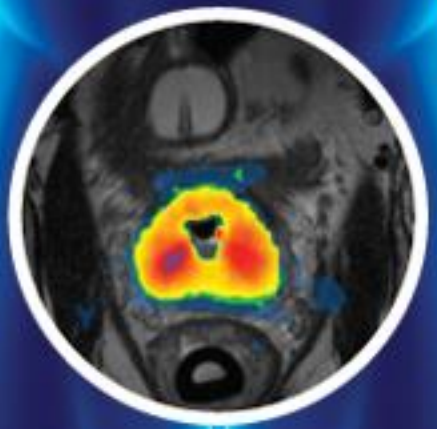
PROFOUND MEDICAL CORP.

Driving a new therapeutic standard in prostate cancer

January 2017



TSXV:PRN

Forward-Looking Statements

This presentation and oral statements made during this meeting regarding Profound and its business which may include, but are not limited to, the expectations regarding the efficacy of Profound's technology in the treatment of prostate cancer. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "is expected", "expects", "scheduled", "intends", "contemplates", "anticipates", "believes", "proposes" or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Such statements are based on the current expectations of the management of each entity. The forward-looking events and circumstances discussed in this presentation may not occur by certain specified dates or at all and could differ materially as a result of known and unknown risk factors and uncertainties affecting the company, including risks regarding the pharmaceutical industry, economic factors, the equity markets generally and risks associated with growth and competition.

Although Profound has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. No forward-looking statement can be guaranteed. Except as required by applicable securities laws, forward-looking statements speak only as of the date on which they are made and Profound undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, or otherwise, other than as required by law.

Investment Highlights

- Ablate prostate in a single, two hour treatment by urologists
- Technology uses real time MR image guidance, inherently designed to be safe and precise. Strong IP portfolio
- Large market; significant unmet medical need
- Received CE Mark approval in April 2016; commenced TACT pivotal trial in September 2016
- Commenced pilot commercial launch in Europe in January 2017
- Agreements in place with Siemens and Philips for sales and marketing collaboration
- Attractive razor/razor blade model with high-value, one-time use consumables

Large & Growing Patient Population

- 5.8 Million Men Are Currently Living with Prostate Cancer in the U.S. and Europe
- 524,000 new patients per year
  - 181,000 U.S.[3]
  - 343,000 E.U.[4]
- Current treatments associated with significant side effects, forcing delay in treatment until necessary

US: 2.8M MEN[1]

EU: 3M MEN[2]

1. seer.cancer.gov
2. European Alliance for Personalized Medicine, 2015
3. American Cancer Society
4. International Agency for Research on Cancer. WHO.

No Current Standard of Care

MONITORING	MOST COMMON PROCEDURES	
ACTIVE SURVEILLANCE	**RADICAL PROSTATECTOMY**	**RADIATION**
Delayed Treatment: in recent study 55% received radical treatment[3] **Periodically monitored: biopsy, PSA tests, digital rectal exams, imaging**	**Minimally Invasive**	**No incision**
	Excise prostate from outside-In	**Radiate from outside-In**
	No active protection of critical anatomy	**Minimal protection of critical anatomy**
	High rates of incontinence and impotency	**High rates of side effects, including damage to bowels**
10 yr. cost, $29,000[2] **Impact on patients: psychological distress, periodic invasive and painful tests**	• **Success – surgeon skill** • **Recovery time – weeks**	• **Damage to surrounding tissue** • **Risk of secondary cancers** • **Delayed onset of side effects** • **Multiple sessions - 30-60 days** • **30% patients fail treatment[1]**

Other less frequent treatments include: HIFU, Cryotherapy, Brachytherapy, Hormone Therapy, Laser…

1. Rukstalis, DB. Treatment Options after Failure of Radiation Therapy – A Review. Rev Urolo. 2002; 4(Suppl 2): S12-S17.
2. Keegan et al. Active Surveillance for prostate cancer compared with immediate treatment. Cancer 2012; 118(14): 3512-3518.
3. Hamdy et al. 10-Year Outcomes after Monitoring, Surgery or Radiotherapy for Localized Prostate Cancer. NEJM 2016.

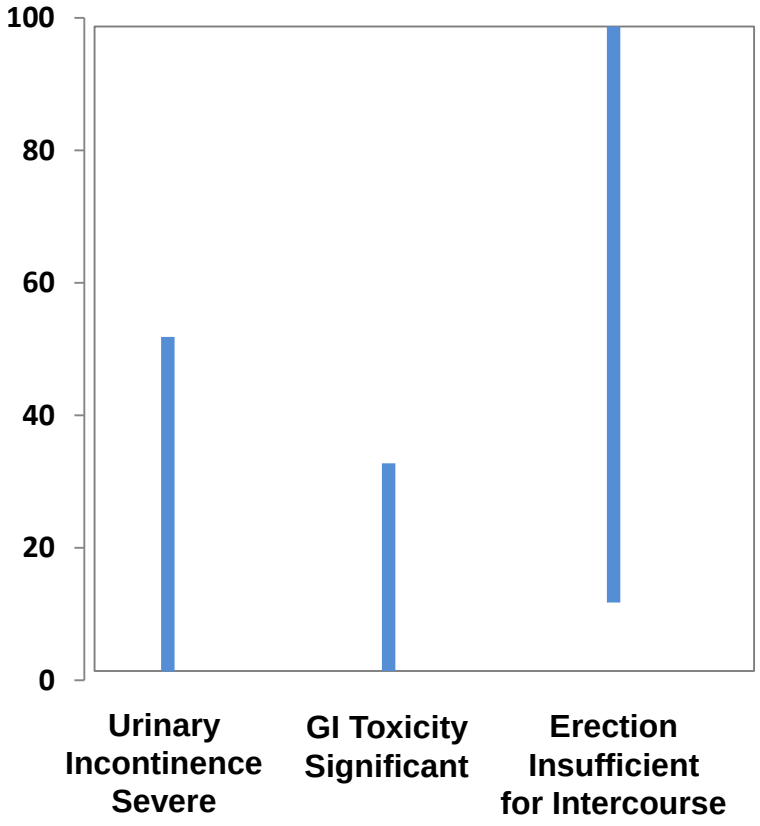
The Problem: Complication Rates & Side Effects

Functional Outcomes at 2 years[1]

	PROSTATECTOMY	RADIOTHERAPY
URINARY INCONTINENCE	No control or frequent urinary leakage	
	10%	3%
	Bothered by dripping or leaking urine	
	11%	2%
BOWEL FUNCTION	Bowel urgency	
	14%	34%
	Bothered by frequent bowel movements, pain, or urgency	
	3%	8%
SEXUAL FUNCTION	Erection insufficient for intercourse	
	79%	61%
	Bothered by sexual dysfunction	
	56%	48%

Rate of complications reported with radical prostatectomy & radiotherapy[2,3]

(Variation as reported in 436 publications)

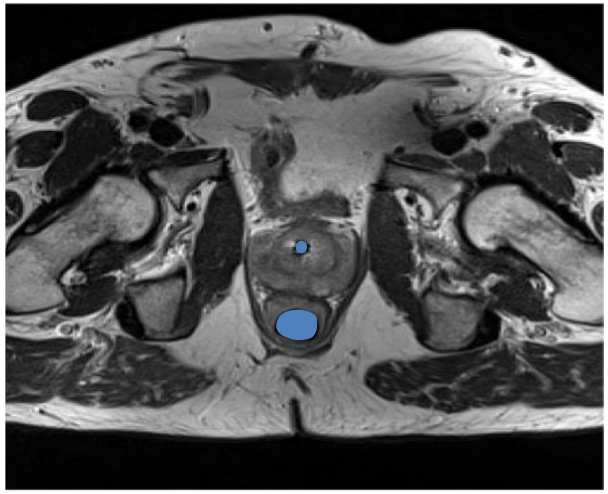


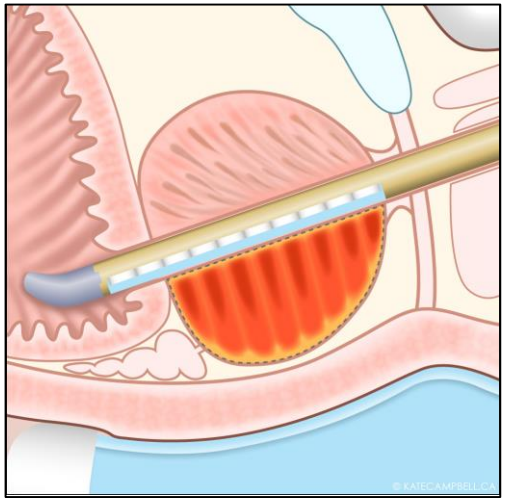
1. Resnick *et al.* Long-Term Functional Outcomes after Treatment for Localized Prostate Cancer; New England Journal of Medicine, 2013 (Jan): 368:436-445
2. Thompson (Chair) *et al* AUA prostate cancer clinical guideline update panel, "Guideline for the management of clinically localized prostate cancer: 2007 update," The Journal of Urology, 177: 2106-2331 (2007)
3. PMI 12-month Phase 1 Trial, GCP-10102 Table 10

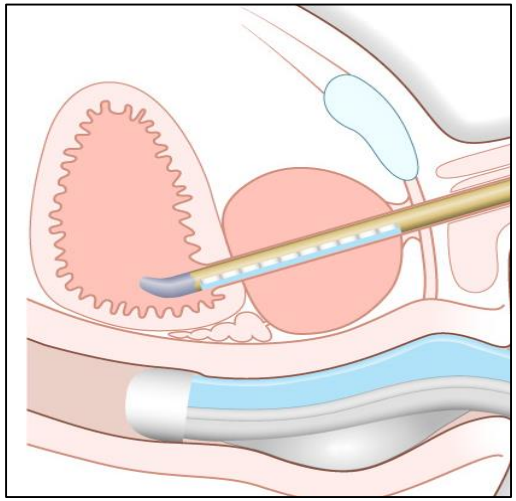
Inherently Designed to Minimize Side Effects

TULSA ablates cancerous prostate in a single 2 hour procedure

- Actively protects critical anatomy via cooling
- Inside-out: avoiding damage to rectum, urethra and nerves
- Precise: robotic, MRI Guidance, real-time temperature guidance & control
- No incision



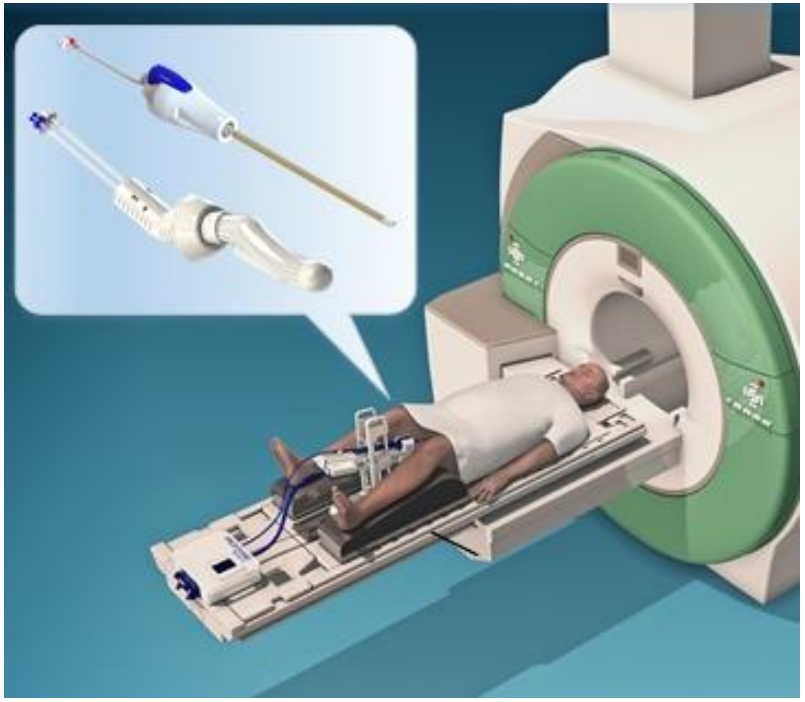




TULSA-PRO™ Device Technology

CONTROL ROOM

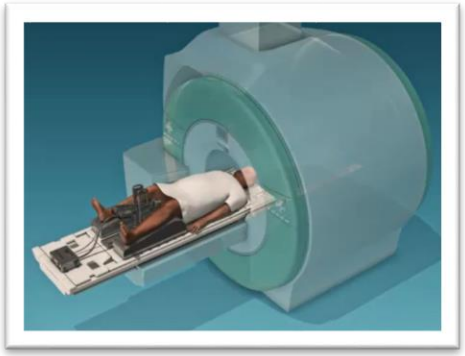
SCAN ROOM

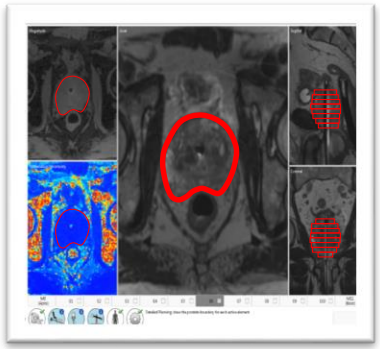


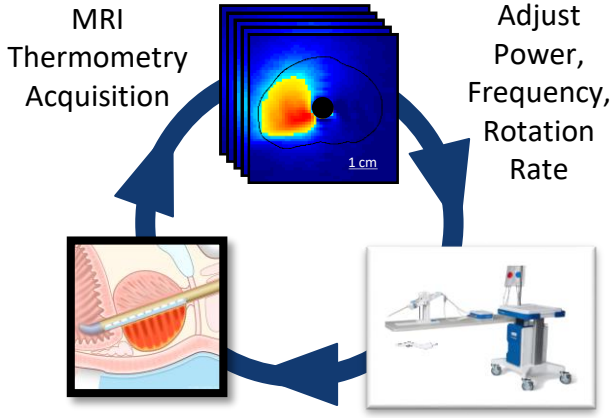
EQUIPMENT ROOM

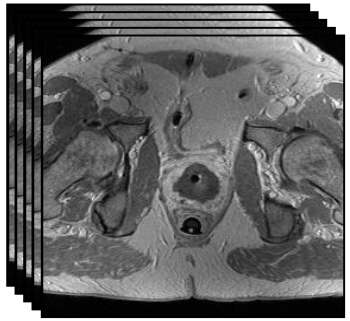
Automated, Precise Ablation from the Inside-Out

1 2 3 4









MRI Guided Device Positioning

Precise Treatment Planning by Urologist

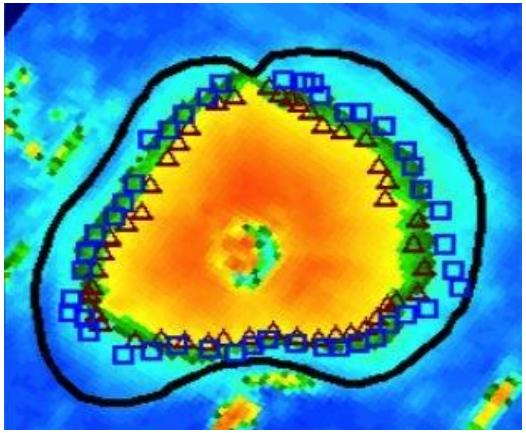
Automated Temperature Feedback Controlled, Robotically driven

- Controlled Algorithm Target Temp 57^0 Celsius
- Ablation in 40 minutes

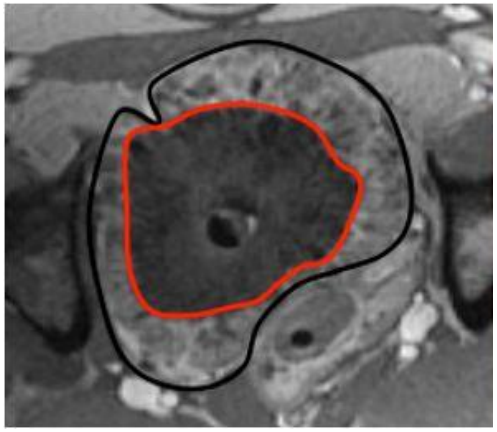
Confirmation of Ablation Margin with MRI

Precision of TULSA Has Been Validated

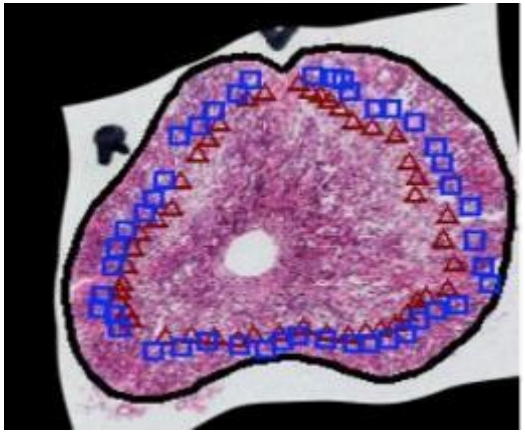
TULSA ablation is accurate to 1.3 mm, confirmed by contrast-enhanced MRI and histology in animal and human studies



Thermal MRI measurement from TULSA procedure



High resolution contrast MRI confirms ablation accuracy



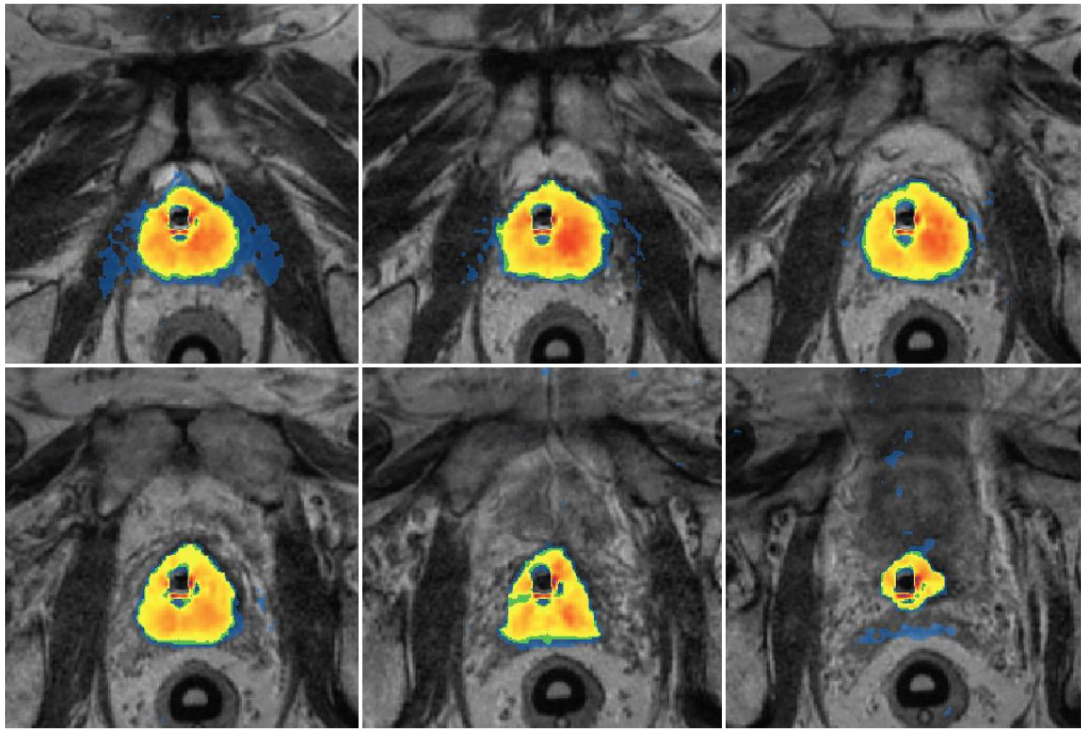
Also confirmed by gold standard whole-mount pathology

Chopra et al, Phys Med Biol. 2009; 54(9): 2615-33
Chin et al, European Urology (Sept 2016)

Personalized Precision

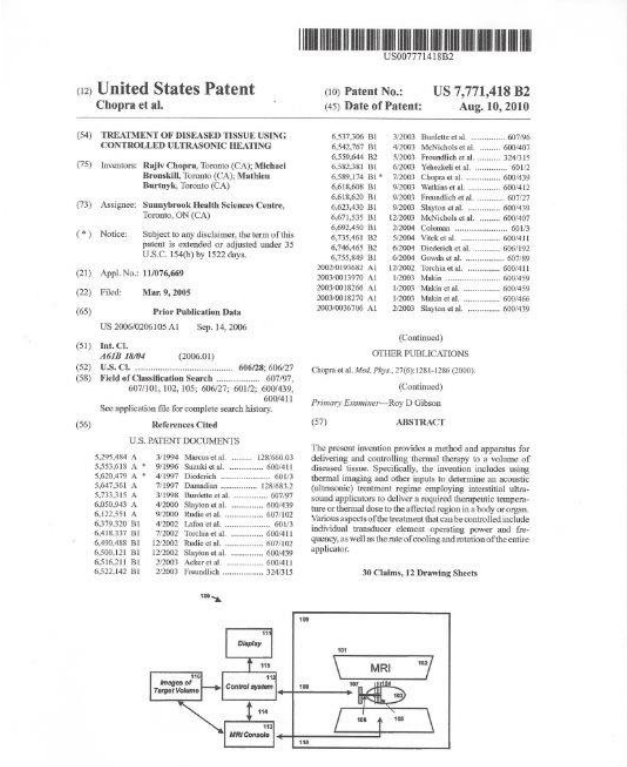
Customized prostate ablation:

- Personalized to each patient's anatomy and pathology
- Precisely planned
- Delivered with millimeter precision



Opportunity is Well Protected by Strong IP

- Both system and method patents
  - Core claims include, but not limited to, transurethral prostate treatment
  - Original core patents valid through 2026-2029
- Newer patents extend coverage to algorithms and devices used to deliver treatment
- United States: 6 patents issued, 6 pending
- PCT: 9 patents pending



US007771418B2

(12) **United States Patent**
Chopra et al.

(10) **Patent No.: US 7,771,418 B2**
(45) **Date of Patent: Aug. 10, 2010**

(54) **TREATMENT OF DISEASED TISSUE USING CONTROLLED ULTRASONIC HEATING**

(75) Inventors: **Rajiv Chopra**, Toronto (CA); **Michael Bronskill**, Toronto (CA); **Mathieu Burtnyk**, Toronto (CA)

(73) Assignee: **Sunnybrook Health Sciences Centre**, Toronto, ON (CA)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1522 days.

(21) Appl. No.: **11/076,669**

(22) Filed: **Mar. 9, 2005**

(65) **Prior Publication Data**

US 2006/0206105 A1 Sep. 14, 2006

(51) **Int. Cl.**
A61B 18/04 (2006.01)

(52) **U.S. Cl.** **606/28**; 606/27

(58) **Field of Classification Search** 607/97, 607/101, 102, 105; 606/27; 601/2; 600/439, 600/411

See application file for complete search history.

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(Continued)

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Chopra et al. *Med. Phys.*, 27(5):1281-1286 (2000).

(Continued)

Primary Examiner—Roy D Gibson

(57) **ABSTRACT**

The present invention provides a method and apparatus for delivering and controlling thermal therapy to a volume of diseased tissue. Specifically, the invention includes using thermal imaging and other inputs to determine an acoustic (ultrasonic) treatment regime employing interstitial ultrasound applicators to deliver a required therapeutic temperature or thermal dose to the affected region in a body or organ. Various aspects of the treatment that can be controlled include individual transducer element operating power and frequency, as well as the rate of cooling and rotation of the entire applicator.

30 Claims, 12 Drawing Sheets

Safety & Precision Clinical Trial: Completed

OBJECTIVE	**Determine safety and feasibility of MRI-TULSA for whole-gland prostate ablation in a primary treatment setting of localized prostate cancer**
SUBJECTS	30 Patients (Inclusion criteria: Men ≥ 65 yr, organ confined PCa, PSA ≤ 10 ng/ml, Gleason score 3+3 or 3+4)
OUTCOMES	• 30 patients treated with at least 12 month follow-up • No intraoperative complications, no rectal injury or fistula • Erectile dysfunction rate of 8% (IIEF item 2 ≥ 2) • At 12 months, only 1 patient (3%) with Grade 1 urinary incontinence (no pads) • Functional quality-of-life outcomes back to baseline levels • Accuracy of thermal ablation +/- 1.3 mm

Trial design required leaving 3mm outer prostate tissue intact
– 70 % patients free of clinically significant cancer

Chin *et al*, "Magnetic Resonance Imaging-Guided Transurethral Ultrasound Ablation of Prostate Tissue in Patients with Localized Prostate Cancer: A Prospective Phase 1 Clinical Trial," European Urology (2016)

TACT Pivotal Trial: Commenced September 2016

OBJECTIVE	**Further evaluate safety and efficacy of TULSA-PRO™ intended to ablate prostate tissue of patients with localized, organ-confined prostate cancer**
SUBJECTS	110 Patients (Inclusion criteria: Males, age 45-80 yrs, organ confined PCa, PSA ≤ 15 ng/ml, Gleason score ≤ 3+4)
SITES	15 Sites
OUTCOMES	**Primary Endpoints** • Safety • Efficacy **Secondary Endpoints** • Frequency and Severity of Adverse Events • Rate of Erectile Dysfunction • Rate of Urinary Incontinence • PSA Levels and Stability • Procedure Efficiency • Resource Requirements for Reimbursement Purposes

Safe, Fast & Accurate

“Everything has returned to normal and in some cases is better than what it has been for five years.”

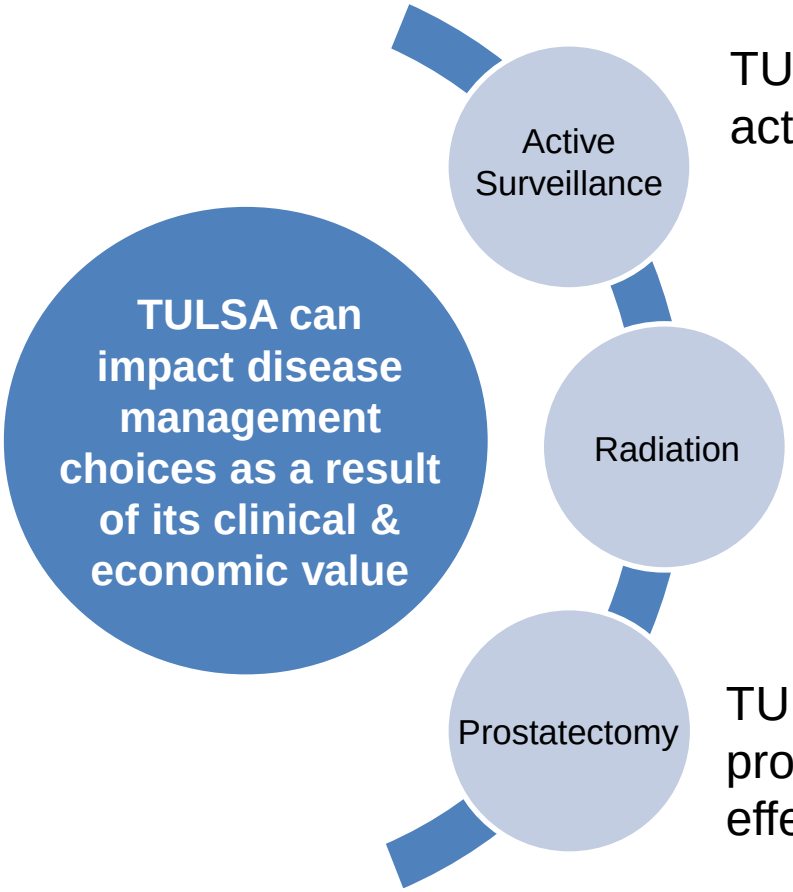
First TULSA patient

Dr. Chin and world’s first TULSA-PRO™ patient

Solid Path To Commercialization

- Leverage brand, scale and installed base and co-market with partners, Philips and Siemens
  - Profound co-sells TULSA-PRO™ base units with MR companies
  - Profound clinical sales team to independently drive utilization
    - ➢ $2,000 USD per patient after base unit sale
- Establishing Centers of Excellence & Reference Hospitals
  - Collect clinical and economic data to support a strong reimbursement strategy
- Developing country-specific market entry strategies
  - Initial focus on Germany and opinion-leading sites

TULSA Well-Suited for Accountable Care



TULSA potentially reduces costs associated with active surveillance by minimizing the need to wait

TULSA potentially less expensive, “one-and-done” treatment

TULSA a potential alternative for radical prostatectomy candidates concerned about side effects and recovery time from co-morbidities

Reimbursement For TULSA

- Positive feedback from reimbursement experts: TACT study data may be sufficient to submit for reimbursement consideration
- Plan to work with AMA and AUA to directly apply for a category 1 CPT code using the data from TACT trial
- CMS has agreed to pay ~$8,200 for standard of care aspects of the procedure per patient for the TACT trial

Favorable Reimbursement Environment

Multiple treatment approaches, including infrequently performed procedures, are already reimbursed

PROCEDURE	CODE	PAYMENT 2016	CODE	PAYMENT 2016
LAPAROSCOPIC RADICAL PROSTATECTOMY WITH CC	DRG 666	$9,775	CPT 55866	$1,443
LAPAROSCOPIC RADICAL PROSTATECTOMY WITH MCC	DRG 665	$17,022	CPT 55866	$1,443
RADIATION THERAPY (IMRT SIMPLE, 40 SESSIONS)	APC 5623	$19,816	CPT 77387	Fee bundled into primary APC
BRACHYTHERAPY	APC 5532, 5613, 5374, 5614, 5624	$4,324[1]	CPT 76873, 77318, 55875,55876, 77778	$2,206[1]
CRYOABLATION	DRG 666	$9,775	CPT 55873	$793

1. Payment is the sum of the indicated APC/CPT codes
The payments included in this worksheet are for Medicare patients, private payers payments for these procedures will vary and may result in higher payments than published Medicare rates.

Delivering Benefits Across Continuum

PATIENTS	UROLOGISTS	PAYERS
• Single incision free ~ 2 hour procedure • Minimal side effects and complications • Fast recovery	• Treat patients who might otherwise be on active surveillance or go to radiation • Enables urologist to use innovative/cutting-edge therapies remotely, in “control room” setting • Computer-driven procedure may enable standardization across doctors	• Favorable side effect and complication profile • Risk-benefit analysis may favor immediate treatment instead of active surveillance • Cost analysis may favor TULSA over other treatments

Key Upcoming Milestones

TACT Trial:

1. First patient treated – September 2016
2. Recruitment completed – End of Q2 2017
3. Reporting Interim data (6 months) – End of Q4 2017
4. Reporting Interim data (12 months) – End of Q2 2018
5. FDA 510k submission – Early Q3 2018

Commercial – Europe:

1. First commercial install – Q4 2016
2. Focus on Germany & EU opinion leading sites
3. Establishing Centers of Excellence & reference hospitals
4. Market access and digital marketing to drive momentum