7.5B in the US | **~$8.5B** OUS

- Leverages existing pacing clinical expertise and infrastructure
- Potential to utilize existing reimbursement coding and payment
- Coverage to be based on clinical evidence and regulatory labeling
- BACKBEAT Trial designed to provide clinical evidence foundation

[1]U.S. patient population estimates based on company analysis; populations are nested, not additive. Second FDA Breakthrough Device Designation granted April 22, 2025. [2]Annual Addressable Expansion Population reflects estimated patients per year meeting Breakthrough Designation criteria who could be addressable with an AVIM-enabled device; [3]Annual Expansion Market Size reflects the estimated annual revenue opportunity ($) associated with treating that population. PPM = permanent pacemaker; HFpEF = heart failure with preserved ejection fraction; ISH = isolated systolic hypertension; ASCVD = atherosclerotic cardiovascular disease; LVEF = left ventricular ejection fraction.

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VIRTUE SAB

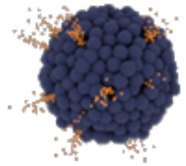
Virtue Sirolimus AngioInfusion Balloon



Virtue SAB: Designed to Optimize Sirolimus Dosing, Uptake and Release

Sub-Micron Particle-Encapsulated SirolimusEFR™

Proven gold standard sirolimus
The anti-restenotic and anti-inflammatory, cytostatic drug with a broad safety margin[1]



+

Non-Coated, Microporous AngioInfusion™ Balloon

Protected large liquid volume infusion
for rapid intramural distribution

- **NO** drug loss in transit
- **NO** rapid navigation
- **NO** large particulate



Designed to Optimize Sustained Sirolimus Delivery



- **Rapidly infuses** particles transmurally
- **Sustains** sirolimus release through the critical healing period[2,3]
- Saturates binding sites **to inhibit proliferation & modulate inflammation**



[1]Xinlin Zhang, et al. PLOS ONE 2014 May 20;9(5):e97934. [2]Granada et al. EuroIntervention 2016;12:740-747. [3]Virtue SAB Mechanism of Action Note to File. [4]Instructions For Use

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Virtue SAB in action



Treatment paradigm shift and strong U.S. reimbursement fueling fast-growing opportunity

THE GLOBAL CORONARY INTERVENTION MARKET[1] | "LEAVE NOTHING BEHIND" DYNAMIC



>$5,000

DCB average selling price in U.S. broadly reimbursed[2]

- 27.2% of AGENT U.S. commercial coronary cases were off-label (non-ISR) through June 2025[3]
- DCBs are widely adopted in Europe, China and Japan, with penetration likely over 20% of total percutaneous coronary interventions (PCIs) across these markets and growing[4]

[1]Procedure volumes and market sizes are Company estimates. [2]DCB U.S. reimbursement reflects CMS Transitional Pass-Through payment for coronary DCBs (effective January 1, 2025) and New Technology Add-on Payment (effective November 1, 2025). [3] 3,459 of 12,728 AGENT procedures (27.2%) were performed for non-ISR indications between April 2024 and June 2025 in the ACC-NCDR CathPCI Registry (Lalani C, et al. Circ Cardiovasc Interv 2026; DOI 10.1161/CIRCINTERVENTIONS.126.016625). [4]Estimated. Japan: DCB in 20.8% of patients / 17.2% of lesions, J-PCI registry 2021 (Muramatsu, Cardiovasc Interv Ther 2023;38:166–76). China: 18.5% of PCI in 2023 (NHC quality-control registry, CCIF 2024); 20–25% of coronary interventions in 2022 (Br J Cardiol 2023). Europe: 14.3% of PCI involved a DCB in Spain in 2024 (ACI-SEC XXXIV Official Report, Rev Esp Cardiol 2025). Blended figure is a Company estimate.

Why there is a compelling opportunity for Virtue SAB

1 SIROLIMUS IS THE GOLD STANDARD FOR RESTENOSIS, PACLITAXEL IS INFERIOR AND DISAPPEARS FROM DES

Superior safety and efficacy over paclitaxel across 76 DES studies, including 26 RCTs[1]

45%	26%
lower TLR risk	**lower MACE risk**

Sirolimus vs. paclitaxel DES[1]

2 PACLITAXEL RESURFACED ON COATED BALLOONS BECAUSE IT IS EASIER, NOT BETTER

The **majority of DCBs** available worldwide are **paclitaxel-coated**

Boston Scientific's paclitaxel-coated **AGENT** is the first DCB approved in U.S. for coronary use

Medtronic's paclitaxel-coated **PREVAIL** is in a U.S. IDE pivotal coronary study

3 …BUT EVERY COATED BALLOON CARRIES THE SAME THREE DRUG DELIVERY CONSTRAINTS

Dose is limited



~1–4 µg/mm² — capped by balloon surface area and coating integrity[2]

Drug is lost



Up to ~80% lost before reaching the lesion[3]

Embolic risk



Coating particulate in up to 36% of downstream sections[4]

[1]Zhang et al., PLoS ONE 2014 (network meta-analysis of 76 DES studies including 26 RCTs). [2]Tada et al., Am Heart J 2013; Leon et al., ACC 2011 (Endeavor vs. Resolute). [3]Based on Company review of published dose concentration of commercially available DCBs worldwide. [4]Brodmann: EuroPCR 2015. Definitions: Drug-Coated Balloon (DCB)

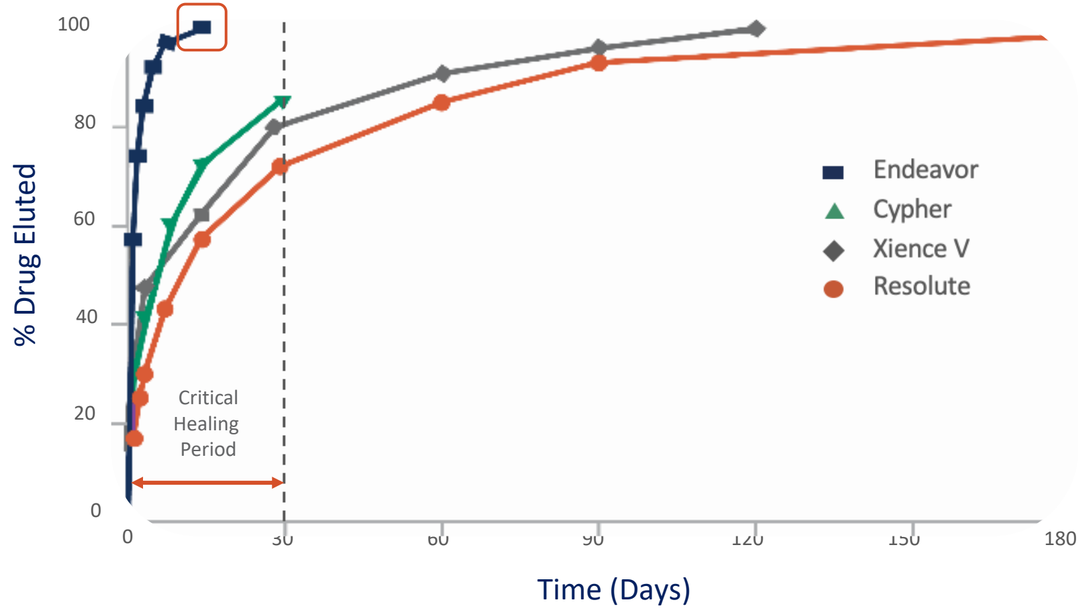
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Sirolimus needs a high enough dose in the artery wall, for enough time, to work

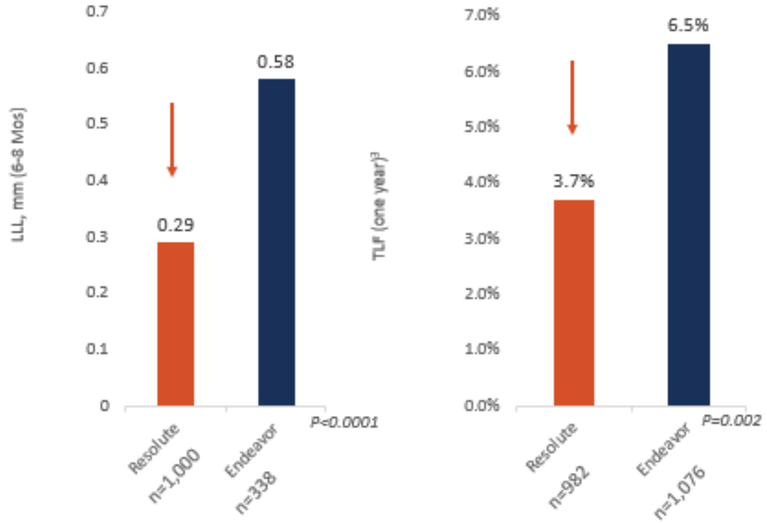
4

EXTENDED RELEASE THROUGH CRITICAL HEALING PERIOD IMPROVED OUTCOMES; RAPID ELUTION SHOWED SUBOPTIMAL OUTCOMES

Endeavor Failed to Elute Through Critical Healing Period [1]



Resolute Demonstrated Significantly Lower LLL and TLF compared to Endeavor [2,3]



Different release profiles = different results

Same drug + same stent

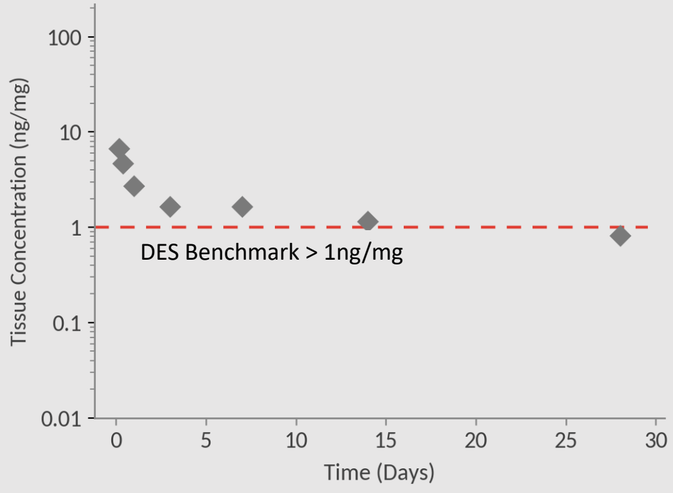
[1]https://slideplayer.com/slide/5787004; [2]Tada, et. Al., *Am Heart J.* 2013 Jan;165(1):80-6. [3]Leon M LBT III, Session 3014 ACC 2011. ***Definitions***: LLL (Late Lumen Loss), TLF (Target Lesion Failure), Mos (Months).

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Virtue delivered & maintained more sirolimus than DES and DCB – published PK studies

Virtue achieved high drug concentrations in tissue through critical healing period, ***exceeding published levels of proven DES (Xience) and leading Sirolimus-coated balloons***

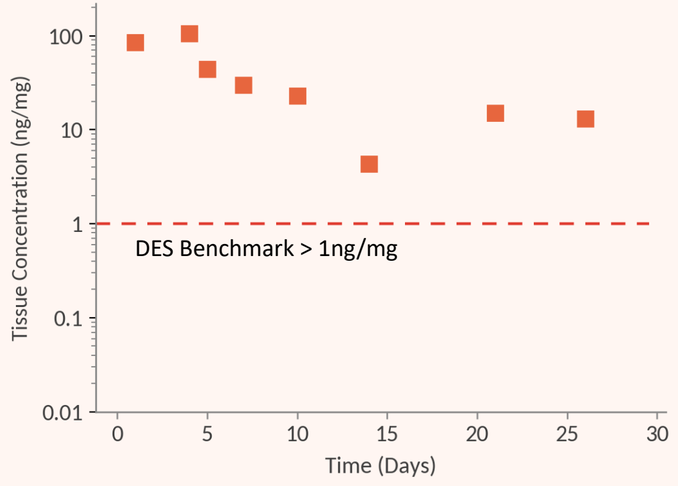
XIENCE™



N = up to 30/time point

Perkins et al. J Int Cardiol 2009; 22(Suppl 1): S28-S40

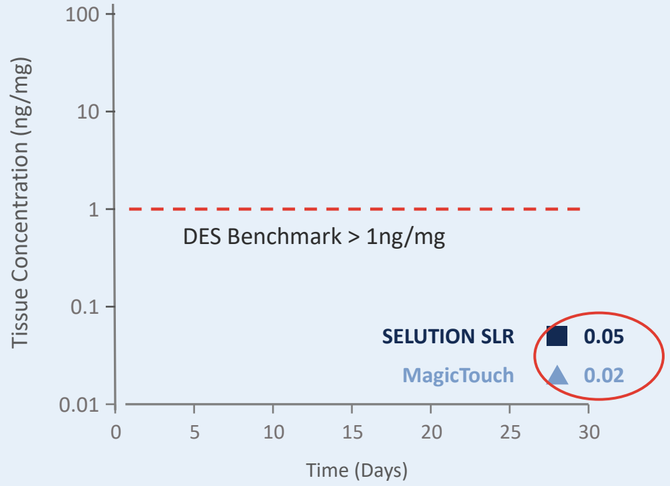
VIRTUE® SAB



N = 15 - 247/time point

Granada et al. EuroIntervention 2016;12:740-747

SIROLIMUS-COATED BALLOONS



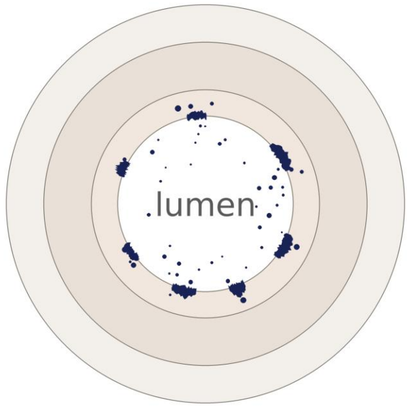
Kawai et al. Catheter Cardiovasc Interv 2025;105:1434-1444

Evolution of Coronary Drug Delivery

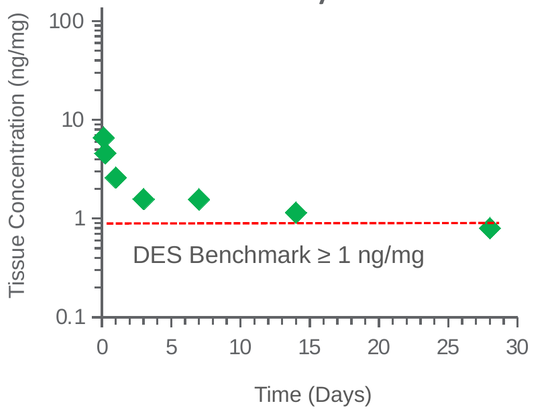
From Surface Coatings to Transmural Delivery

COATINGS FOR DRUG DELIVERY

Via Polymer on DES & Coating on Balloon



XIENCE™ V Everolimus-eluting Coronary Stent[1]

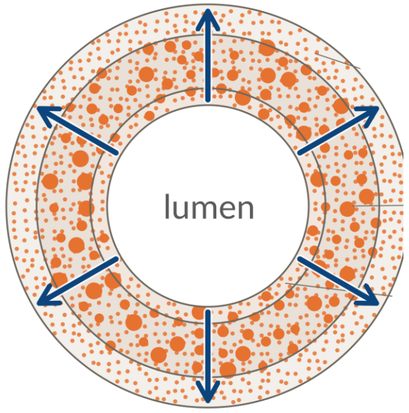


Unsaturated
~1 ng/mg at 30 days [1]

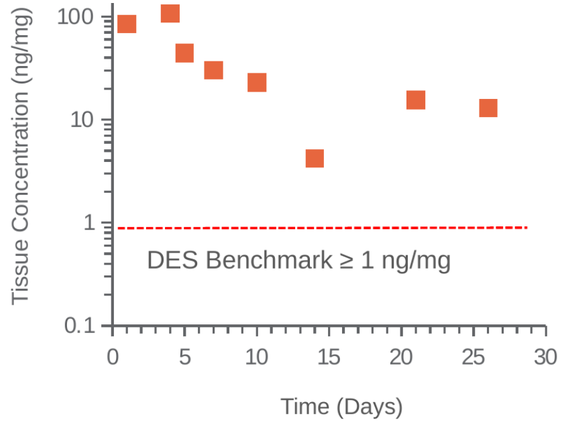
Dose is limited[2] · Drug coating is lost in transit[3] · Transfer is uneven[4]

LIQUID DRUG INFUSION

Transmural SirolimusEFR™ Particle Infusion



Virtue SAB[5]



>99% Saturated
13 ng/mg at 30 days[5],[6]

Saturates binding sites to optimize **inhibition of cell proliferation & modulation of inflammation** through the critical healing period[6]

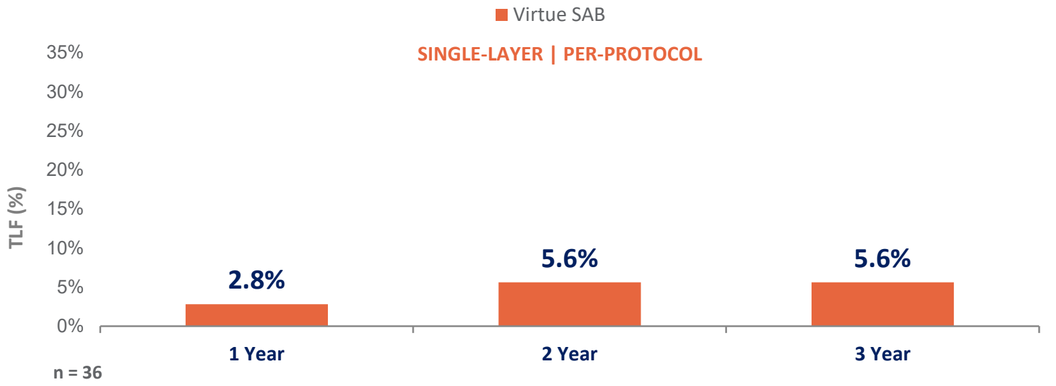
[1]PK adapted from Perkins et al. J Interv Cardiol 2009;22(Suppl 1):S28–S40. [2]Tzafriri AR, et al. Biomaterials. 2020;260:120337. [3]Brodmann: EuroPCR 2015. [4]Tzafriri AR, et al. J Control Release. 2019;310:94–102 (10.7–16.1% of the endoluminal surface covered by coating); Kolachalama VB, et al. Circ Cardiovasc Interv. 2013;6:415–422. [5]PK adapted from Granada et al. EuroIntervention 2016;12:740–747. [6]Virtue SAB Mechanism on file. XIENCE V is a trademark of the Abbott Group of Companies.

Orchestra BioMed™

SABRE pilot trial results showcase opportunity for Virtue SAB

VIRTUE® SAB

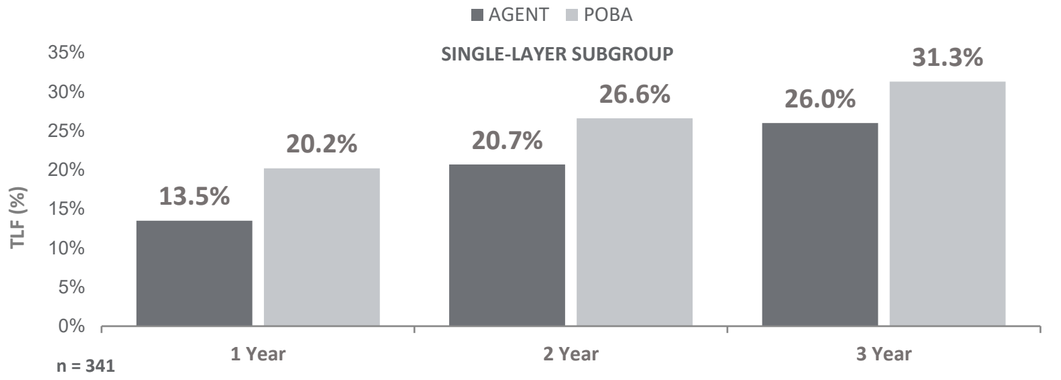
Virtue SAB demonstrated encouraging safety and efficacy results in patients with coronary ISR in the prospective, multi-center SABRE trial — **single-layer restenosis with 6 month angiographic follow up**, per-protocol analysis. [1-4]



- **Very Low 2.8% TLF at 1 year**
- **0% increase in TLR from 1–3 years**
- **Low 0.12 mm late lumen loss (LLL) at 6 months**

AGENT™ DCB - AGENT IDE TRIAL

Boston Scientific's AGENT DCB demonstrated a reduction in TLF versus POBA in patients with **single-layer restenosis** in the randomized IDE trial. [5,6]



- **13.5% TLF at 1 year, a 93% relative increase in TLF from 1 to 3 years[7]**
- **No angiographic follow-up in the IDE**
- **AGENT LLL = 0.397 mm at 6 months[8]**

1-YEAR TLF, SINGLE-LAYER ISR COHORTS *(separate studies | not head-to-head)*

SELUTION SLR[9] SELUTION4ISR Trial	**14.2%**	**AGENT[5]** AGENT IDE Trial	**13.5%**

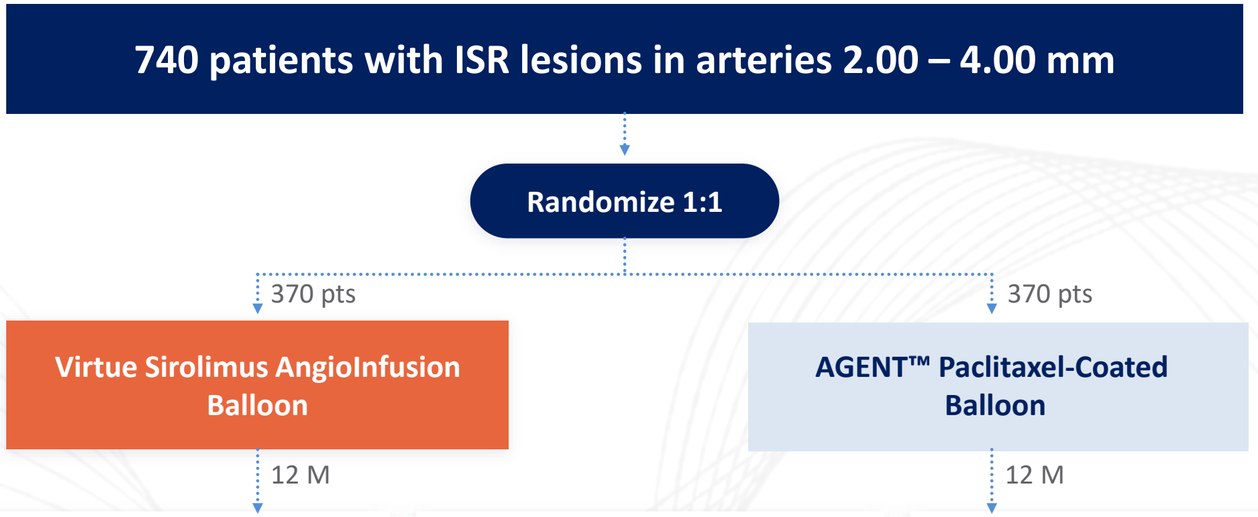
A sirolimus balloon with poor PK performs like paclitaxel. ***Clinical results follow pharmacokinetics.***

[1]Verheye et al., JACC Cardiovasc Interv 2017;10(20):2029–2037. [2]Revised per-protocol analysis set meets the criteria of the proposed In-Stent Restenosis IDE study population. [3]Granada, SABRE 3-Year Clinical Results, TCT 2018. [4]Cause of death unknown — reported as multiple organ failure, non-cardiac and non-neurological; adjudicated as non-device and non-procedure related. [5]Yeh et al., JAMA 2024;331(12):1015–1024 (AGENT IDE); single-layer subgroup: Kirtane et al., J Am Coll Cardiol 2025. [6]Moses, Two-Year Outcomes from the AGENT IDE Trial, CRT 2025. [7]Relative increase calculated from reported single-layer TLF at 1 and 3 years (13.5% to 26.0%). [8]Boston Scientific AGENT DCB Brochure, 2017. [9]Cutlip DE, Mehran R, Sharma S, et al. Sirolimus-Eluting Balloon vs Repeat Drug-Eluting Stent or Balloon Angioplasty for Coronary In-Stent Restenosis. J Am Coll Cardiol. 2026;88(1). doi:10.1016/j.jacc.2026.03.021. Prespecified single-layer ISR analysis. SABRE, AGENT IDE and SELUTION4ISR are separate studies with different designs and patient populations — not a head-to-head comparison.

The Virtue Pivotal Trial actively enrolling

Virtue Trial

- FDA IDE approved
- 1:1 RCT vs AGENT DCB
- N = 740
- Primary endpoint: 12-month TLF
- Actively enrolling trial participants
- Enrollment completion expected by end of 2027



PRIMARY ENDPOINT

Target Lesion Failure (TLF) at 12 months

ANALYSIS

- Non-inferiority comparison
- Superiority test upon confirming non-inferiority

FOLLOW-UP

Clinical follow-up out to 5 years

Orchestra BioMed™

Virtue SAB offers prospective partners potentially significant and sustainable advantages

STRATEGIC PARTNERING PATHWAY

TERUMO

Coronary Right of First Refusal

- $65M in strategic capital to Orchestra[1]
  - Includes payments & equity investments
- ROFR does not restrict any strategic activity today and expires 90 days after Virtue Trial data disclosure
  - 30 days to exercise after notice of third-party proposal

FUTURE PARTNERING LANDSCAPE

We maintain strategic optionality and opportunity to engage with up to 10 currently identified potential partners

PRECEDENT TRANSACTION

Cordis acquired MedAlliance, developer of the SELUTION SLR sirolimus-coated balloon, in 2023 for up to **$1.135B**[2]

[1]ROFR terms per agreement filed with the Company's Form 8-K (October 2025). [2]Per MedAlliance/Cordis announcements (November 2023) with the substantial majority of such amount dependent on achievement of certain regulatory and commercial milestones.

Orchestra BioMed

OUR PRODUCT PIPELINE

Our product pipeline targets large immediate and future opportunities

AVIM THERAPY

Atrioventricular Interval Modulation

LAUNCH MARKET | PIVOTAL TRIAL STAGE

Hypertension + Pacemaker

up to $6B
global annual total addressable market (TAM)

FDA Breakthrough Device Designation

- Uncontrolled hypertension in pacemaker patients
- Randomized pivotal trial primary results targeted for Q2 2027

EXPANSION MARKET

Hypertensive Heart Disease

up to $16B
global annual TAM

FDA Breakthrough Device Designation*

- Hypertensive heart disease in high-risk non-pacemaker patients
- BACKBEAT Trial creates clinical evidence foundation

VIRTUE SAB

Sirolimus AngioInfusion Balloon & SirolimusEFR

LAUNCH MARKET | PIVOTAL TRIAL STAGE

Coronary

$7.5B
global annual TAM

FDA Breakthrough — ISR & Small Vessel

- ISR (in-stent restenosis), small vessel de novo, and other coronary indications
- Randomized pivotal ISR trial targeting 2027 full enrollment

EXPANSION MARKET

Peripheral

$2.5B
global annual TAM

FDA Breakthrough Device Designation — BTK

- Below-the-knee (BTK) & Superficial Femoral Artery (SFA) indications
- Novel devices to leverage liquid SirolimusEFR delivery in longer, larger arteries

*Global annual TAM figures are Company estimates. FDA Breakthrough Device Designations as granted to date. Launch & Expansion indications are not approved and are subject to clinical, regulatory and reimbursement outcomes. *Breakthrough Device Designation applies to patients with preserved left ventricular systolic function (EF>50%) and uncontrolled hypertension with increased high ten-year ASCVD risk (>20%), despite the use of anti-hypertensive medications or in patients who may have intolerance to anti-hypertensive medications*

Orchestra BioMed™

Led by a team with a proven cardiovascular innovation track record

300+ Combined years of industry experience

25+ Average years of experience across the team

100+ Successful product approvals delivered globally

600+ Authored patents shaping the future of healthcare

EXECUTIVE LEADERSHIP



David Hochman
Chairman & CEO, Founder

Managing Partner, Orchestra Medical Ventures; co-founder BackBeat, Caliber, Motus GI, Corbus & PROLOR Biotech; Managing Director, Spencer Trask



Darren R. Sherman
President & COO, Director, Founder

Managing Partner, Orchestra Medical Ventures; CEO/Co-inventor Caliber; co-founder/inventor BackBeat; Cordis Neurovascular (J&J); founder, Revivant



Andrew Taylor
Chief Financial Officer

CFO, Motus GI; CFO & President, Avertix Medical; 20+ yrs medtech finance leadership



Amy Berman
Vice President, Clinical Operations

Clinical operations leadership roles at Optinose, Cordis (J&J), and IlluminOss Medical



Bill Little
EVP, Corporate Development & Strategy

COO, Neovasc (→ Shockwave); Abbott Vascular; St. Jude Medical; Boston Scientific



Yuval Mika, Ph.D.
EVP, GM & CTO, Bioelectronic Therapies

Co-founder & CEO, BackBeat Medical; CTO & CSO, Impulse Dynamics; AVIM therapy inventor; Ph.D., Technion



Mark Pomeranz
EVP & GM, Interventional Therapies

CEO, Motus GI; CEO, Svelte Medical; 30+ yrs medical-device leadership across cardiology & GI; Cordis Neurovascular (J&J); Cardiac Pathways



Heather Buckley
Vice President, Marketing

Marketing leadership roles at Olympus Corporation, Cordis (J&J), and Boston Scientific

BOARD OF DIRECTORS
independent directors

Jason Aryeh
Ligand; Anebulo

Pamela Connealy
Pyxis Oncology; Genentech

Chris Cleary
Medtronic; GE Capital

Eric S. Fain, M.D.
St. Jude Medical; Abbott; Procyrion

John Mack
Medtronic (30+ yrs)

David Pacitti
Abbott; Siemens Healthineers; Avanos

Orchestra BioMed™

THE BOTTOM LINE

We deliver value for patients, partners and shareholders



CAPITAL-EFFICIENT ROYALTY ECONOMICS

High-margin potential royalties on partner-driven sales; no sales, marketing or manufacturing to fund



TWO LARGE, ESTABLISHED TARGET MARKETS

AVIM and Virtue SAB each target **multibillion-dollar annual opportunities** in two of the largest cardio-device markets



MEDTRONIC COLLABORATION FOR AVIM THERAPY

Spans development, regulatory & global commercialization with expansion optionality into hypertensive heart disease



STRATEGIC OPTIONALITY FOR VIRTUE SAB

Free to pursue strategic transaction subject to limited coronary ROFR with Terumo



ALIGNED, BLUE-CHIP STRATEGIC BACKING

$185M+ of strategic capital; ~50% of shares owned by strategic investors and long-term institutional holders



DEFINED, NEAR-TERM CATALYST PATH

Completed BACKBEAT enrollment, pivotal data (Q2 2027); Virtue Trial enrollment completion (targeting end of 2027)

BRINGING MEDICAL **INNOVATIONS** **TO LIFE** THROUGH PARTNERSHIPS

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