Creating The Improved Standard In Healthcare Sterile Reprocessing™

December 2015
Our Vision

“To Create the Improved Standard in Healthcare Sterile Reprocessing™”
## Company Overview

### Past

- Founded 1998
- Design and Manufacture Low Temperature Sterilizers for Medical Devices
- IPO 2001
- TSX: TOS
- Outstanding Shares: 83 M

### Current

- New Sterilizer FDA 510(k) Cleared – December 2014
- Financing Completed – March 5, 2015
- Distribution Agreement Signed: GETINGE Infection Control – March, 2015
  - FIRST SALES (USA) - announced in August 2015
What We Do...
- Enable Better Healthcare

By delivering Low Temperature Sterilization Systems that offer:

- Reliable
- Low cost
- Rapid turnaround
- Compatible
- Environmentally Friendly
- Efficient
- High Volume

Solutions for simple and complex reusable medical devices that cannot withstand other harsh sterilization modalities
Why Low Temperature Sterilization? (market drivers)
Market Drivers

Aging Population

- 65 yrs +
- 45 to 64
- 15 to 44
- - 15 yrs

53% Increase
Age Impact on Demand and Type of Surgery

- 88% of ophthalmology surgeries
- 70% of cardiothoracic surgeries
- 65% of urology surgeries
- 60% of general surgeries
MIS Procedures

Increasingly used and finding new applications everyday

Orthopaedic
Neurosurgery
Gastrointestinal
Gynaecology
Urology
Pulmonary medicine
Cardiology

30 million + surgeries in US/year

MIS Devices
Complex and Delicate
MIS Devices Require Low Temperature Sterilization
Global Market Overview / Low Temperature Sterilization

Capital Equipment (Sterilizers) Placements
- Low Temperature Gas Sterilizers in Hospitals:
  - ~30,000 installed worldwide
  - Life span ~ 10 years
  - Replacement business: 3,000 units/year
  ➢ Total Replacement Value $4.5 bln

Consumables
- Accelerating revenues due to increased placements and increased daily cycles

ETO
- Ethylene Oxide (100%, 90/10 etc. all forms)
- (-) Toxic, Carcinogenic, Slow, Environmental pollutant

H₂O₂
- Hydrogen Peroxide (VHP, Plasma etc)
- (+) Quick, Environmentally safe
- (-) Expensive, Strict loading limitations, Monitors
STERIZONE® VP4 Sterilizer

The NEXT GENERATION LOW TEMPERATURE STERILIZER
The ONLY Two or More Sterilant Sterilizer cleared in the USA
SUPERIOR Claims to any Cleared Device

STERIZONE® VP4 Sterilizer
• **Unique cycle** intended for Rigid and Flexible lumen, and non-lumen devices
• Cycle comprises two phases including $\text{H}_2\text{O}_2$ injection, followed by $\text{O}_3$ injection and dwell

Hydrogen Peroxide
• 125-280 Solution™ bottle containing 280 mL of 50% $\text{H}_2\text{O}_2$ solution
• Each phase can use between 7 and 20.1 mL of solution

Vaporizing technology
• Vaporizer temperature: 120°C
• Vaporizes and injects multiple and continuous pulses of a small quantity ~40 mg of 50 wt% $\text{H}_2\text{O}_2$ solution.

Other Features
• 125 L (4.3 cu’) Chamber
• Chamber temperature 41°C
• Vented with medical grade $\text{O}_2$
• Separate loading rack (not shown)
• $\text{O}_3$ generator providing a mixture of $\text{O}_2$ and $\text{O}_3$ at a dose of 2 mg/L for residual $\text{H}_2\text{O}_2$ reduction
Cleared Claims (USA - December 2014)

STERIZONE® VP4 Sterilizer

- **Broader** claims in industry; **More** devices and **Greatest** flexibility of load configurations
  - Flexible, Rigid and General instruments in the same load
- Largest quantity of devices in Load in Industry
- Highest gross weight available for a single load in Industry (75 lb)
  - Supported by multiple validation loads

STERIZONE® BI+/ Test Pack

- “Demonstrated to be more resistant than the full half-cycle, including exposure to hydrogen peroxide and ozone”
- 18-hour incubation
- Shelf life of 12 months
### STERIZONE® Sterilizer Claims

**CANADA AND ROW (TODAY)**

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Description</th>
<th>Inside Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle 1</td>
<td>#Single channel flexible endoscopes</td>
<td>≥ 1.0 mm</td>
<td>≤ 850 mm</td>
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<td>Cycle 2</td>
<td>Rigid channel devices including single channel and double rigid channel endoscopes</td>
<td>≥ 0.7 mm</td>
<td>≤ 500 mm</td>
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<tr>
<td>Cycle 3</td>
<td>Multi-Channel flexible endoscope</td>
<td>≥ 1.1 mm</td>
<td>≤ 3500 mm</td>
</tr>
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</table>
### STERIZONE® Sterilizer Claims

**Single Cycle (Cycle 1)**

<table>
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<tr>
<th>MIXED LOADS</th>
<th>Inside Diameter</th>
<th>Length</th>
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<tr>
<td></td>
<td>≥ 2.0 mm</td>
<td>≤ 575 mm</td>
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# STERIZONE® Sterilizer Claims

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**CANADA** (applied for)

1 Cycle with NO reduction in Claims
Customer Benefits

- **Single cycle, for all loads**
  
  Ease of use / Reduction of operator error / Enhanced quality

- **Utilizable three shelf racks**
  
  Makes the STERIZONE® VP4 Sterilizer (4.3 cu‘) chamber fully usable
  - **Most instruments per load** (Reduced operating cost/Faster turnaround)

- **Least load restrictions**
  
  Flexible chamber content
  - Efficacious throughput (Reduced time to process)

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**Efficacious, Rapid, Low Cost, Compatible, High Throughput Sterilization Process**
Throughput Defined

One load vs. three...

- Mixed loads
- Greater quantity
- Greater complexity
- Reduced time
- Reduced cost
Reprocessing Areas in Hospitals

CSSD - STERILE

GI – High Level Disinfected
## Reprocessing: The What to DO … and When …

### Spaulding Classification

<table>
<thead>
<tr>
<th>Body Contact</th>
<th>Disinfection Requirements</th>
<th>FDA Device Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intact skin</td>
<td>Low level disinfection</td>
<td>Non-critical</td>
</tr>
<tr>
<td>Mucous membranes</td>
<td>High level disinfection</td>
<td>Semi-critical</td>
</tr>
<tr>
<td>Sterile body cavity</td>
<td>Sterilization</td>
<td>Critical</td>
</tr>
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[Diagram showing margin of safety with LOWEST on the left and HIGHEST on the right]
The Superbug Problem

What is it?
SUPERBUG = Antimicrobial Resistance

Increasingly a Problem

“…CRE bacteria have become resistant to most available antibiotics.—one report cites they can contribute to death in up to 50% of patients who become infected.”

Call to Action

Centers for Disease Control (CDC) Warns CRE Infections More Common, More Resistant; Its findings, published in Vital Signs, call on states, communities, medical facility CEOs, health care providers, and patients to take steps to prevent serious infections.

CRE bacteria linked to seven infections, 2 deaths at UCLA.
Increased Importance of Technology

Diagnostic instruments (mucous membranes) are being repurposed for use in surgical (sterile body cavity) procedures.

Endoscopic Retrograde Cholangiopancreatography (ERCP)
Potential “ERCP” Opportunity

- Sterilization as a standard of practice ... IMPACT

- 650,000 procedures annually

- >1000 use locations (potential placements)

Spill over to other scopes ???...

Colonoscopes, gastroscopes, etc.
Opportunity Expansion

Our Data

$TSO_3$ in-house data supports feasibility of pursuing enhanced claim to existing clearance (not a new clearance) for high risk flexible endoscopes
Indications for Use

510(k): K090636

Device Name: TSO₃ Ozone Sterilizer, model 125L

**Indications for Use:**

TSO₃ 125L Ozone Sterilizer has the ability to sterilize successfully packaged rigid and flexible lumen medical devices, including single and multi channel flexible endoscopes such as fiber optic and video endoscopes.

**Notes:**

* Sterilization efficacy was demonstrated for a load comprising of packaged multi channel and single channel flexible endoscopes having a total of 14 channels in the presence of other packaged medical devices.

* Endoscopes evaluated include: Colonoscope, Gastroscope, Broncho video scope, Choledofiberscope and Ureteroscope.
(TSX:TOS) has received the green light from the FDA to expand the intended claims of its STERIZONE® 125L Sterilizer, including sterilization of packaged, multi-channel flexible endoscopes, such as colonoscopes, gastrosopes, bronchoscopes, ureteroscopes and choledochoscopes.

…these same procedures have been followed during the recent development of TSO₃’s new cycles. (STERIZONE® VP4 Sterilizer)

“These new cycles are intended to maintain the same sterile efficacy, while taking less time and being gentler on many medical devices”
GO TO MARKET STRATEGY
Go to Market Strategy

- CHANNEL - Leverage available Sales and Service channels
  ✓ Non-exclusive Agreements
    ✓ Maintain Positioning and Pricing Control
    ✓ Obtain contracts positions with:
      ✓ Group Purchasing Organizations (GPO) and Integrated Delivery Network (IDN) contracts
  ✓ Utilize established service capabilities
    ✓ Ease of mind for customers – promotes equipment “up-time”
  ✓ Geographical Concentration
    ✓ North America, Europe

- Product Positioning
  ✓ Technology as a differentiator
    ✓ Solve the problem no one else can
      ✓ While reducing
        ✓ ERRORS
        ✓ TIME
        ✓ COST
Getinge Infection Control

Associates: 3,089
Revenue: SEK 5,4 billion = USD 0.650 M
Global Headquarters: Getinge, Sweden
Sales Companies: 36
Manufacturing Locations: 10
Year Founded: 1904

TSO3 ENTERS INTO FIRST COMMERCIAL AGREEMENT FOR STERIZONE® VP4 STERILIZER

Québec City, March 6, 2015 – TSO3 Inc. (TSX: TOS) ("TSO3" or the "Corporation") an innovator in sterilization technology for medical devices in healthcare settings, today announced that the Company has signed its first commercial agreement with Getinge Infection Control in support of the launch of the STERIZONE® VP4 Sterilization System. The non-exclusive agreement covers multiple markets in which Getinge has significant market share, including North America and other selected markets. Efforts to launch the product will begin immediately.
Emerging Support Materials

STERIZONE VP4 Low Temperature Sterilizer
– one cycle for mixed load simplicity

Innovation by design
– Sterizone® VP4 Sterilizer

The Sterizone® VP4 Sterilizer is a low-temperature process that utilizes new materials, improved hydrolytic properties (C4 and C6), and a novel heating design to sterilize and maintain the sterility of mixed loads. The result is a non-disruptive, non-toxic, and non-destructive sterilization process that is ideal for sensitive medical devices. A highly automatic sterilization process is recommended for the immediate use of sterilized items using a batch system.

Dynamic Sterilant Delivery System™
– STERIZONE® VP4 Sterilizer

The Sterizone® VP4 Sterilizer is designed to automatically adjust the load or sterilization cycle based on the load conditions. It features a microprocessor-controlled, temperature-stable wash system that is pre-programmed to ensure optimal performance. As a result, the Sterizone® VP4 Sterilizer delivers an innovative end-to-end process, reducing cycle time and improving efficiency.

One automated programmed cycle for mixed loads
Increase productivity, reduce costs and achieve better outcomes


STERIZONE GROUP
Short Term Efforts

**TSO$_3$ will IMMEDIATELY...**

- Place units in targeted strategic accounts
- Open US customer training and distribution facility
- Rationalize product to STERIZONE® VP4 Sterilizer in North America
- Sign Group Purchasing /Integrated delivery networks (IDN) contracts (USA)
- Increase label claims
# Financial Situation -
## As of September 30, 2015

<table>
<thead>
<tr>
<th>September 30 (000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sales Revenue</strong></td>
</tr>
<tr>
<td><strong>Liquidities</strong></td>
</tr>
<tr>
<td><strong>Inventories</strong></td>
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<tr>
<td><strong>Total Assets</strong></td>
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<tr>
<td><strong>Equity</strong></td>
</tr>
<tr>
<td><strong>Monthly Burn Rate – LTM</strong></td>
</tr>
<tr>
<td><strong>Outstanding Shares (September 2015)</strong></td>
</tr>
<tr>
<td><strong>Outstanding Options and Warrants (September 2015)</strong></td>
</tr>
</tbody>
</table>
Thank you!