Creating the Improved Standard in Healthcare Sterile Reprocessing™
Important Cautions Regarding Forward Looking Statements and Other Disclosures

The statements in this presentation and oral statements made by representatives of TSO₃ Inc. (“Company”) relating to matters that are not historical facts (including, without limitation, those regarding the timing or outcome of any financing undertaken by the Company) are forward-looking statements that involve certain risks, uncertainties and hypotheses, including, but not limited to, general business and economic conditions, the condition of the financial markets, the ability of TSO₃ to obtain financing on favorable terms and other risks and uncertainties.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities, in any jurisdiction in which such offer, solicitation or sale would be unlawful.

The TSX has neither approved nor disapproved the information contained herein and accepts no responsibility for it.

STERIZONE® are registered trademarks of TSO₃ Inc.

U.S. Pat. No. 9,101,679

US Pat. Applications No.13/779,132; 13/779,193; 13/780,464; 14/820,965

Corresponding patents granted or pending in other countries

© 2016 TSO₃ Inc., all rights reserved for all countries. No part of this publication may be reproduced or translated in any form or by any means, without the prior written permission of TSO₃ Inc.
### Key Stats (TSX: TOS)

**All Dollars in USD**

<table>
<thead>
<tr>
<th>Stock Price (12/1/15)</th>
<th>$1.47 USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 Week High-Low</td>
<td>$1.68 - $0.85</td>
</tr>
<tr>
<td>Avg. Daily Vol. (3 mo.)</td>
<td>153,000</td>
</tr>
<tr>
<td>Shares Outstanding</td>
<td>83.3M</td>
</tr>
<tr>
<td>Float (est.)</td>
<td>47.4M</td>
</tr>
<tr>
<td>Insider Holdings</td>
<td>~1%</td>
</tr>
<tr>
<td>Institutional Holdings</td>
<td>~42%</td>
</tr>
<tr>
<td><strong>Market Cap</strong></td>
<td>$122.8M</td>
</tr>
<tr>
<td>Enterprise Value</td>
<td>$110.6M</td>
</tr>
<tr>
<td>Date Founded</td>
<td>1998</td>
</tr>
<tr>
<td>Employee Count</td>
<td>49</td>
</tr>
<tr>
<td>Fiscal Year End</td>
<td>December 31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Total Revenue (ttm)</strong></th>
<th>$1.2M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income (ttm)</td>
<td>(5.2M)</td>
</tr>
<tr>
<td>EPS (ttm)</td>
<td>($0.07)</td>
</tr>
<tr>
<td><strong>Price/ Tangible BV</strong></td>
<td>8.7x</td>
</tr>
<tr>
<td>Cash and Equiv. (mrq)</td>
<td>$9.2M</td>
</tr>
<tr>
<td>Getinge Payment (post mrq)</td>
<td>$7.5M</td>
</tr>
<tr>
<td><strong>Total Assets (mrq)</strong></td>
<td>$13.6M</td>
</tr>
<tr>
<td>Total Debt (mrq)</td>
<td>$0.0M</td>
</tr>
<tr>
<td>Total Liabilities (mrq)</td>
<td>$1.1M</td>
</tr>
<tr>
<td>Total Equity</td>
<td>$12.0M</td>
</tr>
</tbody>
</table>

**Distributor (Getinge) 5-Year Sales Target**

- Minimal commitment expected to be exceeded
- High-margin consumables and maintenance additional

---

1) Units based on TSO3 market estimates, issued and only effective on Nov. 25, 2015.

Data sources: Yahoo! Finance, S&P Capital IQ, company estimates

(ttm) = trailing 12 months at September 30, 2015

(mrq) = most recent quarter at September 30, 2015
Who We Are

- Our FDA-cleared medical device sterilization system represents numerous breakthroughs in design, capabilities, effectiveness and cost.

- **Razor/Razorblade business model:** proprietary consumables create high-margin recurring revenue stream.

- Recently signed, performance-based global distribution agreement with industry-leader, Getinge, highlights multi-billion dollar market potential.

- **Company at inflection point following regulatory clearances:** initial sales kicked off in 2015, now ramping up.
We Address a Multi-Billion Dollar Global Market for Low Temperature Sterilization

- Global sterilization equipment market is expected to grow at a 7.6% CAGR to $6.1 billion by 2020\(^1\)
- Market segmented into equipment, consumables and accessories, and contract sterilization services
- Consumables and accessories segment projected to grow at the highest CAGR\(^1\)
- Low-temperature gas sterilizers used in medical centers:
  - Total equipment replacement value: $4.5 billion\(^2\)
  - ~30,000 installed worldwide
  - Typical life span: ~10 years
  - Equipment Replacement opportunity: 3,000 units/year or $450 million annually
  - Consumables and accessories provide additional revenue

1) Markets and Markets, July 2015
2) Source: Company estimates
Key Market Driver: Demographics

- Global population is aging
  - U.S. 65+ age group to grow 35%, from 40 million in 2010 to 54 million by 2020¹
  - Globally, 65+ to grow >100% by 2020²

- Patients age 65+ currently consume 50% of surgical suite time³

- Aging population to result in increasing demand for minimally invasive diagnostic and surgical procedures (MIS)³, as well as for devices used in MIS operations

¹ U.S. Census Bureau
² United Nations
³ Markets and Markets, February 2015
Minimally Invasive Surgery (MIS) is Increasing the Need for Low-Temperature Sterilization of Devices

- **30 million+** Minimally Invasive Surgery (MIS) operations annually in U.S.
- MIS offers multiple benefits
  - Speeds recoveries
  - Maximizes surgical suite time
  - Reduces patient trauma
- However, **devices used in MIS are problematic**
  - Expensive, complex and delicate
  - Cannot tolerate high-temperature steam sterilization
  - **Therefore, many MIS devices are not sterilized** between patient use, but only disinfected
  - Disinfection cannot reach all the layered, complex parts
  - Disinfected-only MIS devices are linked to patient illness and death
The Problem with Disinfection-only: Superbug & Endoscope Connection

- **SUPERBUG** = Antimicrobial Resistant Bacteria
- At least 2 million Americans suffer from antibiotic-resistant bacteria annually – 23,000 die
  
  1
- Half of all bugs that cause infections after surgery are antibiotic resistant

- Superbug, CRE, has become resistant to most available antibiotics, resulting in death in up to 50% of patients who become infected

- CRE infections increasingly prevalent and linked to use of endoscopes, including seven incidents and two deaths at UCLA Medical Center

### Deaths From Drug-Resistant Infections Set To Skyrocket
Deaths from antimicrobial resistant infections and other causes in 2050

<table>
<thead>
<tr>
<th>Infection Type</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antimicrobial resistant</td>
<td>10.0m</td>
</tr>
<tr>
<td>Cancer</td>
<td>8.2m</td>
</tr>
<tr>
<td>Diabetes</td>
<td>1.5m</td>
</tr>
<tr>
<td>Diarrhoeal disease</td>
<td>1.4m</td>
</tr>
<tr>
<td>Road traffic accidents</td>
<td>1.2m</td>
</tr>
<tr>
<td>Measles</td>
<td>130,000</td>
</tr>
<tr>
<td>Cholera</td>
<td>120,000</td>
</tr>
<tr>
<td>Tetanus</td>
<td>60,000</td>
</tr>
</tbody>
</table>

1) Source: Centers for Disease Control (CD)
2) The Lancet Infectious Diseases journal, as reported by *Time, October 2015*
3) Associated Press, February 20, 2015

NATION WORLD

FDA links "superbug" to key medical device

Advisory: Germs may linger in endoscopes, even when cleaned properly

*By Alicia Chang  The Associated Press*

POSTED: 02/20/2015 12:01:00 AM MST

LOS ANGELES — A "superbug" outbreak suspected in the deaths of two Los Angeles hospital patients is raising disturbing questions about the design of a hard-to-clean medical instrument used on more than half a million people in the U.S. every year.
Effective Medical Device Reprocessing is Critical to Reducing CRE Infections

- **Use of non-sterile** devices contributes to **increased** infection rates and hospital stays
- **Therefore sterilization** of reusable medical devices is an **essential element** for positive surgical outcomes
- **Sterilization** requires vigilant completion of every stage in the **Medical Device Reprocessing Cycle**
- **Broad skillset** required to properly execute
  - Applied Microbiology
  - Sterilization / Disinfection Processes
  - Instrument and Materials knowledge
  - Storage Conditions and Labeling
  - Cleaning Protocols and Practices
    - Device Inspection
    - Packaging Systems and Materials
    - Fluid Dynamics
Our Answer to these Issues and Challenges?

The FDA-Cleared, STERIZONE® VP4 Sterilizer
- Dual Sterilant, Low Temperature Sterilization System -

**Advantages**
- Single cycle – easy to use, fewer operator errors due to Error free cycle selection
- Sterilizes wide range of devices in one load

**Proprietary Consumables**
- 125-280 Solution™ (H₂O₂)
- STERIZONE® BI+ / Test Pack advanced process monitoring

**Dynamic Sterilant Delivery System™**
- Proprietary Software automatically adjusts the sterilant quantity based on load composition, weight and temperature.

**Other Key Features**
- Large 125 L (4.3 cu. in.) chamber
- Up to 75 lb in a single load
- Onboard O₃ generator
- Separate extra-large loading rack
What Makes STERIZONE® VP4 Sterilizer so Unique?

Our STERIZONE® Sterilization System represents a breakthrough in design, capabilities, effectiveness and cost

- **Only** FDA-cleared sterilizer utilizing dual sterilants (Hydrogen Peroxide and Ozone)
- **Only** FDA-cleared sterilizer able to mix simple and complex reusable medical devices in the same cycle
- **Only** single-cycle low temperature sterilizer on the market
- **Only** sterilizer with validated claims for colonoscopes, gastrosopes, and duodenoscopes (Canada and Europe)
- **Only** sterilizer so unique and groundbreaking, the FDA had to create a new product code for it

STERIZONE® VP4 Sterilizer is the first and only device to receive new FDA product code, PJJ, for a device that can use two or more sterilants simultaneously
**Why is Hydrogen Peroxide Important?**

**Chemical Used in Medical Device Reprocessing**

<table>
<thead>
<tr>
<th>ETO</th>
<th>Ethylene Oxide (100%, 90/10, etc. – all forms)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Toxic</td>
</tr>
<tr>
<td></td>
<td>• Carcinogenic</td>
</tr>
<tr>
<td></td>
<td>• Slow</td>
</tr>
<tr>
<td></td>
<td>•Environmental pollutant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H₂O₂</th>
<th>Hydrogen Peroxide (VHP, Plasma, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Quick</td>
</tr>
<tr>
<td></td>
<td>• Environmentally safe</td>
</tr>
<tr>
<td></td>
<td>• However, typically expensive, with strict</td>
</tr>
<tr>
<td></td>
<td>loading limitations and monitoring</td>
</tr>
</tbody>
</table>

**Relative Market Share Over Time**

- ETO: Toxic, Carcinogenic, Slow, Environmental pollutant
- H₂O₂: Quick, Environmentally safe, However, typically expensive, with strict loading limitations and monitoring
STERIZONE® VP4 Sterilizer Regulatory-Cleared Claims

STERIZONE® VP4 Sterilizer
- Broadest regulatory claims of any sterilizer
- Greatest variety of devices
- Greatest flexibility of load configuration — an industry first: flexible, rigid, and general instruments all in the same load
- Largest quantity of devices per load
- Highest gross weight capacity in a single load

STERIZONE® BI+ / Test Pack
- “Demonstrated to be more resistant than the full half-cycle, including exposure to hydrogen peroxide and ozone”
- 18-hour incubation
- 18-month shelf life
# Competitive Landscape of Low Temperature Sterilization

<table>
<thead>
<tr>
<th>Ethylene Oxide (EtO)</th>
<th>Hydrogen Peroxide (H₂O₂)</th>
<th>Liquid Peracetic Acid (PAA)</th>
<th>Hydrogen Peroxide + Ozone (H₂O₂/O₃)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacious</td>
<td>Fast</td>
<td>Specific use in OR</td>
<td>Fast</td>
</tr>
<tr>
<td>High material compatibility</td>
<td>Limited in efficacy</td>
<td>Liquid = Not terminal sterilization</td>
<td>Efficacious</td>
</tr>
<tr>
<td>Long cycles (16-30 hrs for toxicity removal)</td>
<td>Good material compatibility</td>
<td>Replacement offers reduced claims</td>
<td>Good material compatibility</td>
</tr>
<tr>
<td>Dangerous (Carcinogenic, mutagenic, neurotoxic)</td>
<td>Load restrictive</td>
<td>Only addresses OR segment</td>
<td>High loading capacity</td>
</tr>
<tr>
<td>Regulated pollutant</td>
<td>Expensive</td>
<td>Initial 23,000 units pulled from market</td>
<td>Lowest cost, Most instruments sterilized</td>
</tr>
<tr>
<td>Multiple cycles - No Throughput</td>
<td>Multiple cycles - No Throughput</td>
<td>Multiple cycles - No Throughput</td>
<td>Single cycle - Throughput</td>
</tr>
</tbody>
</table>
Extensive Global Patent Portfolio Creates Competitive Barriers

- **Broad global patent coverage**
  - TSO₃ sterilization method; selective control of condensation
  - Use of its *Dynamic Sterilant Delivery System™* using the two sterilants of H₂O₂ and ozone and/or additional chemistry combinations
- Patents create competitive barrier-to-entry
- Patents pending on other technology enhancements

### Our Global Patent Portfolio

<table>
<thead>
<tr>
<th></th>
<th>Projected¹</th>
<th>Submitted</th>
<th>Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S.</strong></td>
<td>1</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td>2</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>2</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Europe</strong></td>
<td>2</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td>2</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9</td>
<td>15</td>
<td>36</td>
</tr>
</tbody>
</table>

¹) Still in international phase
Our Go-to-Market Strategy: Partnering with Getinge for Global Sales and Service

- **Getinge Infection Control** (part of the Getinge Group)
  - Global Headquarters: Getinge, Sweden
  - Top global provider of infection control devices
  - Associates: 3,089
  - Sales Companies: 36
  - Manufacturing Locations: 10

- **STERIZONE® VP4 Sterilizer** immediately fills a gap in Getinge’s product portfolio
TSO3 and Getinge
Exclusive Global Distribution Agreement

- Q4 2015 - Getinge granted exclusive global distributor rights to STERIZONE® VP4 Sterilizer
- US$7.5M license fee paid to TSO3 in Q4 2015
- Minimum annual purchase commitments
- Consumables to generate additional sales
- Broad sales pipeline in the U.S.
- Deal reflects solid endorsement of STERIZONE® Technology and value proposition

“The STERIZONE® VP4 Sterilizer uniquely addresses an unmet global need for cost effective, high throughput sterilization of complex medical devices used in hospital environments.

“Our initial customer experience with the product line has been excellent.

“We’re now laying plans for a global rollout, designed to leverage the global reach of Getinge’s subsidiaries and distributors partnerships across six continents.”

- Joacim Lindoff, President and CEO
Getinge Infection Control
November 25, 2015
Getinge Sales Target for TSO₃ STERIZONE® VP4 Sterilizer

- **Getinge’s commitment:**
  - 10% of the ~3,000 unit/US$450 million annual global replacement market within five years
  - = 300+ units/year by 2020E¹
- Ongoing maintenance and proprietary consumables to generate additional **high-margin recurring revenue**

- Minimum commitment expected to be exceeded
- High-margin consumables and maintenance additional

1) Units based on TSO3 market estimates, issued and only effective on Nov. 25, 2015.
Recent Financials and Outlook

<table>
<thead>
<tr>
<th>Total Revenue (ttm)</th>
<th>$1.2M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income (ttm)</td>
<td>($5.2M)</td>
</tr>
<tr>
<td>EPS (ttm)’</td>
<td>($0.07)</td>
</tr>
<tr>
<td>Cash and Equiv. (mrq)</td>
<td>$9.2M</td>
</tr>
<tr>
<td>Monthly Burn Rate²</td>
<td>~$700K</td>
</tr>
<tr>
<td>Total Assets (mrq)</td>
<td>$13.6M</td>
</tr>
<tr>
<td>Total Debt (mrq)</td>
<td>$0.0M</td>
</tr>
<tr>
<td>Total Liabilities (mrq)</td>
<td>$1.1M</td>
</tr>
<tr>
<td>Total Equity (mrq)</td>
<td>$12.0M</td>
</tr>
<tr>
<td>Fiscal Year End</td>
<td>Dec. 31</td>
</tr>
</tbody>
</table>

2015 Quarterly Revenue Growth

($ Millions)

<table>
<thead>
<tr>
<th>Q1-15</th>
<th>Q2-15</th>
<th>Q3-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.09M</td>
<td>$0.14M</td>
<td>$1.21M</td>
</tr>
</tbody>
</table>

Revenue Growth

($ Millions)

<table>
<thead>
<tr>
<th>2013</th>
<th>2014</th>
<th>TTM@Q3-15</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.2M</td>
<td>$0.3M</td>
<td>$1.2M</td>
<td></td>
</tr>
</tbody>
</table>

Data sources: Yahoo! Finance, S&P Capital IQ, company estimates

1) Adjusted to exclude collection of R&D tax credits

(ttmm) = trailing 12 months at September 30, 2015

(mrq) = most recent quarter at September 30, 2015

Received initial purchase orders for STERIZONE® VP4 Sterilizer

Distributor Commitment to Drive Revenue Ramp

Fiscal year ending Dec. 31
Growth Strategies

- **Support Getinge** for global introduction and commercialization of STERIZONE® VP4 Sterilizer

- **Broaden product portfolio** with development and commercialization of new products:
  - Purpose-built or sterilizer products
  - Iterations of existing systems for local market adoption
  - Acquire complimentary technology or product lines in sterile reprocessing market

- **Expand and evaluate manufacturing/assembly operations and options**
Important Regulatory Growth Driver

- FDA has recently identified flexible endoscopes as known source of infection and cause of death

- FDA has recorded 109 reports of infections or contamination related to bronchoscopes over the past five years, including 50 in 2014 alone\(^1\)

- FDA has recently expanded warnings about infection risk from medical scopes

- TSO\(^3\) STERIZONE® VP4 Sterilizer is the only device validated for sterilization of colonoscopes, gastroscopes, and duodenoscopes in Europe and Canada

- TSO\(^3\) is pursuing claims expansion with the FDA for sterilization claims of important flexible endoscopes

---

1) Bloomberg, Sept. 2015
Potential Future Regulatory Growth Driver: Evolution of Classification of Reprocessing Requirements

- Since multi-channeled flexible endoscopes, including colonoscopes and duodenoscopes are typically not sterilized in U.S., FDA is considering an expansion of its sterilization requirements.

- Requiring more devices to be sterilized, rather than just disinfected, would dramatically increase our addressable market.

<table>
<thead>
<tr>
<th>Body Contact</th>
<th>Reprocessing Requirements</th>
<th>FDA Device Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterile Body Cavity</td>
<td>Sterilization</td>
<td>Critical</td>
</tr>
<tr>
<td>Mucous Membranes</td>
<td>High Level Disinfection</td>
<td>Semi-Critical</td>
</tr>
<tr>
<td>Intact Skin</td>
<td>Low Level Disinfection</td>
<td>Non-Critical</td>
</tr>
</tbody>
</table>

1) Bloomberg, Sept. 2015
TSO₃ Key Takeaways

- **STERIZONE® VP4 Sterilizer**: FDA-cleared medical device sterilization system with multiple **breakthroughs** in design, capability, effectiveness and operational cost

- **Exclusive, performance-based global distribution agreement with Getinge**: minimum sales commitment affirms major market potential

- **Razor/Razorblade recurring revenue** business model with proprietary consumables

- **Company at inflection point**: initial sales kicked off in 2015, now ramping up
Contact Us

**TSO₃ Inc. - Canada**
2505, avenue Dalton
Québec, Québec
G1P 3S5 CANADA

Tel (418) 651-0003
info@tso3.com

**TSO₃ Corporation - USA**
1636 American Way
Myrtle Beach, SC 29577

**Investor Relations**

**Liolios Group, Inc.**
Ron Both, Senior Managing Director
Tel (949) 574-3860
TOS@liolios.com

**Renmark Financial Communications Inc.**
Barry Mire, Vice President
Tel (416) 644-2020
Tel (514) 939-3989
bmire@renmakfinancial.com
Appendix
Evolution of TSO³ – From Development Stage to Major Commercial Rollout

- **1998**
  - Founded in Québec City, Québec

- **2000**
  - 125L Ozone Sterilizer received regulatory clearance from Health Canada and FDA

- **2008**
  - R.M. (Ric) Rumble appointed CEO

- **2009**
  - Health Canada licenses STERIZONE® 125L+ Sterilizer
  - Developed next generation sterilizer, STERIZONE® 125L+ Sterilizer that utilizes hydrogen peroxide and ozone

- **2010**
  - Received CE Mark notice of conformity for STERIZONE® 125L+ Sterilizer

- **2014**
  - Granted patents in Europe, Japan and Australia
  - FDA 510(k) clearance for STERIZONE® VP4 Sterilizer

- **2015**
  - Completed CN$11.5 million equity offering to provide working capital
  - Additional patent coverage USA
  - Established first U.S. location in Myrtle Beach, South Carolina
  - Allowed expanded claims for STERIZONE® VP4 Sterilizer by Health Canada
  - Signed first commercial agreement with Getinge Infection Control for STERIZONE® Sterilization System
  - Received first purchase orders for STERIZONE® VP4 Sterilizer

- **2015**
  - Signed multi-year, multi-million dollar distribution agreement with Getinge

---

**Transition from Pre-Revenue to Commercialization > 2015**
Richard Rumble, President and CEO

- President, CEO and director of TSO3 since October 2008
- 25 years of experience in N. American and global medical device industry, including the delivery of significant and sustained revenue and earnings growth, leading successful new commercial strategies, and negotiating and integrating large-scale acquisitions
- Previously president of BERCHTOLD Corporation; VP of sales and marketing for Strategic Diagnostics; VP and GM of STERIS Corporation; and president and CEO of MediVators
- Held number of domestic and international management positions at 3M Company, including Global Business Unit manager for Sterile Processing
- Holds a BSc degree in biology and an Honours BSc in microbiology and immunology from the University of Western Ontario in London, Ontario

Glen Kayll, Chief Financial Officer

- Appointed CFO December 2015
- Brings 20+ years of senior management experience, including as CFO and head of operations for both Canadian and U.S. public companies listed on TSX and NASDAQ exchanges
- Earlier CFO of Argex Titanium and CFO and VP of international operations for Coastal Contacts, a TSX/NASDAQ, vertically integrated multinational manufacturer and internet retailer
- Prior to Coastal Contacts, was treasurer and head of investor relations at PMC-Sierra, a NASDAQ-listed, semiconductor and software solutions innovator
- Bachelor of Commerce degree from Carleton University, MBA from Simon Fraser University
- Chartered Professional Accountant
Board of Directors

Richard Rumble | Director

Germain Carriere | Chairman

- Chairman since June 1998.
- In recent years, after holding the position of Vice Chairman, Corporate Strategy, at National Bank Financial Inc., he held the positions of President and Chief Operating Officer at Desjardins Securities until July 2009.
- Mr. Carrière joined the Corporate Finance Department of Lévesque Beaubien Geoffrion in 1979 where he held positions of Senior Vice President and President, Customer Services.
- Mr. Germain Carrière holds a law degree from the Université de Sherbrooke and a MBA from the University of Western Ontario.

Pierre Désy | Director

- Joined TSO3 board in May 2008.
- Brings to TSO3’s board of directors a wealth of strategic experience, including business management, both as owner-officer amongst others with La Compagnie Panelfold du Canada, and as President and CEO of various companies particularly Rougier, a group of five companies operating in various biotechnology sectors and in the pharmaceutical industry.
- Currently a negotiation and business strategy consultant.
- Previously served as President and CEO of DiagnoCure Inc. from 2000 to 2006 steering this public company through the international marketing of diagnostics cancer tests and numerous financing in the financial markets.

Jean Lamarre | Director

- Joined TSO3 board in March 2013.
- Brings to the board 35 years of experience in international business development, finance, and corporate strategy.
- Currently, president of Lamarre Consultants, a global advisory firm in connection with strategic development, financing and international operations.
- Previously, Executive Chairman of the Board of Semafo Inc. since June 2008, Director of Semafo Inc. since May 1997 and served as its Lead Director from February 2004 to June 2008.
Claude Michaud | Director
• Joined TSO3 board in March 2013.
• Brings to the board his expertise in corporate finance, mergers and acquisitions and corporate development.
• Experienced finance executive and investment banker. 15-year career in investment banking with Scotia Capital and TD Securities, he became Chief Financial Officer of C-MAC Industries, Neurochem, Kangaroo Media and Groupe Lagassé.
• Member of the Board of Directors of Milit-Air and the Fondation du Théâtre du Nouveau-Monde.

Jean-Pierre Robert | Director
• Joined TSO3 board in May 2015.
• Brings to the board over 30 years of senior management experience in the global healthcare industry, in particular in diagnostics, specialty pharmaceuticals and medical imaging.
• Currently Chairman of the board and CEO of CADENS Medical Imaging, a privately owned company located in the Québec province.
• Most recently served as President and CEO of Draximage, and Chief Operating Officer of the parent company Draxis Specialty Pharmaceuticals Inc.
• Previously served as EVP Eastern Canada and Vice President Marketing at Fisher Scientific Ltd., & from 1996 to 2001 Vice President and General Manager at Mallinckrodt Canada Inc., which was acquired by Tyco Healthcare in 2001.

Steve West | Director
• Joined TSO3 board in November 2015.
• Brings to TSO3’s board of directors a wealth of strategic experience, including more than 30 years of public company experience in health and life sciences, nuclear industry, specialty chemicals and venture capital.
• Previously served as CEO of Nordion (TSX: NDN, NYSE: NDZ), a leading provider of medical isotopes and sterilization technologies.
• Prior to Nordion, Mr. West held senior positions with MDS, where he was responsible for all aspects of the company’s global operations and regulatory affairs before its sale to Nordion. He has also served as a senior partner at MDS Capital, president at Unilever Canada, and vice president at Diversey Corporation.
FDA Links Superbug to Key Medical Device

FDA links "superbug" to key medical device
Advisory: Germs may linger in endoscopes, even when cleaned properly
By Alicia Chang
The Associated Press
Posted: 02/20/2015

LOS ANGELES — A "superbug" outbreak suspected in the deaths of two Los Angeles hospital patients is raising disturbing questions about the design of a hard-to-clean medical instrument used on more than half a million people in the U.S. every year.

At least seven people — two of whom died — have been infected with a potentially lethal, antibiotic-resistant strain of bacteria after undergoing endoscopic procedures at Ronald Reagan UCLA Medical Center between October and January. And more than 170 other patients may have been exposed, university officials said.

UCLA said the infections may have been transmitted through at least two contaminated endoscopes that were used to diagnose and treat pancreatic and bile-duct problems.

The infections occurred even though the instruments had been cleaned according to the manufacturer's instructions, the hospital said.

The episode is the latest in a series of outbreaks involving such instruments.
"You can very easily do everything right and still have some contamination," said Dr. Deverick Anderson, an infectious-disease expert at Duke University. "We're finding this is a problem, but it's probably one that we don't have a very good solution to right now."

Lawrence Muscarella, a Philadelphia infection-control expert, said the recent incidents point to a design flaw that needs to be addressed.

An endoscope — or more specifically in this case, a duodenoscope — is a thin, flexible fiber-optic tube that is inserted down the throat to enable a doctor to examine an organ. It typically has a light and a miniature camera.

"We notified all patients who had this type of procedure, and we were using seven different scopes. Only two of them were found to be infected. In an abundance of caution, we notified everybody," UCLA spokeswoman Dale Tate said.

The hospital said it has since changed its disinfection procedures, and they go beyond normal standards.

On Thursday, the U.S. Food and Drug Administration issued an advisory warning doctors that even when a manufacturer's cleaning instructions are followed, infectious germs may linger in the devices. Their complex design and tiny parts make complete disinfection extremely difficult, the advisory said.

In a statement, the FDA said it is trying to determine what more can be done to reduce such infections. But it said that pulling the device from the market would deprive hundreds of thousands of patients of "this beneficial and often life-saving procedure."

"The FDA believes at this time that the continued availability of these devices is in the best interest of the public health," the agency said.

More than 500,000 patients undergo procedures using duodenoscopes in the U.S. every year, according to the FDA.

The company that supplied UCLA's equipment, Olympus Medical Systems Group, did not immediately respond to an email request for comment.

The germ is known as carbapenem-resistant Enterobacteriaceae, or CRE, and similar outbreaks have been reported in hospitals around the nation. They are difficult to treat because some varieties are resistant to most known antibiotics.

Healthy people usually don't get CRE infections; infections typically occur in patients in hospitals, nursing homes and often life-saving procedure.

By one estimate, CRE can contribute to death in up to half of seriously infected patients, according to the U.S. Centers for Disease Control and Prevention.

CRE can cause infections of the bladder or lungs. Symptoms can include coughing, fever and chills.

The bacteria may have been a "contributing factor" in the deaths of two UCLA patients, the university said. Those who may have been exposed are being sent free home-testing kits that the university will analyze.

National figures on the bacteria are not kept, but 47 states have seen cases, the CDC said.

One outbreak occurred in Illinois in 2013. Dozens of patients were exposed to CRE, with some cases linked to a tainted endoscope at a hospital.

A Seattle hospital, Virginia Mason Medical Center, reported in January that CRE linked to an endoscope sickened at least 35 patients, and 11 died.