Forward Looking Statements

This presentation contains forward-looking statements. Any statements about future expectations, plans and prospects for the Company, including any statements containing the words “believes,” “anticipates,” “plans,” “expects,” and similar expressions, constitute forward-looking statements. Forward-looking statements necessarily involve risks and uncertainties, and actual results could differ materially from those indicated by such forward-looking statements as a result of various important factors. Factors that could cause or contribute to such differences are described in the documents we file from time to time with the SEC, including Forms 10-K and 10-Q. In addition, any forward-looking statements made by the Company in this presentation represent the Company's views as of the date of this presentation. The Company anticipates that subsequent events and developments may cause the Company's views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so, and these forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this presentation.
Investment Highlights

• Outstanding opportunity to invest in a business with current revenues and significant potential upside

• Unique patent protected product -- RenalGuard® -- positioned to serve a large market opportunity – Acute Kidney Injury (AKI)

• $500 to $750 M current market opportunity
  • Removing contrast dye that is toxic to kidneys (CI-AKI) in the Imaging Lab
    • U.S. Pivotal Trial underway
    • Strong positive results from 2 European trials

• Commercial sales and strong international distribution partners - CE Marked devices

• Opportunity to grow market - huge potential upside

• Platform technology with additional applications
PLC’s Core Mission: Preventing AKI

- Acute Kidney Injury (AKI)
  - 1.5 million cases in US each year
  - $10 billion in AKI related health care costs

- RenalGuard
  - The only real-time fluid management system on the market
  - Enhances the body’s own mechanism to protect from AKI
What is Acute Kidney Injury?

• AKI is rapid loss of kidney function
• Leads to very poor long term outcomes, including dialysis and increased mortality
  
  – AKI occurred in over 1 of 5 hospitalizations and was associated with a more than fourfold increased likelihood of death

• Causes include:
  
  – Exposure to substances/poisons harmful to kidney
    • Contrast dyes ($750M market potential)
    • Chemo therapy agents ($100M market potential)
    • Cardiac Surgeries ---- Inflammatory cytokines
  
  – Low blood volume or flow
    • From many causes

• Current therapies --- Hydration, Dialysis
  
  – Inadequate and expensive

• Millions and millions of people affected annually
RenalGuard for AKI prevention is designed to:

Flush poisons out of kidneys

- Creates and maintains high urine flow rates
- Rapidly clears renal toxins
- Prevents contrast from clogging tubules
- Avoids injury to kidneys

Reduces Oxidative stress

- High urine flow rates make the kidney work less
- Lowers kidneys oxygen requirement
- Less damage from low blood flow
- Less oxidative stress

Promote and monitor urine output

EU: CE Marked
US: Investigational device. Limited by Federal Law to investigational use only.
RenalGuard Attributes:

- The only real-time fluid management system using the body's natural systems for protection
- Customizable to patient needs
- Mitigates risk of over/under hydration
- Seamless integration into hospital work flow

EU: CE Marked
US: Investigational device. Limited by Federal Law to investigational use only.
AKI Market Opportunity

CI AKI -- 1st market

Doing TAVR / Kidney Transplant cases now

In discussion for Cardiovascular Surgery
Tumor Lysis, Heart Failure trials
Contrast Induced-AKI: An Unmet Need in the Imaging Lab -- A Costly and Deadly Problem

- Acute kidney injury caused by toxic contrast agents
- Unintended consequence of the procedure
- 4-7M imaging procedures performed annually worldwide in Cardiac and Vascular imaging labs
- ~15% of all patients are considered ‘at risk’ due to age and prior kidney damage

No effective method of preventing or treating CI-AKI exists today
Problems with CI-AKI

• You are **13 times more likely to die** in the first 30 days after Cath if you get CI-AKI\(^1\)

• CI-AKI is associated with significant rates of potentially **deadly and costly complications**, most often **leading to dialysis**\(^2\)

• Patients who develop CI-AKI are more likely to experience adverse events, undergo prolonged dialysis, have longer hospital and ICU stays and have higher mortality rates. **The average in-hospital cost of CI-AKI is $10,345**\(^3\)

• Estimated hospital costs range between **$2-3,000 per day**\(^4\)

• CI-AKI can initiate CRF and be “final straw” on path to **dialysis at $58,000/year or transplant at $250,000**\(^4\)

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\(^2\) CARE II*: A prospective study concluded that CIN has a causal role in adverse events. * RJ Solomon et. al. CJASN June 2009

\(^3\) Subremanian S, Tumlin J JMed Econ 2007

\(^4\) Health Advances / RTI Health Solutions
Current Approaches to CI-AKI Prevention

• **Overnight hydration:** recommended but challenging in practice
  – 12 hours of hydration both pre- and post-procedure on in-patient basis
  – logistically cumbersome, uncomfortable and requires staffing

• **Bolus hydration in lieu of overnight hydration**
  – risk of volume overload
  – less common due to fear of over-hydration and pulmonary edema

• **Other therapies**
  – infusion of Mucomyst (NAC) or sodium bicarbonate

• **Recent studies confirm ineffectiveness**

**A Better Solution Is Needed**
RenalGuard for CI-AKI prevention is designed to:

- Promote & monitor urine output
  - Substantial urine flow rates
  - Rapidly clears renal toxins
  - Flushing prevents contrast from clogging tubules
- Sophisticated automation system
  - Matched fluid replacement system
  - Mitigates risk of over/under hydration
- Seamless integration
  - Easily incorporated into existing lab workflow
Annual Diagnostic and Interventional Procedures Requiring Contrast Media

$750M Market Potential

- Cath Lab (vascular & cardiac procedures – includes TAVI)
- CAT Scan Market (uses contrast dye)
Initial RenalGuard Market: The Imaging Lab

Annual Diagnostic and Interventional Procedures Requiring Contrast Media

High Risk Patients (GFR>60): 10-20%
Target Patient Pool:
400,000 – 800,000 (U.S.)
700,000 – 1,400,000 (WW)
RenalGuard est. Charge:
$500/procedure (U.S.)
Estimated Market:
$500 million (WW)
RenalGuard Therapy
6 to 8 hours

- **First Contrast Dose**
  - Foley Catheter IV catheter (18G)
  - Prime RenalGuard
  - Begin Therapy and set Bolus
  - Furosemide Dose on call to Cath lab

- **Last Contrast Dose**
  - Additional Furosemide Dose if needed
  - Check electrolytes
  - Stop RenalGuard Continue to monitor patient’s hydration status

- Throughout procedure, RenalGuard matches all urine output with equal volume of saline

- **Pre-Catheterization Procedure**
- **Catheterization Procedure**
- **Post-Procedure** 4 hours after last contrast
Expert Support for the RenalGuard Concept

Recent Recommendations from Key Opinion Leaders on High Urine Flows:

• Dr. P. McCullough 2008 JACC – “…ensure urine flow greater than 150ml/hr”

• Dr. R. Mehran 2008 CIT – “…establish brisk diuresis before dye administration and avoid hypotension”

• Dr. J. Reiner 2009 JIC – “…maintaining a post-contrast diuresis may block the oxygen-demanding active transport in the medullary ascending limb and thereby prevent kidney injury”
<table>
<thead>
<tr>
<th></th>
<th>Beth Israel IRB Study</th>
<th>FDA-Approved Pilot Study</th>
<th>MYTHOS CCM Study Bartorelli/Marenzi</th>
<th>REMEDIAL II Dr. Briguori 4 site RCT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Obj.</strong></td>
<td>Feasibility Study</td>
<td>Safety Study</td>
<td>Efficacy Study</td>
<td>Efficacy study</td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td>10 Pts. Manual RGT Non-Randomized Treatment Only</td>
<td>23 Pts. RGT Non-Randomized Treatment Only</td>
<td>170 Pts. RGT vs. Overnight Hydration Single Center Randomized/Controlled</td>
<td>292 Pts. RGT vs. SBC/NAC Multi-Center Randomized/Controlled</td>
</tr>
<tr>
<td><strong>Pts.</strong></td>
<td>Post-Cardiac Transplant</td>
<td>&lt;50 eGFR</td>
<td>≤60 eGFR</td>
<td>&lt;30 eGFR or &gt; 11 RM Score¹</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>10.0% CI-AKI Rate No serious AE</td>
<td>8.5% CI-AKI Rate</td>
<td>5% CI-AKI Rate - RG</td>
<td>2.7% CI-AKI Rate - RG</td>
</tr>
<tr>
<td></td>
<td>17.9% Predicted Rate*</td>
<td>18% CI-AKI Rate - Control</td>
<td></td>
<td>13% CI-AKI Rate - Control</td>
</tr>
</tbody>
</table>

¹ Mehran, JACC 2004, Vol. 44 #7
RenalGuard Reduced the Rate of CI-AKI

RenalGuard-protected patients have nearly 70% lower rate of CI-AKI than Standard of Care

Source: MYTHOS Study, Marenzi, JACC 2012, Vol. 5 #1
RenalGuard Significantly Reduced In-Hospital Complications

<table>
<thead>
<tr>
<th>Event</th>
<th>RenalGuard Group (N=87)</th>
<th>Control Group (n=83)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI-AKI Requiring dialysis</td>
<td>1 (1.1%)</td>
<td>3 (4%)</td>
<td>NS</td>
</tr>
<tr>
<td>Acute myocardial infarction</td>
<td>0 (0%)</td>
<td>1 (1.2%)</td>
<td>NS</td>
</tr>
<tr>
<td>Atrial fibrillation/VT</td>
<td>1 (1.1%)</td>
<td>2 (2.4%)</td>
<td>NS</td>
</tr>
<tr>
<td>Emergency CABG</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>-</td>
</tr>
<tr>
<td>Acute pulmonary edema</td>
<td>5 (6%)</td>
<td>10 (12%)</td>
<td>NS</td>
</tr>
<tr>
<td>Hypotension/shock</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>-</td>
</tr>
<tr>
<td>In-hospital death</td>
<td>1 (1.1%)</td>
<td>3 (4%)</td>
<td>NS</td>
</tr>
<tr>
<td>All adverse events (per protocol)</td>
<td>7 (8%)</td>
<td>15 (18%)</td>
<td>0.05</td>
</tr>
</tbody>
</table>

*Source: MYTHOS Study, Marenzi, JACC 2012, Vol. 5 #1*
RenalGuard More Effective at Preventing Dialysis

RenalGuard - more effective than standard of care at preventing CI-AKI and Dialysis in at-risk patients

Source: Remedial II Study, Briguori, Circulation 2011
RenalGuard - U.S. Pivotal Trial

FDA-approved protocol for U.S. pivotal trial:

- Randomized, controlled design
- 652 patients at up to 30 sites
  - Adaptive design minimum of 326 patients
  - Sample size re-estimation at 163 patients
- RenalGuard compared to the Standard of Care
- Primary Endpoint: 25% rise in SCr within 72 hours
- Secondary Endpoint: composite clinical endpoint at 90 days
- Qualification and enrollment underway; 11 sites enrolling
International Commercial Strategy

• CE-marked product in 2008

• ACIST, a subsidiary of Bracco, appointed as distributor for France and Germany, Europe’s largest markets

• 17 countries in Europe and select others around the world on board
  – Brazil, Latin and South America
  – Australia, New Zealand, Asia-Pacific
  – Israel and UAE

• Two investigator-sponsored European clinical trials showed positive results
  – REMEDIAL II data published in Circulation September 2011
  – MYTHOS published in January 2012 JACC Intervention

• Japanese path to approval announced, first step completed
Intellectual Property Summary

• 8 total patents in the U.S.

• Method patent of CI-AKI prevention with high volume diuresis
  • Covers method of using automated matched replacement to prevent CI-AKI
  • Broad claim includes any method of urine measurement
  • Also claims specific embodiment using weight measurement
  • Method patent would cover any manufacturer who attempted to market or
    get labeling for a device that used automated fluid replacement to prevent
    CI-AKI

• Original RenalGuard Patent
  • Filed: 9/9/2004
  • Expires: 3/15/2029

• Europe, Canada and Japan
  • Full technology patents for RenalGuard
Milestones

Milestones Over the Next 12 Months (assuming successful funding completed):

• Interim Results from the U.S. Pivotal Clinical Trial
• Presentations at Scientific Meetings
• Issuance of Multiple Patents in U.S. – Method and Device
• Initiation of Trials in other Markets
• Continuation of Patient Enrollment in Japanese Clinical Trial
• Acceleration of OUS Product Sales and Market Adoption
PLC Systems: Poised for Success with RenalGuard

• Significant progress in advancing proprietary technology addressing large unmet need
• Need will grow as population ages and prevalence of underlying conditions like diabetes increases
• On market in select countries in Europe, with more distributors being added
• Highly positive scientific data from investigator-sponsored clinical trials in Europe
• U.S. pivotal trial underway
• Strong, growing patent position to protect market leadership
RenalGuard®: Preventing Acute Kidney Injury
PLC Medical Systems, Inc