LETTER TO SHAREHOLDERS

Milestones

FEBRUARY 2014
Announced the full market launch of two new spine systems -- the MaxFuse™ vertebral body replacement system and the Aspect® anterior cervical plate system.

MARCH 2014
Received approval to CE mark Fortiva™ porcine dermis and began distribution throughout Europe.

Released map3® cellular allogeneic bone graft.

APRIL 2014
Launched the Streamline® OCT System, designed to promote fusion of the occipito-cervico-thoracic spine.

JUNE 2014
First human implantation of the map3® cellular allogeneic bone graft strips.

JULY 2014
Unveiled PACK™ precision allograft cartilage instrument kit for osteochondral allograft resurfacing.

Unveiled AlloWedge™ bicortical bone wedges and instrumentation set, offering surgeons an alternative option for opening wedge osteotomies in the foot and ankle.

OCTOBER 2014
Shirley A. Weis Joined RTI Surgical Board of Directors.

Forward Looking Statement

This communication contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management's current expectations, estimates and projections about our industry, our management's beliefs and certain assumptions made by our management. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," variations of such words and similar expressions are intended to identify such forward-looking statements. In addition, except for historical information, any statements made in this communication about growth rates, new product introductions, future operational improvements and results or regulatory actions or approvals or changes to agreements with distributors also are forward-looking statements. These statements are not guarantees of future performance and are subject to risks and uncertainties, including the risks described in public filings with the U.S. Securities and Exchange Commission (SEC). In addition, these statements are subject to risks associated with Pioneer's financial condition, business and operations and the integration of Pioneer's business with ours. Our actual results may differ materially from the anticipated results reflected in these forward-looking statements. Copies of the company's SEC filings may be obtained by contacting the company or the SEC or by visiting RTI's website at www.rtix.com or the SEC's website at www.sec.gov.
Dear Valued Shareholder,

2014 was a year of steady growth. At the beginning of the year we laid out a series of goals for the company. They were to return to growth in our sports and spine businesses, gain traction in our direct surgical specialties business and expand distribution of our map3® cellular allogeneic bone graft. Not only did we achieve each of these goals, we also saw above market growth in the spine, sports medicine, BGS and general orthopedic and orthofixation businesses, and we met or exceeded our guidance every quarter.

We achieved annual revenues of $262.8 million, exceeding revenue guidance of $260 to $261 million and surpassing 2013 annual revenues of $198 million. Domestic revenues were $238.9 million for 2014 compared to revenues of $177.2 million in 2013. 2014 international revenues were $23.9 million compared to $20.8 million in 2013. On a constant currency basis, international revenues for 2014 increased 15 percent compared to 2013 revenues. Our 2013 worldwide revenues include $36 million from the Pioneer Surgical Technology, Inc. acquisition for the period of July 16, 2013 to December 31, 2013, whereas our current year period includes a full year of Pioneer-related revenues. If the acquisition were effective January 1 for both 2013 and 2014, worldwide revenues would have increased by 8 percent.

For the full year of 2014, on a non-GAAP basis, excluding severance charges, a litigation settlement charge, and an inventory purchase accounting adjustment taken in the first quarter, the company reported adjusted net income applicable to common shares of $6.2 million and adjusted net income per fully diluted common share of $0.11.

Key Product Launches

We are incredibly proud of the accomplishments we made in 2014, especially in regard to the introduction of more than 20 new products, implants and line extensions. In February, we announced the full market launch of the MaxFuse™ vertebral body replacement system and the Aspect® anterior cervical plate system. Both systems are designed for use in spine fusion and are currently available for U.S. distribution. A few months later, we launched the Streamline® OCT System, designed to promote fusion of the occipito-cervico-thoracic spine (or occiput-T3), and in June we celebrated the first human implantation of the map3® cellular allogeneic bone graft strips allograft.

Later in the year we unveiled the PACK™ precision allograft cartilage instrument kit for osteochondral allograft resurfacing, as well as the AlloWedge™ bicortical bone wedges and instrumentation set, offering surgeons an alternative option for opening wedge osteotomies in the foot and ankle. These launches showcase RTI’s expertise in both safe, biologic implants as well as high quality metal instrumentation.

A Look Ahead at 2015

There are several key performance initiatives for our business in 2015. Throughout the year, we are dedicated to driving growth in our focused products – map3® cellular allogeneic bone graft, nanOss® advanced bone graft substitute and Fortiva™ porcine dermis surgical mesh. We will also concentrate on continuing to capture market share in spine hardware through targeted customer conversions, building spine instrument sets to support more surgeries and by leveraging our broad biologics portfolio. Additionally, we are well-positioned to grow international revenues, specifically in Europe and Asia Pacific. Finally, we will place a priority on controlling spending and implementing lean manufacturing processes in order to continue to improve margins.

As I mentioned on our 2014 year-end earnings call in February 2015, the company expects full year revenues for 2015 to be between $279 million and $285 million. Full year net income per fully diluted common share is expected to be in the range of $0.17 to $0.22, based on 58 million fully diluted common shares outstanding.

Following the integration of Pioneer, we have realigned the business as well as defined the goals that will grow our company into the future. We have set out on a path to become a $500 million revenue company with gross margins approaching 60 percent and operating margins approaching 20 percent.

To reach this goal, our leadership team has created a plan that has three major areas (see sidebar):

- Our base biologics business, which includes allograft and xenograft implants;
- our hardware business, which includes metals and synthetic-based implants;
- and our focused products, which includes nanOss® advanced bone graft substitutes, Fortiva™ porcine dermis and our map3® allografts.

As we concentrate on these three key areas, we will gain momentum on the path to achieving our long-term objectives.

With the successful integration of Pioneer behind us and a clear strategy for growth now implemented company-wide, we believe RTI has the right leadership and the right products in place to achieve our goals.

Sincerely,

Brian K. Hutchison
President and CEO
Our Path to a $500M Revenue Company*

FOCUSED PRODUCTS
- Fortiva™ porcine dermis
- nanOss® advanced bone graft substitutes
- map3® cellular allogeneic bone grafts
- Gross Margin 70%+

HARDWARE
- Spinal systems, trauma systems and cardio
- Gross Margin 70%+

BASE BIOLOGICS
- Sports, BSF/GO, bovine tendon (OUS)
- Gross Margin 40%+

2014 2019

INTERNATIONAL
DOMESTIC

New Company Mission and Values

As we entered 2015, we unveiled a new organizational mission statement, as well as new company values. Our mission statement helps define who we are, while our value statements define our company culture while creating a model for behavior. Our hope is that this new mission and values will align our employees with leadership’s vision of growth for the company.

MISSION
RTI Surgical™ promotes a higher standard of patient care and creates value by leveraging employee talents to develop the highest quality surgical solutions.

VALUE STATEMENTS

Quality: We are committed to developing quality implants and instruments for surgeons to help patients improve their quality of life so that they can work, play and live.

Integrity: We earn the trust of those we serve by demonstrating integrity and holding ourselves to the highest ethical standards.

Innovation: We create a legacy through our innovations and advancements in healthcare.

Safety: We are dedicated to providing safe and reliable surgical solutions.

Excellence: We will deliver a higher standard for surgeons, patients, employees and the communities we serve, striving for excellence in all we do.

HIGHLIGHTS

Revenues (in millions)

- 18% Sports Medicine
- 10% Surgical Specialties
- 14% BGS/General Orthopedic
- 8% Dental
- 31% Spinal Constructs
- 5% Orthofixation

$262.8 TOTAL

$36.7 BGS/General Orthopedic
$37.1 Orthofixation
$20.8 Dental
$27.0 Surgical Specialties
$46.8 Sports Medicine
$82.7 Spinal Constructs

Revenues Domestic vs. International (in millions)

$238.9 Domestic
$23.9 International

2014 was a year of steady growth. At the beginning of the year we laid out a series of major areas (see sidebar):

18% Surgical Specialties
10% Sports Medicine
14% BGS/General Orthopedic
8% Dental
31% Spinal Constructs
5% Orthofixation

Our Path to a $500M Revenue Company*

*Charts are for illustration purposes only and do not represent company guidance.

Dear Valued Shareholder,

We are incredibly proud of the accomplishments we made in 2014, especially as defined the goals that will grow our company into the future. We have achieved each of these goals, we also did we achieve each of these goals, we also...
LETTER TO
SHAREHOLDERS

Milestones

FEBRUARY 2014
Announced the full market launch of two new spine systems – the MaxFuse™ vertebral body replacement system and the Aspect® anterior cervical plate system

MARCH 2014
Received approval to CE mark Fortiva™ porcine dermis and began distribution throughout Europe
Launched map3® cellular allogeneic bone graft

APRIL 2014
Launched the Streamline® OCT System, designed to promote fusion of the occipto-cervico-thoracic spine

JUNE 2014
First human implantation of the map3® cellular allogeneic bone graft strips allograft

JULY 2014
Unveiled PACK™ precision allograft cartilage instrument kit for osteochondral allograft resurfacing
Unveiled AlloWedge™ bicortical bone wedges and instrumentation set, offering surgeons an alternative option for opening wedge osteotomies in the foot and ankle

OCTOBER 2014
Shirley A. Weis Joined RTI Surgical Board of Directors

Forward Looking Statement

This communication contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management’s current expectations, estimates and projections about our industry, our management’s beliefs and certain assumptions made by our management. Words such as “anticipates,” “expects,” “intends,” “plans,” “believes,” “seeks,” “estimates,” variations of such words and similar expressions are intended to identify such forward-looking statements. In addition, except for historical information, any statements made in this communication about growth rates, new product introductions, future operational improvements and results or regulatory actions or approvals or changes to agreements with distributors also are forward-looking statements. These statements are not guarantees of future performance and are subject to risks and uncertainties, including the risks described in public filings with the U.S. Securities and Exchange Commission (SEC). In addition, these statements are subject to risks associated with Pioneer’s financial condition, business and operations and the integration of Pioneer’s business with ours. Our actual results may differ materially from the anticipated results reflected in these forward-looking statements. Copies of the company’s SEC filings may be obtained by contacting the company or the SEC or by visiting RTI’s website at www.rtix.com or the SEC’s website at www.sec.gov.

Board of Directors

Dean H. Bergy, Chairman
Vice President, Corporate Secretary, Stryker Corporation

Philip R. Chapman
President, Venad Administrative Services, Inc.
General Partner, Adler & Company

Roy D. Crowningshield, Ph.D.
Emeritus Associate Professor, Department of Orthopaedics and Rehabilitation, University of Florida College of Medicine

Brian K. Hutchison
President and CEO, RTI Surgical Inc.

Curtis M. Selquist
Operating Partner, Water Street Healthcare Partners

Adrian J.R. Smith
Chief Executive Officer, The Woolton Group

Ned H. Villers
Partner, Water Street Healthcare Partners

Shirley A. Weis
President, Weis Associates, LLC Emerita Vice President and Chief Administrative Officer, Mayo Clinic

Investor Contact

Investor Relations
11621 Research Circle
Alachua, FL 32615
386.418.8888
IR@rtix.com

Independent Auditors
Deloitte & Touche L.L.P.
201 E. Kennedy Boulevard
Suite 1200
Tampa, FL 33602
813.273.8300

Audit Committee
Dean H. Bergy (Chair)
Philip R. Chapman
Adrian J.R. Smith

Annual Shareholders’ Meeting

Tuesday, April 14, 2015
8:00 A.M. EDT
Tampa Airport Marriott
Pasco Room
4200 George J Bean Parkway
Tampa, Fla. 33607

Transfer Agent
Broadridge Corporate Issuer Solutions
1981 Marcus Avenue
Lake Success, NY 11042
866.321.8022

Corporate Counsel
Holland & Knight
100 North Tampa Street
Suite 4100
Tampa, FL 33602
813.227.8500