



**COMPETITIVE
TECHNOLOGIES**

Unlocking the Potential of Innovation

Investor Presentation

FIRST QUARTER 2014



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Our Company



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Competitive Technologies Incorporated (CTI)

is a biotechnology company that develops and commercializes innovative medical products and technologies with a concentration in pain management.

- Established in 1968 and headquartered in Fairfield, CT
- Publicly traded on the OTCQX | ticker symbol “CTTC”

Pain Management Therapy: Prescription Drugs



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A Future Without Chronic Pain Neuroscience and Clinical Research

By David Borsook, M.D., Ph.D.
June 27, 2012

Editor's note: Chronic pain affects 2 billion people worldwide, an estimated 100 million of whom live in the United States. For us, currently, there are no effective treatment options. Fortunately, writes David Borsook, director of the Pain and Imaging Neuroscience Group at Children's Hospital Boston, Massachusetts General Hospital, and MGH's Hospital, research advances have determined some of the ways in which chronic pain changes the brain, and several promising research areas could lead to better treatment approaches. Dr. Borsook recommends steps to facilitate these new treatments, including the establishment of integrated clinical neuroscience centers bridging the gap between bench and bedside.

The medical literature defines chronic pain as pain that has lasted for more than three months. Chronic pain is an epidemic worldwide, with 1.5 billion people feeling its effects. In the United States, about one million individuals are estimated to suffer from chronic pain, costing the country billions of dollars in health care and lost work productivity each year.¹ While the statistics are staggering, pain research received less than one percent of the National Institutes of Health (NIH) budget. We do not yet have medications or other treatments that can effectively alleviate chronic pain with speed or efficiency in the majority of patients. Doctors treat patients with a trial-and-error approach, initially prescribing drugs with fewer side effects, reflecting the lack of effective treatment options.

In the past 50 years or so, our main medications have been in four classes: opioids (morphine), nonsteroids (salicylates such as aspirin or ibuprofen), antidepressants (amitriptyline), and antipsychotics (gabapentin); fewer than 10 medications with new mechanisms of action have become available, and only one novel in clinical use was designed based on specific mechanisms of action (triptans for migraines). Other drugs, including the anti-neuro-growth factor inhibitors (NGF), also target specific mechanisms² but were on regulatory hold until very recently because of side effects in patients with osteoarthritis. Given these drugs' significant analgesic effects and new data in other pain conditions,³ the Food and Drug Administration (FDA) allowed trials to proceed.

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A Future Without Chronic Pain: Neuroscience and Clinical Research
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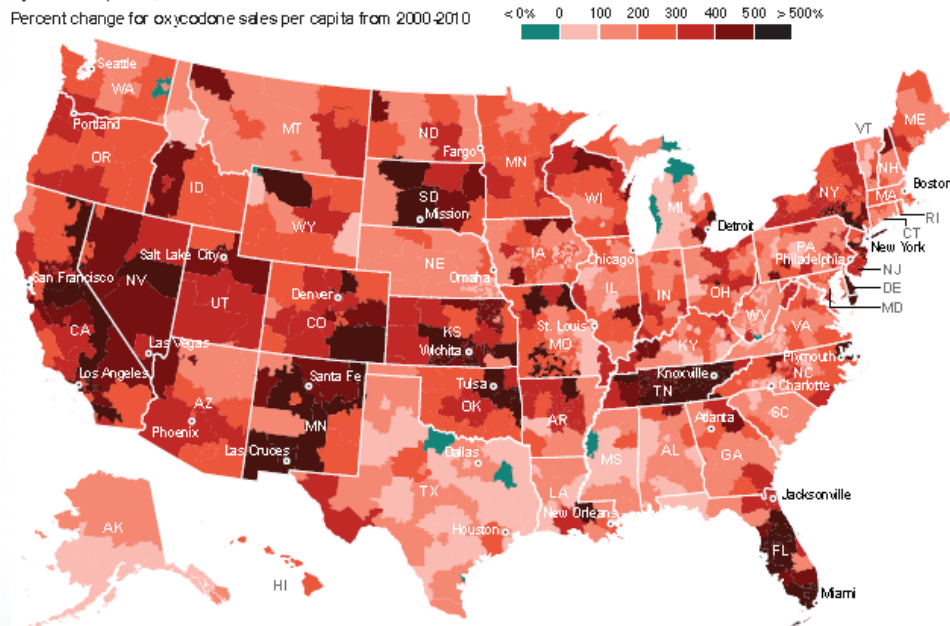
“ We do not yet have medications or other treatments that can effectively alleviate chronic pain with speed or efficiency in the majority of patients. Doctors treat patients with a trial-and-error approach, initially prescribing drugs with fewer side effects, reflecting the lack of effective treatment options

Dr. David Borsook, MD, PhD
Director of Pain, Children's Hospital
Mass General Hospital, Boston, Mass.

But are Prescription Prescription Drugs the Answer?

Painkiller nation: prescription sales boom across U.S. from 2000 to 2010

Sales of the nation's two most popular prescription painkillers, oxycodone and hydrocodone, have exploded across the U.S. in the last decade, according to an Associated Press analysis of data provided by the Drug Enforcement Administration. This map shows increases in per-capita sales of oxycodone, the key ingredient in OxyContin, Percocet and Percodan.



SOURCE: AP analysis; Drug Enforcement Administration

PHOTO: Mike Lieberman/AP

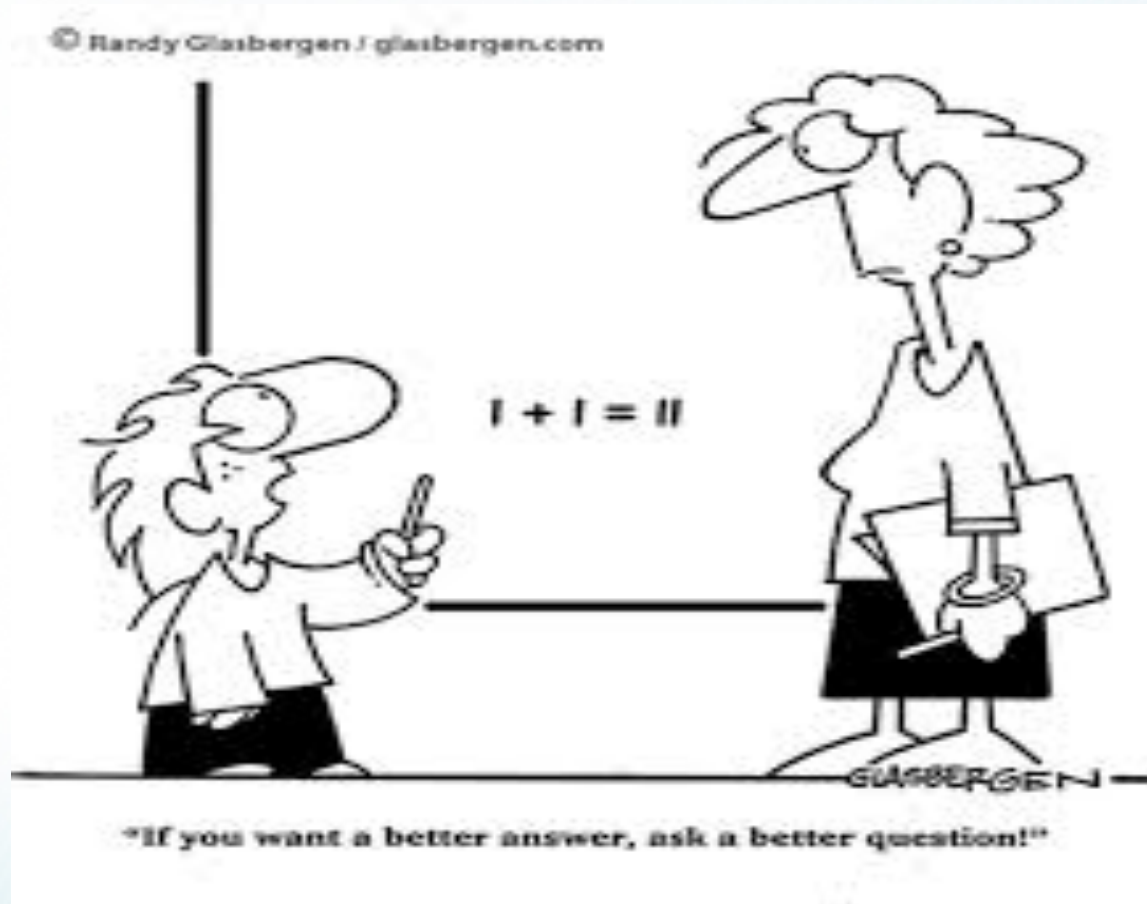
AP

PAINKILLER NATION 040512: An AP analysis of Drug Enforcement Administration data highlighting the increase use of the addictive pain killer oxycodone across the U.S. from 2000 to 2010; 6c x 6 1/2 inches; with BC-US--Painkiller Nation; PH; MM; ETA 11 a.m.

Editor's Note: It is mandatory to include all sources that accompany this graphic when repurposing or editing it for publication

Prescription painkiller overdoses killed nearly over 6,000 people in the US in 2010.

So then ... what's the answer?





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CALMARE

Making pain-free a reality
Pain Device

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Calmare® Pain Device

Our proprietary, patented, non-invasive medical device developed to treat high intensity oncologic and neuropathic pain without the harmful side effects of narcotic painkillers.



- Immediate to prolonged pain relief
- Procedure regimen:
 - 10 to 15 treatments over 2 weeks
 - 1 or 2 “Booster” treatments (Year One), subject to diagnosis and pain severity
- 510(k) cleared for sales in the U.S.
- CE marked for sales in Europe
- Preferred vendor of the U.S. DOD:
GSA contract #V797P-4300b



How does Calmare[®] Technology work?

1. Certified practitioners place surface electrodes on the patient's skin close to the pain source in order to access their C-fiber
2. Our patented multi-processor sends an algorithmically-scrambled pain message to the brain along the patient's C-fibers algorithmic "scrambling"



Result:

“**Pain**” signal – from pain site to brain – becomes
“**No-Pain**” signal

**No known side effects reported in
use with over 4,000 patients**



Indications for Calmare Use

- Chemotherapy-Induced Peripheral Neuropathy (CIPN)
- Chronic Regional Pain Syndrome (CRIP)
- Failed Back Surgery Syndrome
- Chronic Post-Herpetic Neuralgia (PHN)
- Sciatic and Lumbar Pain
- Low Back Pain (LBP)
- Post-Surgical Pain
- Brachial Plexus Pain
- Neuropathic Pain



What's the Market Opportunity?

\$28.6 billion: Global pain management therapeutic market
(CAGR of 5.3% between 2002 and 2010)

116 million: Amount of U.S. adults that experience chronic pain daily

15 million: Amount U.S. adults that suffer from neuropathic pain*

**CTI is targeting 5% of that 116 million market;
(5.8 million chronic pain patients)**

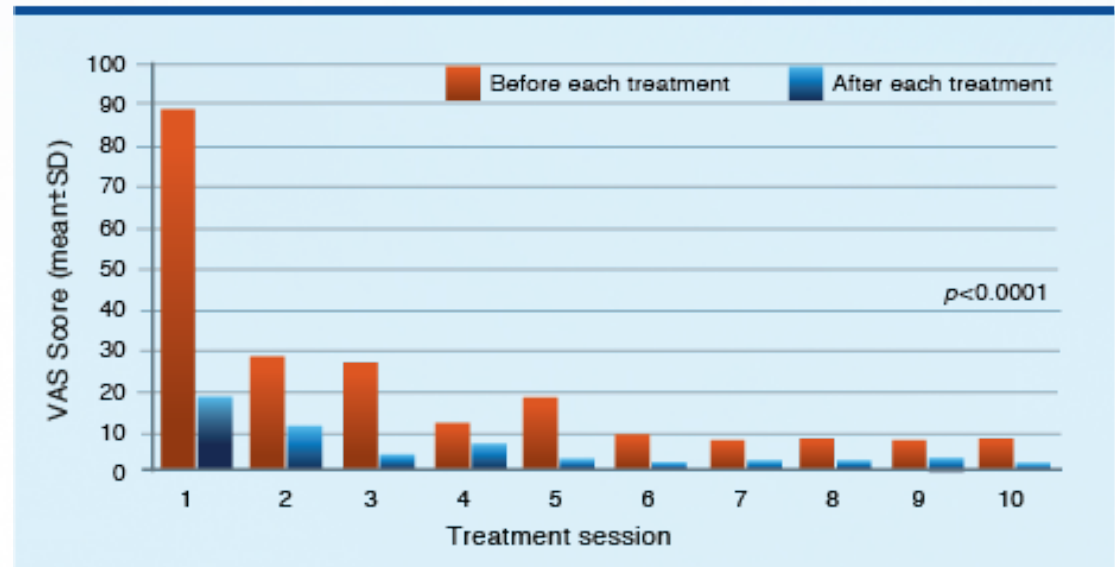
*Neuropathic pain can be caused by spinal cord injury, metabolic conditions, toxins, trauma, surgery or as a direct result of cancer and treatment of cancer from radiation or Chemotherapy (CIPN).

So How do We Fare in the Clinic?

- 33 Terminal cancer patients suffering from severe drug resistant and were treated with Calmare. Chart shows pain reduction after each treatment during 10 sessions.

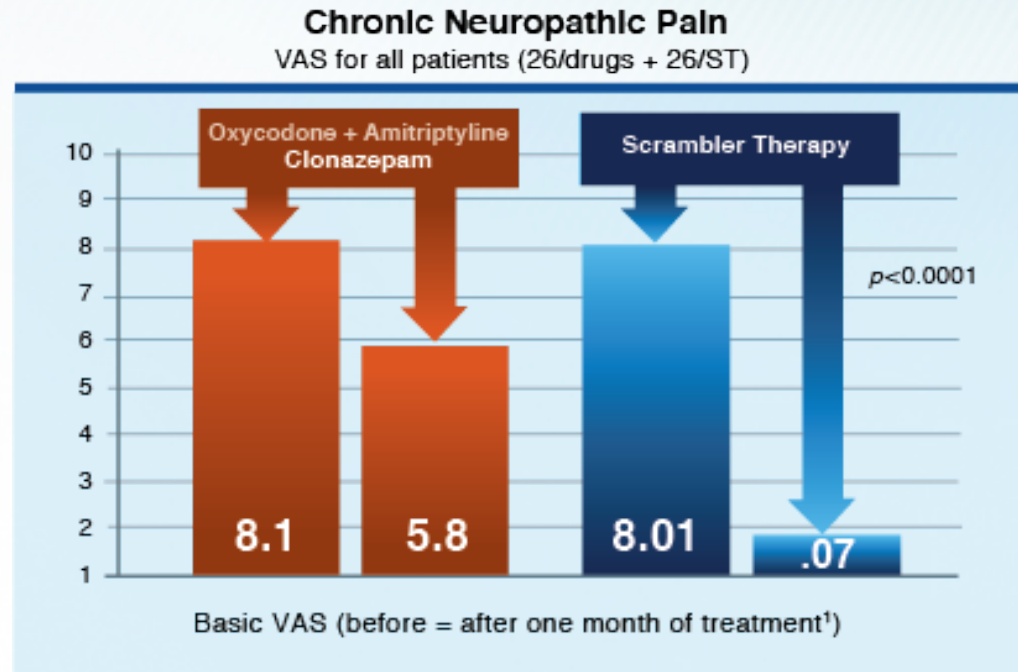
The pain was reduced to zero.

Scrambler Treatment Results — 33 Cancer Patients



Marineo G et al International Congress Series 1255(203) 381-388

- Comparison of pain reduction between drugs (control group) and one treated with Calmare (26/ Drug – 26/ST)
- **72% of patients drug and pain free**
- 20% of remaining patients on *reduced* drug dosages after Calmare treatment

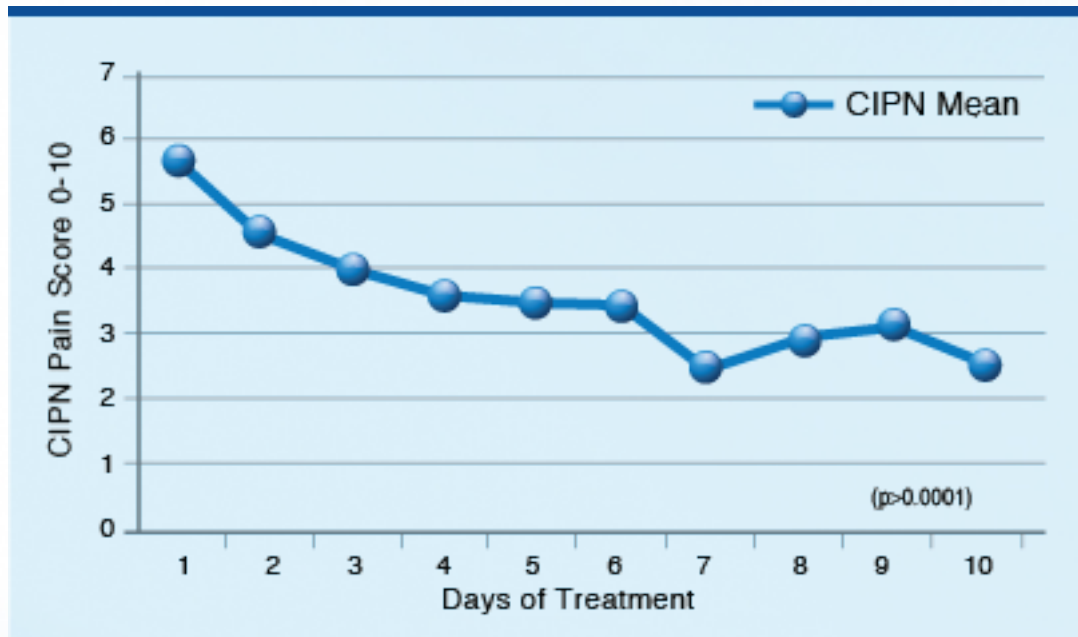


G.Marineo, T. Smith, et al, JPSM 2011



CALMARE

Making pain-free a reality



- Calmare helps drug refractory CIPN patients overall pain score **reduction by 64%**

Smith T. et al Journal of Pain And Symptom Management 2010

What do Independent Clinicians Say?

- **Mayo Clinic:** Charles Loprinzi, MD ([Third Annual Cancer Pain Conference](#))
 - Calmare creates "non pain" information in packets of rapidly varying impulses, given non-invasively using the patients' own nerves
 - (Calmare) therapy looks very promising in 3 pilot trials; a randomized trial is in development
- **Johns Hopkins Medical Institute:** Tom Smith, MD ([Journal of Pain & Palliative Care Pharmacotherapy](#). 2013;27:359–364)
 - In this trial, Calmare therapy appeared to reduce both acute and chronic pain. It substantially reduced the interference of pain with normal life in every scale measured.
- **Virginia Commonwealth University:** Angela Starkweather, Ph.D., (Associate Professor, [Presentation on Scrambler Therapy for Persistent Low Back Pain](#))
 - A potentially effective non-pharmacological therapy for ameliorating pain intensity in patients with persistent low back pain over short-term.

Calmare Market Economics...

Each patient: 12 treatments over 2 weeks

Each Calmare device: 6 patients / 2 weeks = 156 patients per year

5% summary: 5.8 million patients / 156 patients = 37,000 Devices

37,000 devices @ \$105,000  \$3.89 B Market

37,000 devices @ \$75,000  \$2.78 B Gross Profit

Calmare Private Practice Economics...

Each New Patient: 12 treatments over 2 weeks

Primary Treatment Cost: \$250 per patient = \$3,000¹ over 2 weeks (est.)

Practice Income (per month): 12 patients **\$ 36,000**

Product Leasing: **\$ 1,900²**

Monthly Profit: **\$ 34,100**

¹ Average per patient cost Nationwide.

² 5% interest, 60 month lease, Calmare Credit Corp, subject to credit approval

Medical Device Comparator...

Each patient: 12 treatments over 2 weeks

Each Calmare device: 6 patients / 2 weeks = 156 patients per year

5% summary: 5.8 million patients / 156 patients = 37,000 Devices

37,000 devices @ \$105,000  \$3.89 B Market

37,000 devices @ \$75,000  \$2.78 B Gross Profit

Medtronic Synchronomed Implantable Fusion Pumps:

-140,000 Implanted World Wide @ \$50,000 = \$7.1 B

Medtronic 2012 Neuromodulation Revenues = \$1.5 B+

Investment Opportunity



Our 3 steps to break even...

Product sales:

- U.S.: Nurse/Sales person tandem
- Europe, Middle East, No. Africa: distributor sales
- Military: blanket purchase agreement

Certification program:

- Practitioner certification
- Continued education fees

Conduct Pivotal trial:

- Multi-center, controlled, random
- U.S. FDA approval for Calmare



Funding...

CTI is seeking a total investment of **\$5.0 million** in two tranches:

- \$1.5 million in Tranche One
already raised \$1.2 million

\$3.5 million in Tranche Two

— Use of Funds:

- Clinical trial costs (pivotal)
- Personnel: CMO and International Sales Executive
- General operational expenses

Reengineering Update...

- ✓ Repaid Tonaquint Note
- ✓ Reestablished EMENA territory
- ✓ Key Hires:
 - CFO
 - US Sales
 - Product Marketing
- ✓ Reduce expenses
- ✓ Streamline product sales

Financial Data (select)

Stock Price (5/23/14)	\$0.42
52-week Hi-Lo	\$0.05 - \$0.55
Ave. Daily Trading Vol. (3m)	25,309
Market Cap (5/23/14)	\$9.4 million
Shares Outstanding	22.5 million
Float	15.2 million
Authorized Shares	40.0 million
Total Revenues (TTM; a/o 1Q 14).....	\$936,000
Total Debt (a/o 1Q 14).....	\$3.1 million

Our Board of Directors

Peter Brennan, Chairman – As Chairman and the largest shareholder of the company Mr. Brennan brings financial and governance leadership to the company. He spent the last 30 years working in the investment management business and is the founder of Damel Investments LLC which invests in small capitalized technology companies. He was the Chairman of the Governance committee of the New York Society of Security Analysts. As well he was a founding member of the Capital Market Policy Council of the CFA Institute.

Carl O’Connell – Director- Served as President/CEO for the US healthcare division of the Japanese conglomerate, ITOCHU Corporation, and previously as Global Vice President for Stryker Spine, and President for Carl Zeiss Surgical Inc. His responsibilities have spanned from global marketing, sales, manufacturing, leadership development, regulatory affairs, corporate quality systems and research and product development functions. Carl has worked to transform and grow his companies into leaders in their respective markets as well as establishing leadership platforms in Neurosurgery, Ophthalmology, Orthopedics-Spine, ENT and Dentistry. Carl is also an advisor for the Chicago based private equity firm WaterStreet Healthcare and for GE Healthcare for their Interventional Neurosurgery Imaging Technologies.

Conrad Mir – Director, President & CEO - Mr. Mir has over twenty years of investment banking, financial structuring, and corporate reengineering experience. He has served in various executive management roles and on the Board of Directors of several companies in the biotechnology industry. Most recently, Mr. Mir was CFO of Pressure BioSciences, Inc., (OTCQB: PBIO), a sample preparation company advancing its proprietary pressure cycling technology. Before that, he was chairman and CEO of Genetic Immunity, Inc., a plasmid, DNA company in the HIV space, and was the executive director of Advaxis, Inc., (OTCQB: ADXS), a vaccine company. Over the last five years, he was responsible for raising more than \$40 million in growth capital and broadening corporate reach to new investors and current shareholders. Mr. Mir has worked for several investment banks including Sanford C. Bernstein, First Liberty Investment Group, and Nomura Securities International.

Robert Moussa, Director – Mr. Moussa, who has over 30 years in the healthcare and medical device industry, joined the Board of Directors in 2012. He currently serves as Chairman and Chief Executive Officer of Dilon Diagnostics. Mr. Moussa has extensive experience launching new products and directing operations in the diagnostic, nuclear medicine and medical device markets. Mr. Moussa has served in a variety of executive positions with Mallinckrodt, Inc., St. Louis, Missouri, a \$2.4 billion healthcare and chemical company, including, as President and Chief Executive Officer - Mallinckrodt Medical, Inc., Mallinckrodt’s largest business unit with over \$1 billion dollars in revenues.

Rustin Howard – Director

Stan Yarbrow, PhD – Director



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Thank you!

Conrad Mir

President & CEO

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