Sustained Embolic Protection



Jan. 15, 2021 http://www.inspiremd.com/en/

Disclaimers

This presentation contains "forward-looking statements." Such statements may be preceded by the words "intends," "may," "will," "plans," "expects," "anticipates," "projects," "predicts," "estimates," "aims," "believes," "hopes," "potential" or similar words. Forward-looking statements are not guarantees of future performance, are based on certain assumptions and are subject to various known and unknown risks and uncertainties, many of which are beyond the Company's control, and cannot be predicted or quantified and consequently, actual results may differ materially from those expressed or implied by such forward-looking statements. Such risks and uncertainties include, without limitation, risks and uncertainties associated with (i) market acceptance of our existing and new products, (ii) negative clinical trial results or lengthy product delays in key markets, (iii) an inability to secure regulatory approvals for the sale of our products, (iv) intense competition in the medical device industry from much larger, multinational companies, (v) product liability claims, (vi) product malfunctions, (vii) our limited manufacturing capabilities and reliance on subcontractors for assistance, (viii) insufficient or inadequate reimbursement by governmental and other third party payors for our products, (ix) our efforts to successfully obtain and maintain intellectual property protection covering our products, which may not be successful, (x) legislative or regulatory reform of the healthcare system in both the U.S. and foreign jurisdictions, (xi) our reliance on single suppliers for certain product components, (xii) the fact that we will need to raise additional capital to meet our business requirements in the future and that such capital raising may be costly, dilutive or difficult to obtain and (xiii) the fact that we conduct business in multiple foreign jurisdictions, exposing us to foreign currency exchange rate fluctuations, logistical and communications challenges, burdens and costs of compliance with foreign laws and political and economic instability in each jurisdiction. More detailed information about the Company and the risk factors that may affect the realization of forward looking statements is set forth in the Company's filings with the Securities and Exchange Commission (SEC), including the Company's Annual Report on Form 10-K and its Quarterly Reports on Form 10-Q. Investors and security holders are urged to read these documents free of charge on the SEC's web site at http://www.sec.gov. The Company assumes no obligation to publicly update or revise its forward-looking statements as a result of new information, future events or otherwise.

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About InspireMD

InspireMD is a commercial-stage medical device company focused on stroke prevention in patients with carotid artery disease and treatment of other minimally invasive indications utilizing an integrated embolic protection stent platform.

MicroNet[™] is a proprietary platform comprised of thin, 20-micron polyethylene terephthalate mesh that is designed to trap and maintain plaque stability against the arterial wall for protected flow to eliminate events such as heart attack, stroke and death.

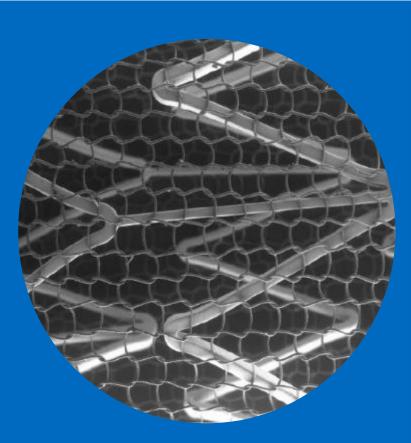
- The company develops, manufacturers and commercializes a portfolio of embolic protection systems
- MicroNet[™], a key differentiator of InspireMD's commercial products, is revolutionizing the field of vascular stenting
- Today, InspireMD is a global company traded in the NYSE under NSPR



Our Leadership

Marvin L. Slosman President and CEO	Mr. Slosman has over 30 years of experience in the medical device industry with focused leadership in commercialization and international market development in both public and privately held companies. He has had senior management roles in a variety of public and privately held companies.	Cordis. INTEGRA
Craig Shore CFO	Mr. Shore has over 25 years of experience in financial management in the United States, Europe and Israel. He has served in various senior financial and general management roles at General Electric, Dunn and Bradstreet, Pfizer Pharmaceuticals and Bristol Myers Squibb.	Bristol-Myers Squibb
Paul Stuka Chairman	Mr. Stuka was named to the Board of Directors in August of 2011 and serves as Chairman of the Board of Directors. Mr. Stuka is a Managing Member of Osiris Partners and a 30-year investment industry veteran.	
Michael Berman Director	Mr. Berman is a successful entrepreneur within the medical device industry. He joined Scimed in 1986, leading its marketing activities until its merger with Boston Scientific in 1995. From 1995-2000, he served as President of Boston Scientific/Scimed.	Scientific Velocimed™ LUTONIX
Campbell Rogers, M.D. Director	Dr. Rogers currently serves as the CMO of HeartFlow, Inc., a private cardiovascular diagnostics company based in California.	HARVARD MEDICAL SCHOOL
Thomas Kester Director	Mr. Kester is CFO of Kester Search Group, Inc., a private executive search firm specializing in sales force placement for medical, dental and diagnostic device companies. He spent 28 years at KPMG LLP.	KPMG Kester Search Group* Clear objectives. Precise solutions.
Gary Roubin, M.D., Ph.D. Director	Dr. Roubin was named to the board of Directors in October 2020. Dr. Roubin has co-authored more than 280 clinical publications and has contributed to 20 textbooks in the fields of Interventional Cardiology and Vascular Surgery. He was a key contributor in the CREST trial which has validated the use of carotid stents for the treatment of carotid artery stenosis.	Lenox Hill Hospital Northwell Health

InspireMD Pipeline



Proprietary MicroNet[™] Technology

Commercial Stage

Stroke Protection: CGuard[™] EPS

Myocardium Protection: MGuard[™] EPS The CGuard[™] Carotid Stent with Embolic Prevention System (EPS) is designed to improve patient safety through sustained embolic protection^{1,2} using our MicroNet[™] technology.

The MGuard[™] EPS, integrated with MicroNet[™], is designed to trap and seal thrombus and ruptured plaque, preventing embolization and optimize flow.

Developing Products

Carotid Treatment: CGuard Accessory Access / Delivery Devices

Expansion Opportunities

Peripheral Treatment: PGuard[™] EPS US

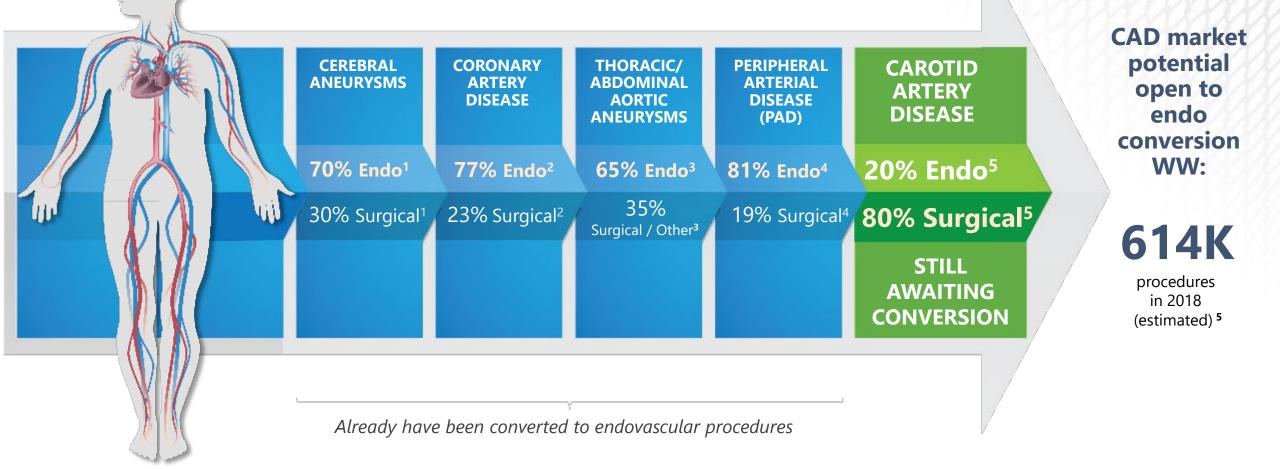
Neuro Treatment:

NGuard™

References: 1. Musialek P et al. PARADIGM-Extend Prospective Academic Trial: Accumulating long-term evidence for MicroNet-covered stent safety and stroke prevention efficacy. Presentation at ESC Congress 2019, Paris, France, 31 August 2019 to 4 September 2019. 2. Wissgott C et al. J Endovasc Ther 2017;24(1):130–137.



Endovascular Procedures: Landscape and InspireMD Potential



¹_Bekelis K, Gottlieb DJ, Su Y, et al. Comparison of clipping and coiling in elderly patients with unruptured cerebral aneurysms. J Neurosurg. 2017;126(3):811–818

²_Culler SD, Kugelmass AD, Brown PP, , et al. Trends in Coronary Revascularization Procedures Among Medicare Beneficiaries Between 2008 and 2012. Circulation. 2015;131(4):362-70

³_Beck AW, Sedrakyan A, Mao J, et al. Variations in Abdominal Aortic Aneurysm Care: A Report From the International Consortium of Vascular Registries. Circulation. 2016;134(24):1948-1958 ⁴Guez, D., Hansberry, D. R., Gonsalves, C. F., Eschelman, D. J., Parker, L., Rao, V. M., & Levin, D. C. Recent Trends in Endovascular and Surgical Treatment of Peripheral Arterial Disease in the Medicare Population. AJR Am J Roentgenol. 2020 May;214(5):962-966.

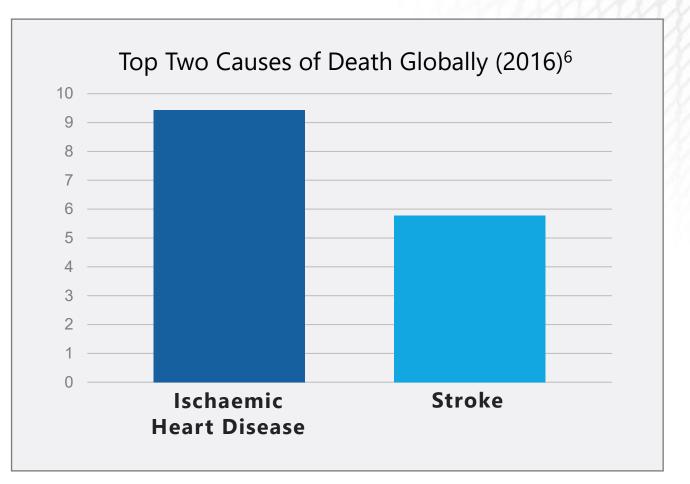
⁵2017 Health Research International Market Report



Stroke is the Second Biggest Cause of Death Globally

An estimated 15 million people suffer from stroke annually¹

- 6.2 million deaths²
- 5 million people left permanently disabled¹
- \$34 billion associated with stroke management in the US alone³
- ~85% of all strokes are ischemic strokes, which result from a lack of blood flow to the brain⁴
- Carotid artery disease (CAD) is a major risk factor for stroke
- ~20% of all ischemic strokes are estimated to be caused by CAD (2.2-2.4 million)⁵



<u>1 http://www.emro.who.int/health-topics/stroke-cerebrovascular-accident/index.html</u>

<u>² https://professional.heart.org/idc/groups/ahamah-public/@wcm/@sop/@smd/documents/downloadable/ucm_505473.pdf</u>
<u>³ Center For Disease Control and Prevention – Stroke Facts – 2017</u>

⁶ https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death

THE PROBLEM: Risks with Existing Approaches to CAD

Surgery (CEA) and conventional Carotid Artery Stenting (CAS) both come with risks

Carotid Endarterectomy (CEA) Surgical Approach

Risk of complications:

- Myocardial infarction risk¹ (heart attack)
- Cranial nerve injury risk² (vertigo, hearing loss, paralysis, etc)
- Esthetic concern

² Circulation. 2012;125:2256-2264

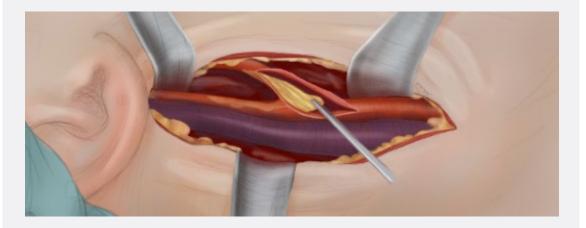
Carotid Artery Stenting (CAS) Conventional Approach (Bare Stent)

Risk of complications:

 Procedural and post-procedural increase minor stroke risk¹



Bare stent deployment





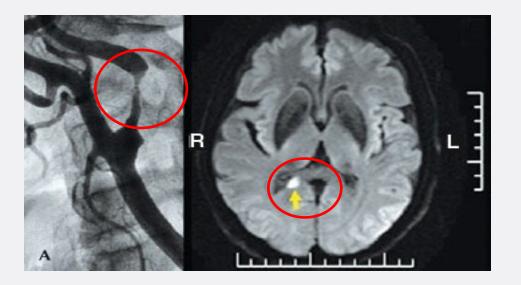
Based on the **CREST** clinical trial data¹, in which only **conventional carotid stents** were used vs.**surgery** ¹CREST Trial: N Engl J Med 2010;363:11-23



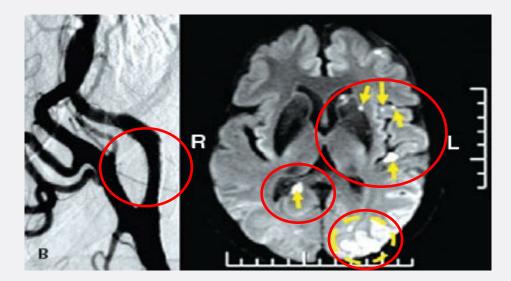
THE PROBLEM: Risk of Embolism Following Conventional CAS

MRI reveals post-procedural cerebral embolization

Pre-Procedure



90% occlusion of the carotid artery MRI of a pre-existing white matter infarction (obstruction) Post-Procedure with Conventional Stent



Successful opening of the carotid artery MRI reveals new multiple microinfarcts (obstructions) due to liberation of embolic particles¹

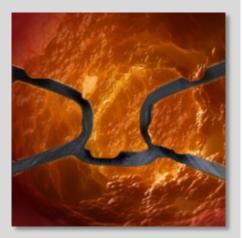
Approximately 2/3 of neurovascular events (stroke, TIA) occur after the procedure takes place.²



1. Cano et al. Rev Bras Cardiol Invasiva 2013; 21(2): 159-64. 2. Bosiers et al. Eur J Vasc Endovasc Surg Vol 33, Feb 2007.,

OUR SOLUTION: Proprietary MicroNetTM Technology

New mesh covered stent that offers superior plaque coverage when compared to conventional stent approaches



Conventional Stent:

Bare or dual layer approach, with plaque protrusion risk Vs.

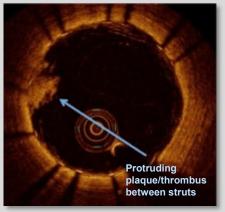
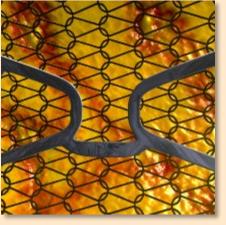


Image: Prof. Valdés Chávarri



New Covered Stent:

Stents are covered in Micronet™

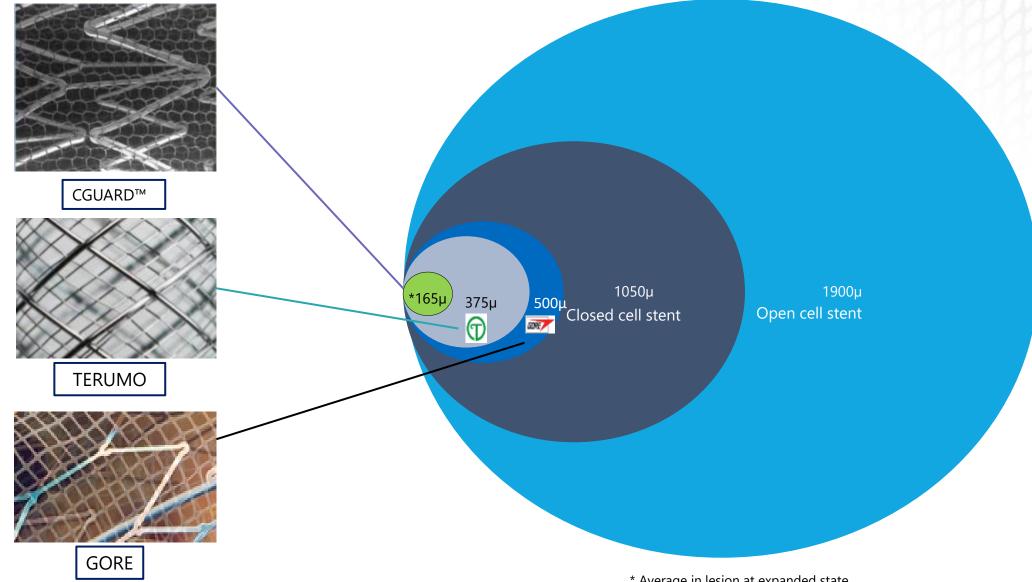


MicroNet[™]: an Embolic Prevention System (EPS) for Ultimate Thrombus Protection

- Ultrathin flexible mesh sleeve, designed to expand seamlessly during stent deployment
- Net **captures and locks** thrombus and plaque materials against the arterial wall
- Prevents thrombus or plaque fragments dispersing, avoids debris entering the bloodstream
- Acts as a mechanical barrier to prevent plaque protrusion



Mechanics Translate to Clinical Results



Musialek, Piotr, MD DPHIL. Mesh-Covered Stents for Carotid Intervention: Rationale, Device Designs, Imaging and Data to Date . Presentation at TCT Congress 2015, San Francisco, California, 11 October 2015 to October 15 2015 .



CGuard™ Shows Superiority Over Terumo RoadSaver at 1yr

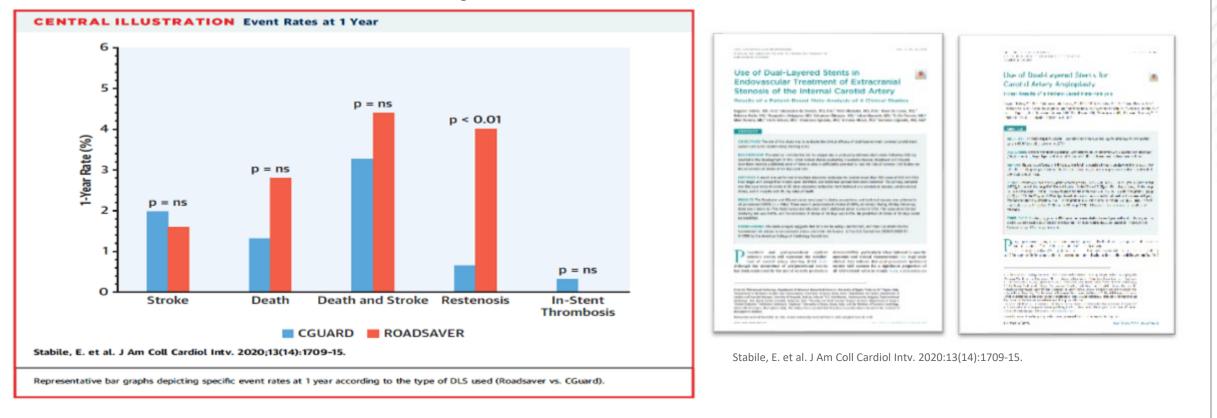
META-ANALYSIS PUBLICATION UPDATE:

Patient-level meta-analysis, 556 patients / 4 trials (both symptomatic and asymptomatic)



CGuard on track, demonstrating SUPERIORITY

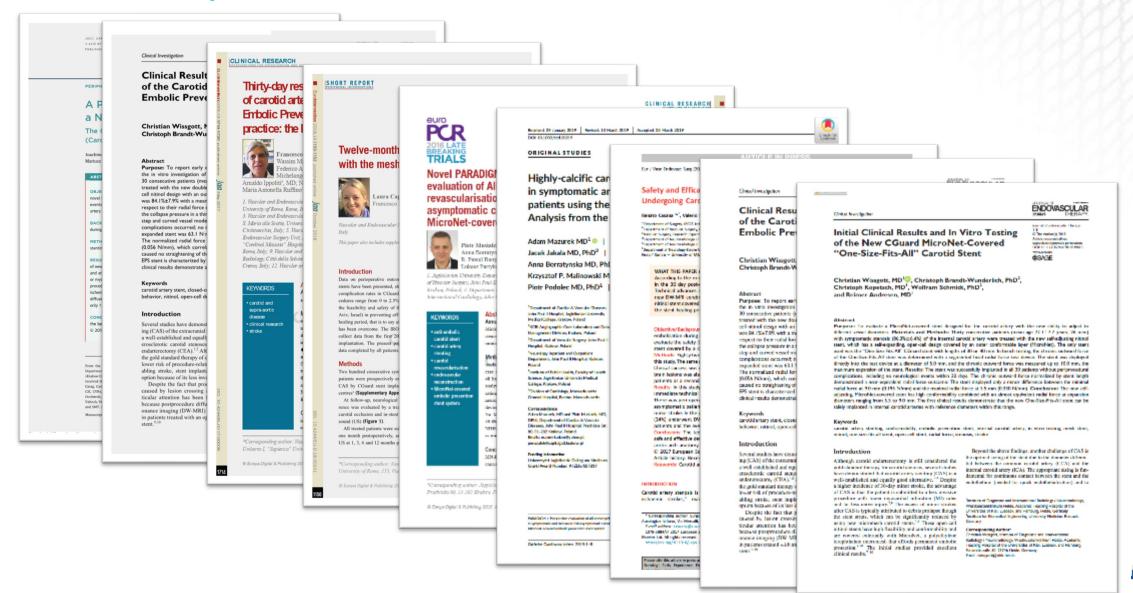
DUAL LAYER STENT 1 YEAR DATA (cumulative results according to Stent Platform: https://doi.org/10.1016/j.jcin.2020.03.048)





Carotid Solution: Our Well Studied Mesh-Covered Technology

More than 1,500 patients in Clinical Publications and Studies



spireMD

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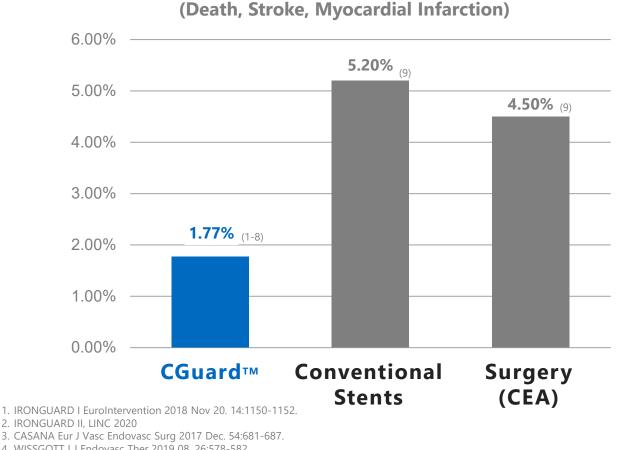
Timeline Growth: From Alternative Stent to New Gold Standard

YEAR	STUDY	PUBLICATION HIGHLIGHTS		JARD'S STANDING wn & anticipated)
2015	CARENET	Safety, Efficacy & Neuroprotection over other stents data		CGuard evaluated as new approach to CAS
2016	PARADIGM	All comers population; Excellent clinical results		
2017	CASANA	Large surgical center; Clinical results over conventional stents historical data		
2017	WISSGOTT	Clinical & mechanical assessment; Mechanical advantages vs competitive stents		
2017	IRON-GUARD 1	Real world multicentric 30d results; Excellent clinical results in multicentric		CGuard demonstrates best
2018	WISSGOTT 10MM	"One-Size-Fit-All" (OSFA); 10 mm CGuard OSFA demonstrates safety and efficacy		performance in field
2019	IRON-GUARD 1	Real world multicentric 1y results; Excellent long-term results in multicentric		
2020	IRON-GUARD 2	Large real world multicentric; Large Multicentric Best–In-Class clinical results		
2021	CGuard-TCAS	CGuard Trans-Cervical excellent results		
2021	IRON-GUARD 2	12-month 733 pts clinical results		
2021	SIBERIA	Randomized Trial; CGuard demonstrates Neuroprotection vs Conventional stents		CGuard demonstrates
2021	ONE SIZE-FIT-ALL	CGuard 150 pts 12m-FU		uperiority to other stents
2021-24	PARADIGM Extend	CGuard in all-comers 550 pts 30d/5y FU		
2021	Meta-Analysis	CGuard superior to Other Stents at 1y-FU		
2021	Meta-Analysis	CGuard superior to CEA at 1y-FU		
2021	OCTOPVS	OCT comparison CGuard vs CEA; CGuard superior post-intervention OCT than CEA		CGuard demonstrates
2022	ΟΡΤΙΜΑ	IVUS assessment after CGuard; Anticipated Plaque exclusion demonstrated		
2022	FLOW-GUARD	Use of CGuard as flow diverter in very high-risk patients beyond carotids; Potential new CGuard indications		superiority to surgery

InspireMD

CGuard™ EPS Yields Superior Clinical Outcomes

When compared with Conventional Stents and Surgery (CEA), CGuard[™] trends Superior



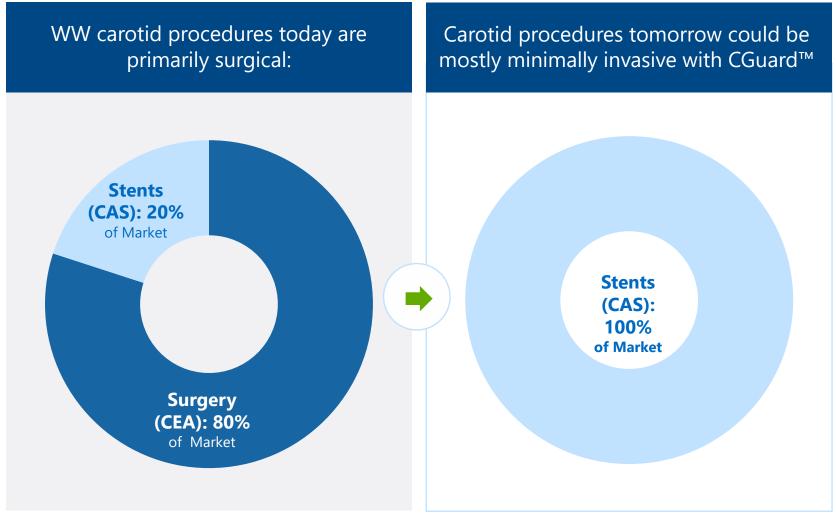
- 30 Day DSM
 - CGuard[™] has a superior profile versus historical data on both conventional carotid stents and surgery
 - CGuard[™] is a next-generation stent supported by a strong and growing body of clinical data
 - 8 completed clinical trials and 3 ongoing trials
 - NO MAJOR STROKE with CGuard[™] (Minor stroke in 21/1,635 pts in 8 studies (1.28%)



- CASANA Eur J Vasc Endovasc Surg 2017 Dec. 54:681-687.
- WISSGOTT I J Endovasc Ther 2019 08. 26:578-582.
- 5. WISSGOTT II J Endovasc Ther 2017 02. 24:130-137.
- 6. PARADIGM Extend, EuroIntervention 2016 Aug 05. 12:e658-70. Updated LINC 2020
- 7. CARENET JACC Cardiovasc Interv 2015 Aug 17. 8:1229-1234.
- 8. SIBERIA EuroPCR e-Course, June 25, 2020.
- 9. CREST N Engl J of Med 2010 July 1. 11-23.

A Billion Dollar Market Opportunity

Our MicroNet[™]-covered stents like CGuard[™] could become the new gold standard



- 2.2M diagnosed (and potentially as many as 13 million undiagnosed) with carotid artery disease (CAD)
- 2017: ~600,000 patients with high grade carotid stenosis (HGCS) required interventions for CAD
- At present, ~80% are surgically treated CEA
- At a price of \$1,650 per stent, the addressable market is estimated to be more than \$1 billion



2017 Health Research International Market Report

CAS = Carotid Artery Stenting CEA = Carotid Endarterectomy

Commercial Footprint (Dark Blue)



- Active Selling in 33 Countries
- Over 90% of sales are through channel partners / distributors
- Short Term Expansion Brazil and France
- New countries development include Japan, S Korea and China
- IDE approval in September 2020; targeting initiation of US trial in 2021



Growth Pathway to the U.S. Market

- U.S. Market Opportunity*
 - Size: 192K High Grade Carotid Artery Stenosis (HGCS) interventions in 2017
 - Opportunity : At a price of \$1,650 per stent, the addressable market is estimated to be approximately \$317 million
- Executing on Approval of FDA PMA for U.S. Market Entry
 - Estimated cost +/- \$15MM
 - The objective of this pivotal study is to evaluate the safety and efficacy of the CGuard[™] Carotid Stent System in the treatment of carotid artery stenosis in symptomatic and asymptomatic patients undergoing carotid artery stenting (CAS) to a performance goal** developed from published CAS literature.
 - **315 Patients** / 395 Total will Roll In
 - Up to 40 Centers (25% planned for European enrollment)
 - 12–15-month enrollment, 12-month follow up
 - Contracted CRO: HCC (Health Care Consultants) specializing in Carotid trial execution
 - Primary Investigator Identified
 - Supporting advisory from Christina Brennan, M.D. and Gary Roubin, M.D. (InspireMD Director)

* 2017 Health Research International Market Report

** The primary endpoint of the study will be the composite of the following: incidence of the following major adverse events: death (all- cause mortality), all stroke, and myocardial infarction (DSMI) through 30-days post-index procedure, based on the clinical events committee (CEC) adjudication or ipsilateral stroke from 31-365day follow-up, based on Clinical Events Committee (CEC) adjudication.



Our Lead Product, CGuard[™] - Advancing Rapidly

31%

growth of CGuard[™] portfolio in Q4 2019

20,000+

Total protected stents sold to date with excellent clinical results CGuard[™] has potential to become the new standard-of-care for carotid indications

*Achieved clinical milestones; neuroprotective vs other carotid artery stenting (SIBERIA) Pre- and Post-Procedure with CGuard[™]





Our Advancement Roadmap / Milestones

Key Value Drivers and Strategic Pathways

Commercial Focus Market Awareness / Data Capability, Share & Growth

2020

- Demonstrate Superiority of CGuard[™]
- Grow market share in those served
- Launch CGuard[™] in Brazil
- CGuard[™] IDE Approval for U.S.
- Advance Clinical Evidence



- •Launch CGuard[™] in U.S. & China
- •Expanded indications for MicroNet[™]
- Conversion of Surgery to CAS

2022 and

Expand Broad Global

Embolic Protection

Indications

Beyond



Our Robust Intellectual Property Portfolio

Proprietary platform technology supported by IP

Patent Rights	Issued	Allowed	Pending
USA	14	1	3
Rest of World	38	0	3

 InspireMD will continue to strengthen and broaden its patent protection globally to enable future pipeline products



Our Business and Market Development

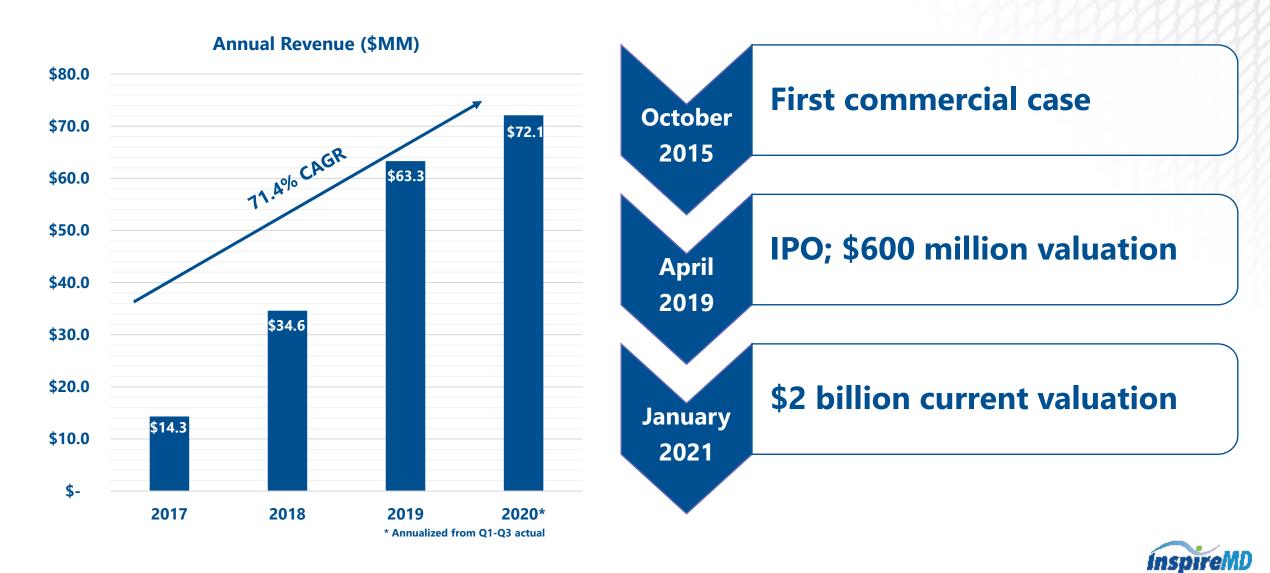
Strategic Targets for Merger or Acquisition





The carotid space is seeing investment





Summary Financials

NYSE AMERICAN	NSPR
Stock Price (1/13/21):	\$0.66
Average volume:	5.1 M
Shares outstanding (1/13/21):	61.7 M
Shares outstanding including full conversion of preferred shares (1/12/21):	64.8 M
Market capitalization including full conversion of preferred shares (1/12/21):	\$42.8 M
Cash (12/31/20)*:	\$12.6 M

* Subject to PwC annual audit; does not include the \$5.8 million received pertaining to final sales of the priorly existing ATM

Thank you



http://www.inspiremd.com/en/