

## **Visible Light Technology To Prevent Infections**

## 1 Year: Funding Journey Caveats, Pitfalls, What Worked

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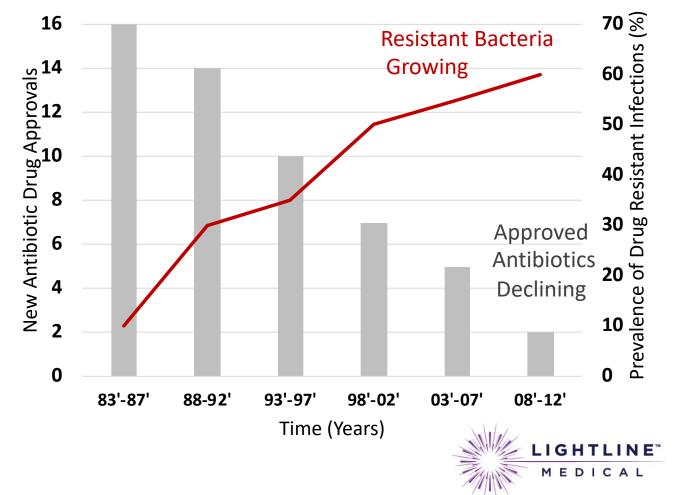


# Hospital Acquired Infection (HAI) Crisis

- US:
- Annual Cost: \$19B
- Annual Deaths: 100,000
- Staggering Penalties
- > 60% Catheter-related



New Antibiotic Drug approvals (FDA) — MRSA %



## Solution: Light Line™ Phototherapy System

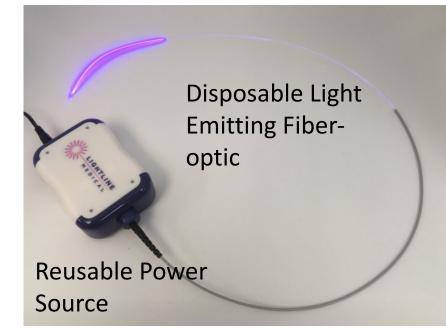
• Visible (405 nm) light (not UV)

No antibiotic resistance/chemical free

- Sterilizes/disinfects inside & outside catheter!
- $\circ$  Off-the shelf catheters

 $\circ$  Patented

1<sup>st</sup> Antimicrobial for ALL Infections (urology, respiratory, vascular, dialysis)





## Market Validation: Traction/Diligence Complete

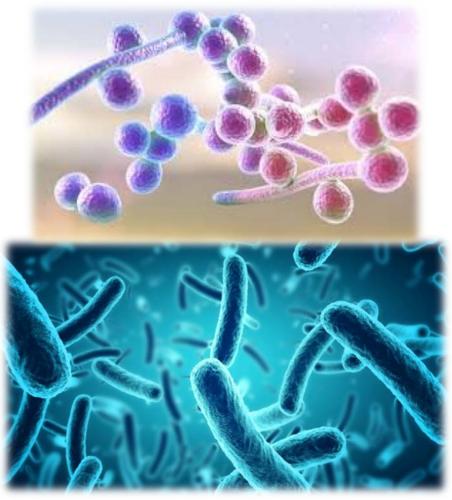
Proof of Concept	Robust IP Portfolio	Exclusive Partnership	Grants & Awards	FUNDING HISTORY	
Completed	5 Issued Patents 12 Pending (7 Int'l)	Medline Industries (~\$10B revenue)	\$255K non-dilutive	\$1.9M Raised	
<ul> <li>In vitro</li> <li>In vivo</li> <li>2 peer reviewed publications</li> </ul>	Freedom to Operate Opinions	3 Years from launch North America Urinary Only	<ul> <li>AMA</li> <li>NASA</li> <li>NSF</li> <li>USPTO</li> <li>USTAR</li> <li>IBM, Rice, Baylor &amp; more</li> </ul>	Notable Investors: • Merit Medical (\$1M) • Medline Industries • Univ. of Utah	



## Our Device Kills Infectious Micro-Organisms

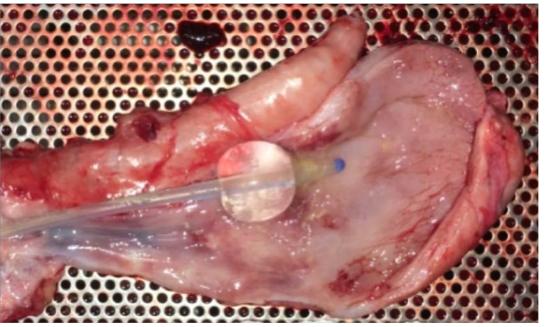
## 6 Organisms Tested:

- E. coli (CAUTI #1 Isolate)
- S. epidermidis (Peritonitis #1 Isolate)
- S. aureus
- S. pneumoniae
- P. aeruginosa
- C. albicans (hardest to kill Fungi)





# Foley Pig Trial: Gross Pathology **Light Treated**



- Minimal redness
- **Minimal Inflammation** •
- No gross evidence of bacteria





- Dark red lesions
- Severe Inflammation
- Infection from bacteria

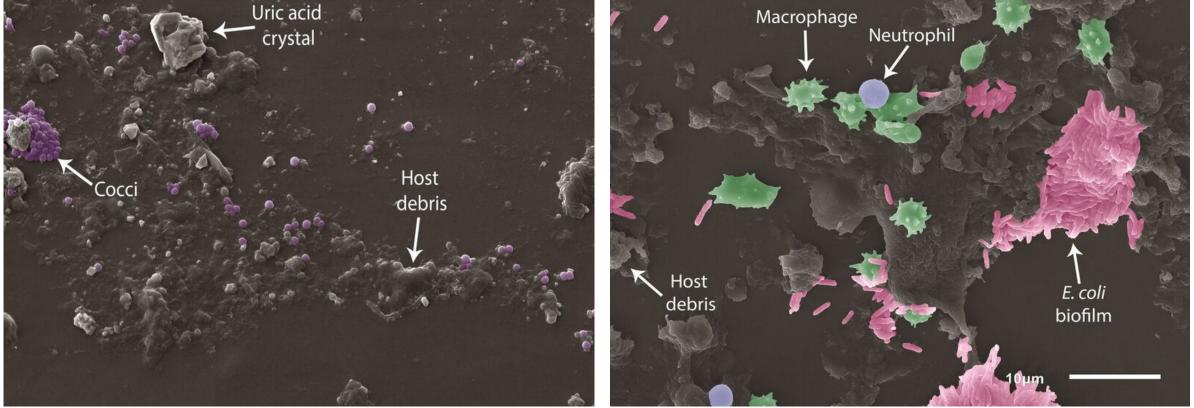


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# In vivo SEM Images (Extraluminal Catheter Surface)

E. coli Inoculated Catheters

**Biofilm Prevention** 



### **Light Treated**

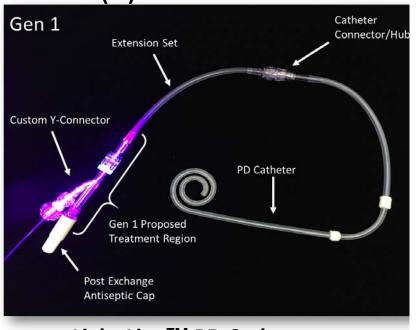


**No Light** 

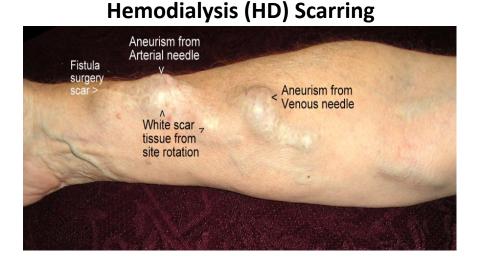
## Initial Focus PD

- Huge clinical need
- PD preferable/HD horrible
- Infections: #1 reason patients on HD
- Executive Order Incentivizing PD (2019)
- 510(k)

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Light Line<sup>™</sup> PD Catheter



Peritoneal Dialysis (PD)



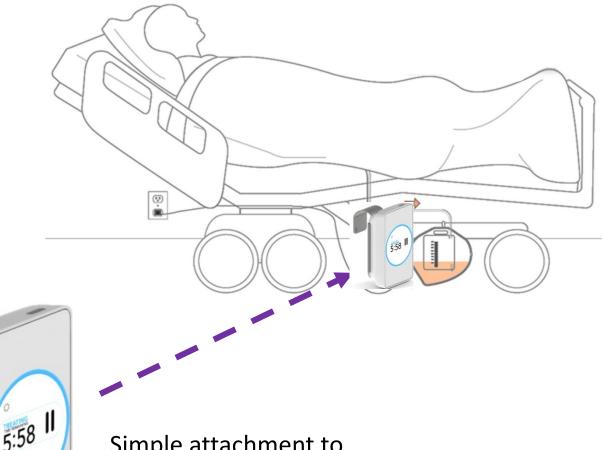


## Next: Light Line Foley to Prevent CAUTI

- Most common HAI (450,000 yr.)
  - Rate unchanged in decades
  - No reimbursement/penalties
- \$10,200 (ICU)
- 510(k) De Novo
- No Effective Solution

#### Light Line<sup>™</sup> Foley

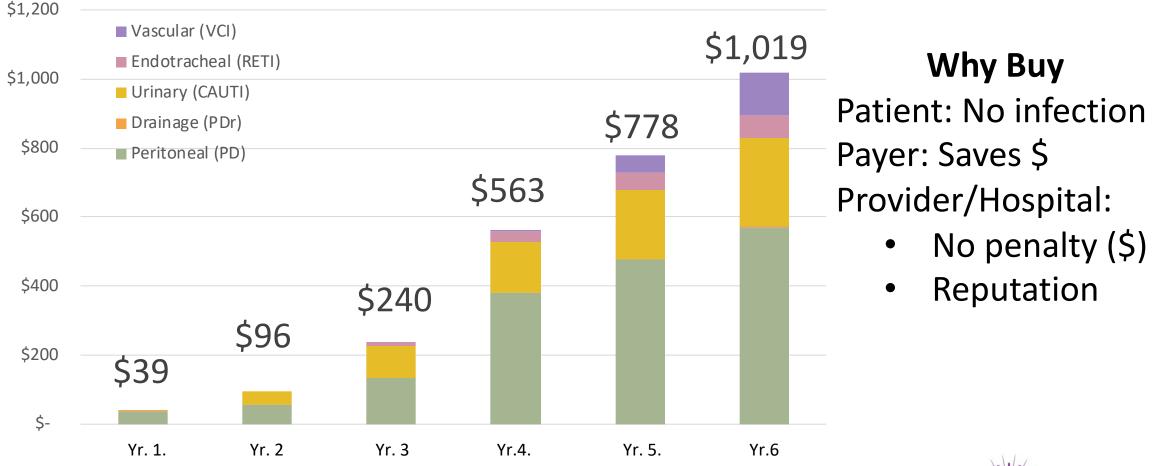




Simple attachment to Hospital Bed, IV Pole, or Wheelchair



# \$1B+ Revenue Opportunity <10% Penetration of \$11B Target Markets





## Exit Strategy/Multiple M&As 8 Potential Exits: 4 Fields of Use, US & Int'l

Company	Market Cap	Urology Catheters	Vascular Catheters	Dialysis Catheters	Respiratory Endotracheal
BD/Bard	\$68B	$\checkmark$	$\checkmark$		$\checkmark$
Fresenius	\$22B			$\checkmark$	
Teleflex	\$12B	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$



## **Experienced Leadership Team**

#### Dinesh Patel, PhD, Executive Chairman

- Co-Founder vSpring Capital: life sciences
- Founder & CEO TheraTech (acquired \$350M by Watson Pharmaceuticals)
- Founder, Chairman, Investor, & Advisor in multiple life science companies

#### Perry Croll, Chief Engineering Officer

- •3 successful startups & exits to Johnson & Johnson, Teleflex and ConvaTec
- •20 years device start-up expertise (R&D, Engineering, Regulatory, Operations)

#### Vicki Farrar, Esq. CEO & Director

Founder & CEO, Catheter Connections, which changed infusion standard of care, sold to Merit Medical 2017
20 years device start-up Executive expertise
Attorney & Device Veteran

#### Kelly Powers (Active Board Member – Product Development Advisor)

•30+ years medical industry expertise
•Former VP of R&D Bard Access
•Recently retired as VP Science & Technology at C.R. Bard

# Ma

#### Mark Ehlert, Director (Strategic Advisor)

40+ years Quality & Regulatory/Devices; Exec. Mgmt. Baxter, Cardinal, Hospira
Peritoneal Dialysis Expertise (Baxter)
President, 315 Ventures, Ltd.
Investor in Light Line



## 1 Year Ago Great: Technology, IP, Team, Strategic Investment





# 1<sup>st</sup> to come to the Rescue





## 1<sup>st</sup>: Keiretsu Forum

## **Without Our Investment Bankers**









Keiretsu Forum | Global Network

Founded in 2000 | Funded 1,000+ companies US \$750 M+ invested to date | 3,000+ members Over 50 chapters in 12 countries on 3 continents



NORTHWES REGION

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East Bay Istanbul Jakarta Kirkland-Eastside London London, Canada Los Angeles Madrid Miami Midwest Mumbai New York Nordics North Bay Orange County Paris Pebble Beach Philadelphia Pittsburgh Portland Prague Rockies San Diego San Francisco Seattle Seaul Shanghai Shenzhen

Established in 2016 & 2017 YTD in red font

Silicon Valley Singapore Spokane-Inland Tacoma **Tel Aviv** Tokyo Toronto Vancouver Vaughan Victoria-Vancouver Island/BC Washington D.C. Waterloo-Wellington Westlake Village LIGHTLINE

## Keiretsu Journey – Began in Mid-West

- Screened
- 3-day Road Show
- Diligence/Brutal but Golden
  - Led (Cantilever Investments)
  - Others
- Road Show Update

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# THEN FUNDING TOOK OFF Others Relied on Keiretsu Diligence

## Keiretsu Chapters

- NW (5-day road show)
- NW Expo
- N. Ca. (4-day road show)
- S. Ca. (3-day road show)
- Boston

## Others

- Angel Groups
- Keiretsu Referrals
- Doctors
- Company Executives

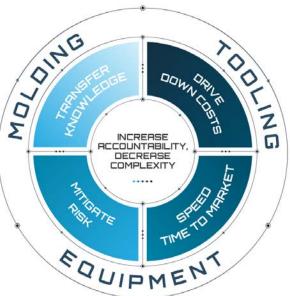


# MGS Mfg./Alligator Holdings Introduced by Cantilever

- MGS Founded in 1982
  - 1400 employees, US, Mexico and Ireland
  - Engineering & design for mfr., mold making
  - Scalable automation
- Capabilities for Light Line Medical
  - Prototype, Engineering (including electrical), Molding, Final Product Mfg.
  - Contract out what MGS can't do

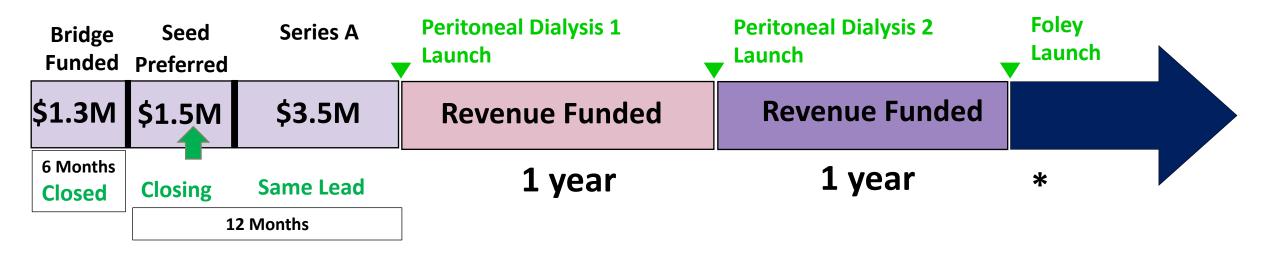
## WHY INVEST?

WE FALL WITHIN THEIR VISION INVEST IN COMPANIES WHERE MGS' MFG. EXPERTISE WILL HELP ASSURE SUCCESS





## PD Gen-1 Timeline & Use of Proceeds



Significant increase in valuation between Seed Preferred & Series A

<sup>22</sup> \* Develop Endotracheal Tube – Product launch 4 years from funding



## Thank-you Nothing changed in our technology, IP, team, etc.

## Diligence is the mother of good luck. - 16<sup>th</sup> century proverb