PROFOUND MEDICAL

Incision-free Surgery
Real-Time MR Guided Ultrasound Therapies

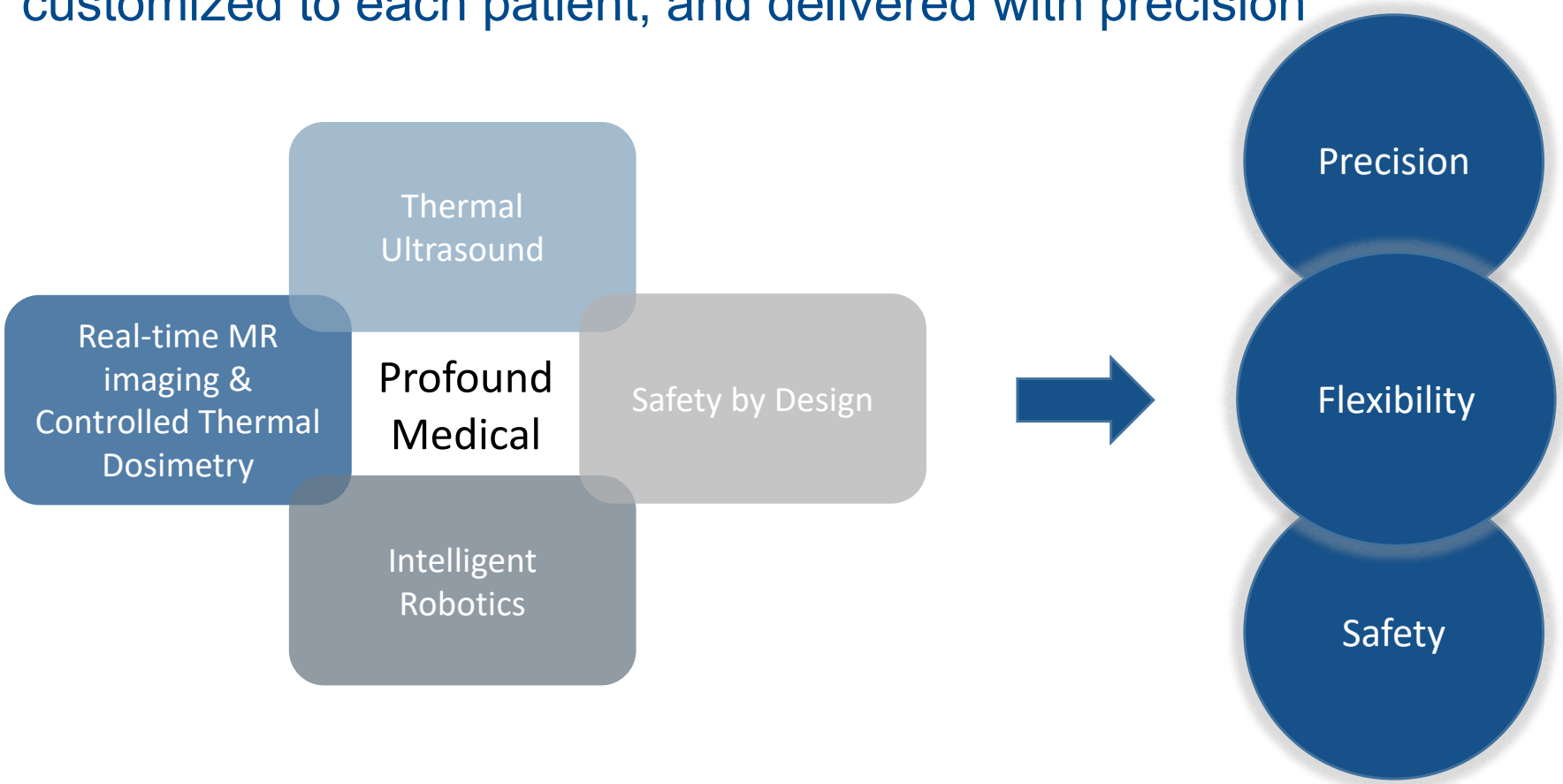
CORPORATE PRESENTATION | MAY 2018

Forward-looking Statements

Certain statements in this presentation and oral statements made during this meeting may contain “forward-looking statements” within the meaning of applicable securities laws, including the “safe harbour provisions” of the Securities Act (Ontario), with respect to Profound Medical Corporation (“Profound” or the “Company”). Such statements include all statements other than statements of historical fact contained in this presentation, such as statements that relate to the Company’s current expectations and views of future events. Often, but not always, forward-looking statements can be identified by the use of words such as “may”, “will”, “expect”, “anticipate”, “predict”, “aim”, “estimate”, “intend”, “plan”, “seek”, “believe”, “potential”, “continue”, “is/are likely to”, “is/are projected to” or the negative of these terms, or other similar expressions, as well as future or conditional verbs such as “will”, “should”, “would”, and “could” intended to identify forward-looking statements. These forward-looking statements include, among other things, statements relating to expectations regarding future clinical trials, expectations regarding regulatory approvals, expectations regarding the safety and efficacy of its product, expectations regarding the use of its product and its revenue, expenses and operations, plans for and timing of expansion of its product and service offerings, future growth plans, ability to attract and develop and maintain relationships with suppliers, manufacturers, physicians/clinicians, etc., ability to attract and retain personnel, expectations regarding growth in its product markets, competitive position and its expectations regarding competition, ability to raise debt and equity capital to fund future product development, and anticipated trends and challenges in Profound’s business and the markets in which it operates.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. The results, performance and achievements of the Company will be affected by, among other things, the risks and uncertainties discussed in the “Risk Factors” section in the Company’s Annual Information Form dated April 20, 2018, such as successful completion of clinical trial phases with respect to Profound’s device, obtaining regulatory approvals in relevant jurisdictions to market Profound’s device, risks related to the regulation of Profound (including the healthcare markets, lack of funding may limit the ability to commercialize and market Profound’s products, fluctuating input prices, international trade and political uncertainty, healthcare regulatory regime in relevant jurisdictions may affect the Company’s financial viability, reimbursement models in relevant jurisdictions may not be advantageous), competition may limit the growth of Profound, if the Company breaches any of the agreements under which it licenses rights from third parties, Profound could lose license rights that are key to its business, loss of key personnel may significantly harm Profound’s business and past performance is not indicative of future performance, and such other risks detailed from time to time in the other publicly filed disclosure documents of the Company which are available at www.sedar.com. The Company’s forward-looking statements are made only as of the date of this presentation and, except as required by applicable law, Profound disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, unless required by applicable law. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, and because of the above-noted risks, uncertainties and assumptions, readers should not place undue reliance on forward-looking statements due to the inherent uncertainty in them.

Profound Medical: Delivering incision free ablative therapies, customized to each patient, and delivered with precision



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TULSA-PRO®

Prostate Ablation

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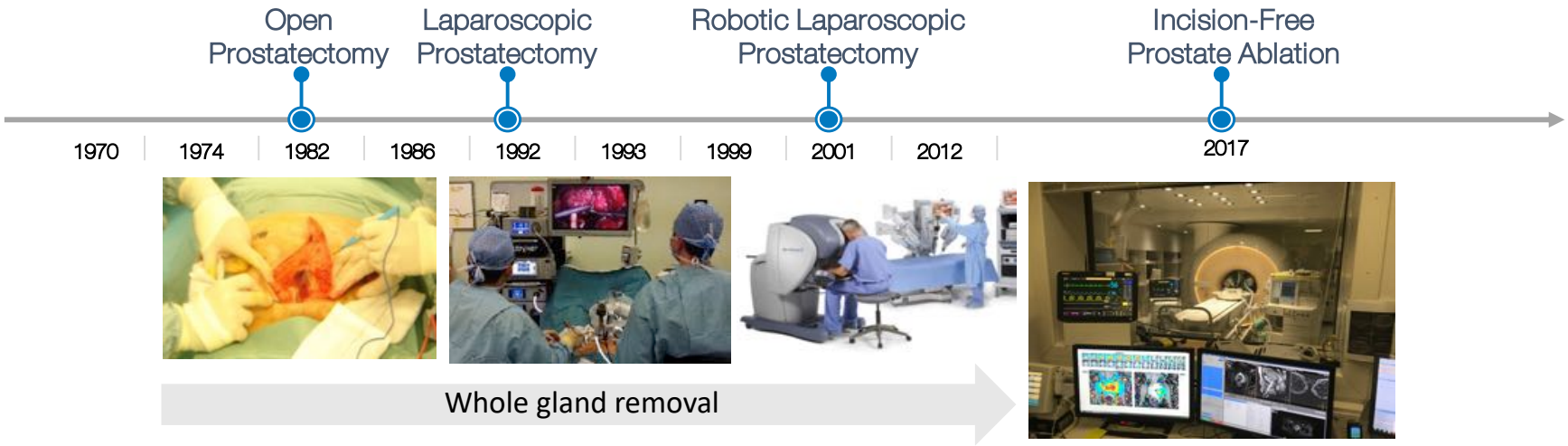
From open surgery to **incision-free surgery**



- Incision-free ablative surgery
- Surgical planning with real time imaging
- Whole gland or disease targeted partial ablation of prostate

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Transurethral Ablation Using Thermal Ultrasound with Real-time MR Guided Controlled Dosimetry

TULSA-PRO®

Precise ablation with millimeter accuracy

- Real-Time MR Imaging
- Real-Time process control of ablation using MR temperature map and robotically driven arm

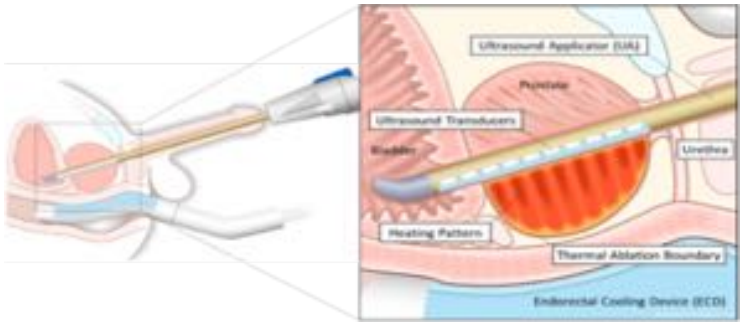
Customized treatment to meet each patients particular need

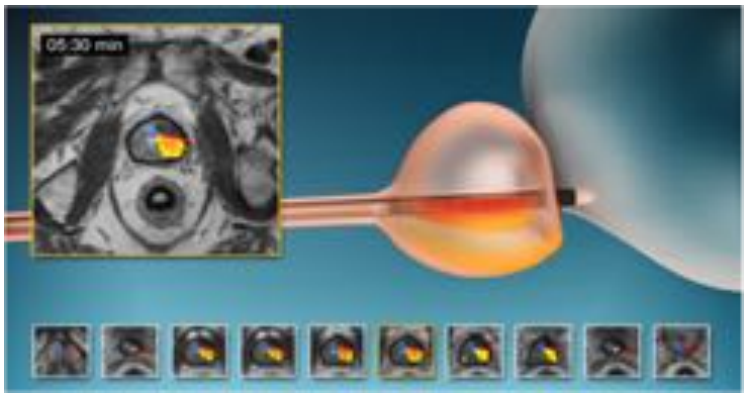
- Urologist defines region of ablation
- Full gland or targeted therapy for localized cancer
- BPH

Safety by design

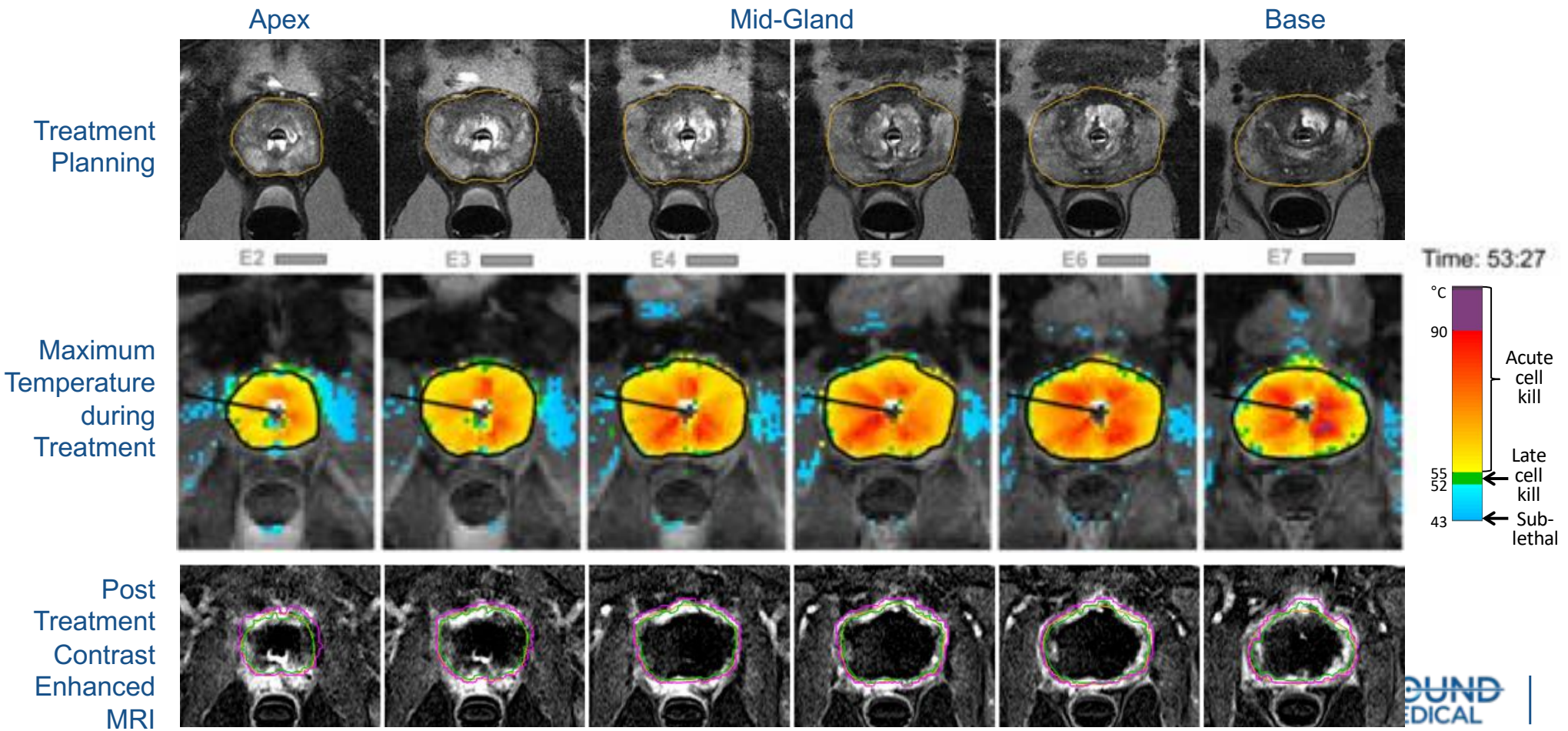
- Ablate from Inside-prostate; safer than outside-through rectum, able to treat prostates >140 cc
- Actively protects urethra and rectum via cooling
- MR and Ultrasound heating are safe modalities

Two hour procedure time

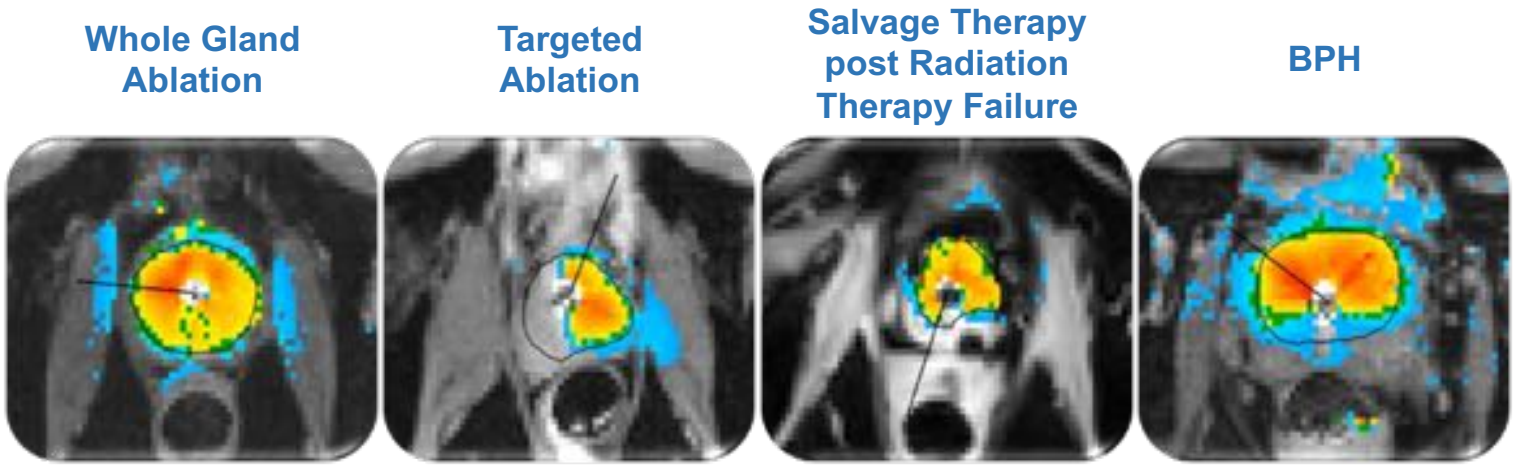




TULSA Procedure Case Example (Axial Images)

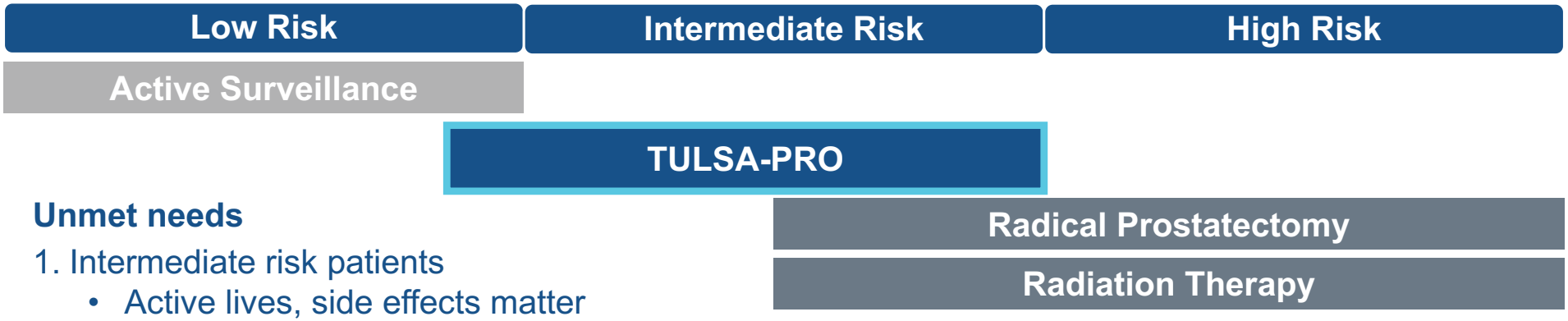


TULSA Technology Offers **Flexibility**



- Treatment – natural follow-on to MRI guided diagnosis and MRI guided biopsy to diagnose disease with precision
- Outpatient procedure – patients discharged within 24 hours
- Customized treatment plan to each prostate anatomy and pathology
- Real-time MRI guidance and control ensures accurate ablation to 1.3 mm precision
- Inside-Prostate approach allows for treatment of large prostates > 140 ml

TULSA-PRO **Addressing Unmet Need**



Unmet needs

1. Intermediate risk patients
   - Active lives, side effects matter
   - Comorbid, surgery carries risks
   - MR visible lesion
2. Low risk patients
   - Also have BPH
   - Want an intervention
3. Salvage therapy patients
4. Early stage disease, Gleason Score (GS) = 3+3 but genetic testing indicates aggressive disease

TULSA does not preclude any additional intervention if needed in the future

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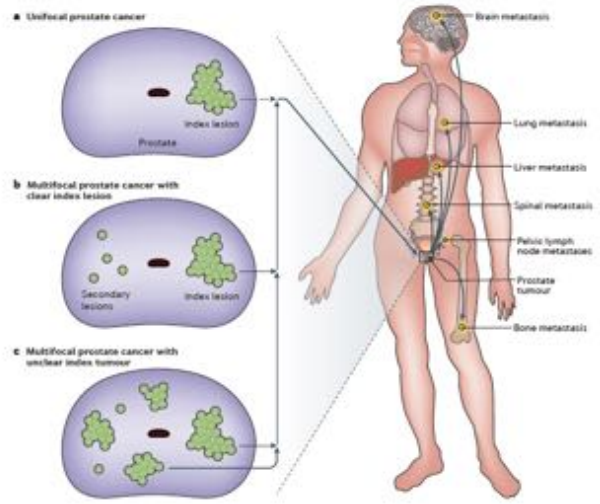
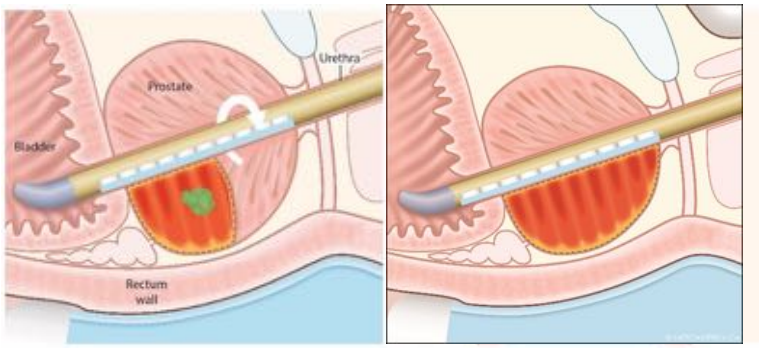
Enables **Whole-Gland or Targeted Treatment**

- Over 90% of prostate cancers present with multi-focal lesions
- 20-40% of patients have their disease confined to one side of the prostate



Perera M et al. An update on focal therapy for prostate cancer. Nature Reviews Urol 2016; 13:641-53.

- Multi-focal nature of prostate cancer requires that clinicians have tools that can provide them precise, safe and effective partial to whole gland range of treatment

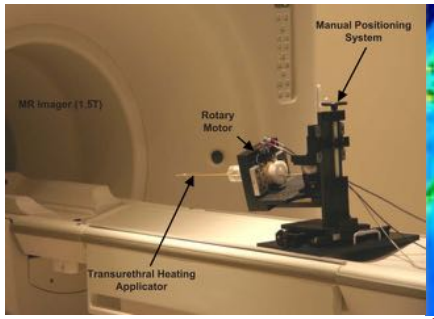


Targeted Ablation

Whole Gland Ablation

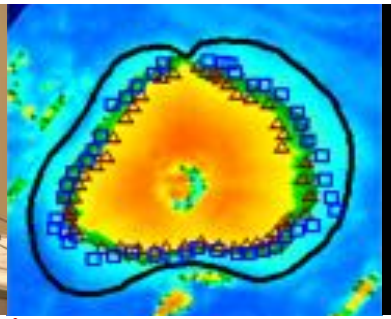
TULSA – Technical & Canine Studies

Robotic Ultrasound Ablation



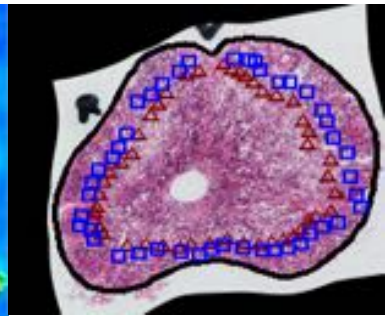
Initial TULSA prototype

MR Thermometry



100% cell kill: tissues inside are killed

Acute Histology



0% cell kill: tissues outside are normal

Preclinical	Clinical Feasibility	Treat-and-Resect	Phase I	TACT
2000-2012	2010	2012-2013	2013-2014	2017-

- In vivo evaluation of MRI-compatible robotics, directional US applicators, MRI thermometry, and feedback control algorithm
- Millimeter ablation accuracy on histology
- Urethra spared, no unintended damage on 28d histology

Chopra 2001 Phys Med Biol, Chopra 2005 Phys Med Biol, Boyes 2007 J Urology, Chopra 2008 Med Phys, Chopra 2009 Phys Med Biol, Burtnyk 2009 Int J Hyperthermia, Burtnyk 2010 Med Phys, Siddiqui 2010 Urology, Burtnyk 2010 Phys Med Biol, Chopra 2010 Int J Hyperthermia, N'Djin 2012 Int J Hyperthermia, N'Djin 2012 Med Phys, Ramsay 2013 JMRI, Burtnyk 2015 J Urology

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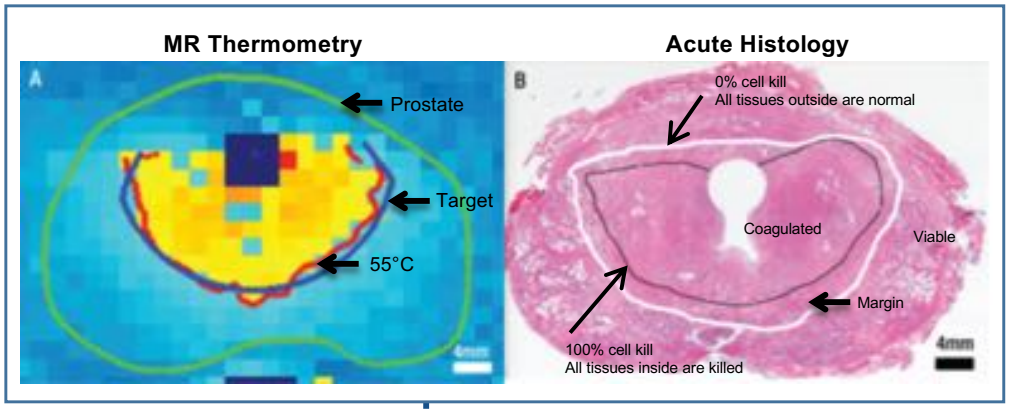
TULSA – First-in-Man Treat & Resect Study for Feasibility



Preclinical	Clinical Feasibility	Treat-and-Resect	Phase I	TACT
2000-2012	2010	2012-2013	2013-2014	2017-

- 8 treat-and-resect patients without therapeutic intent
- TULSA procedure is safe and feasible
- Ablation boundary in tissue matches 55°C

Chopra, Klotz 2012 Radiology

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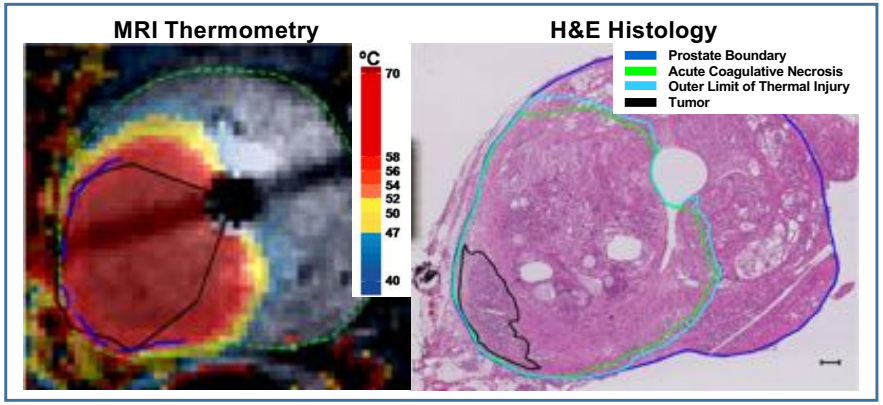
TULSA – Treat & Resect for Targeted Ablation



Preclinical	Clinical Feasibility	Treat-and-Resect	Phase I	TACT
2000-2012	2010	2012-2013	2013-2014	2017-

- 5 treat-and-resect patients with whole-mount histology
- Targeting to mpMRI-visible lesion identified during TULSA treatment
- Millimeter ablation precision on histology
- All index tumors within complete tissue ablation zone

Ramsay, Chopra, Klotz 2017 J Urology

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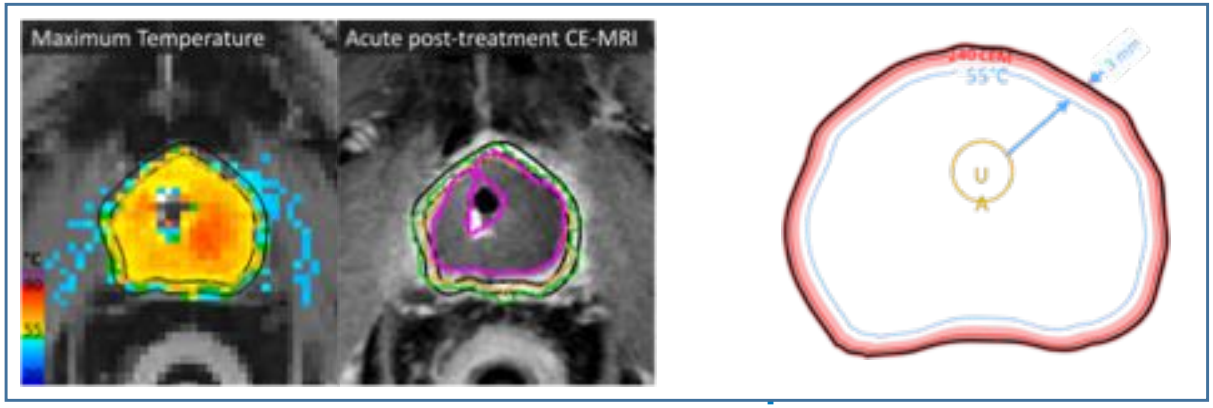
Phase I – 90% Ablation for Safety & Precision



Preclinical	Clinical Feasibility	Treat-and-Resect	Phase I	TACT
2000-2012	2010	2012-2013	2013-2014	2017-

- 30 patients with 3-year follow-up
- 90% ablation with 3 mm margin designed to measure precision
- Demonstrated favorable safety profile with minor impact on QOL
- Millimeter ablation precision on MR thermometry
- **PSA and prostate volume reduction** match **planned** target volume and **measured** thermal ablation volume (90% of the gland)

Chin 2016 Eur Urology; Bonekamp 2018 Eur Radiology (under review)

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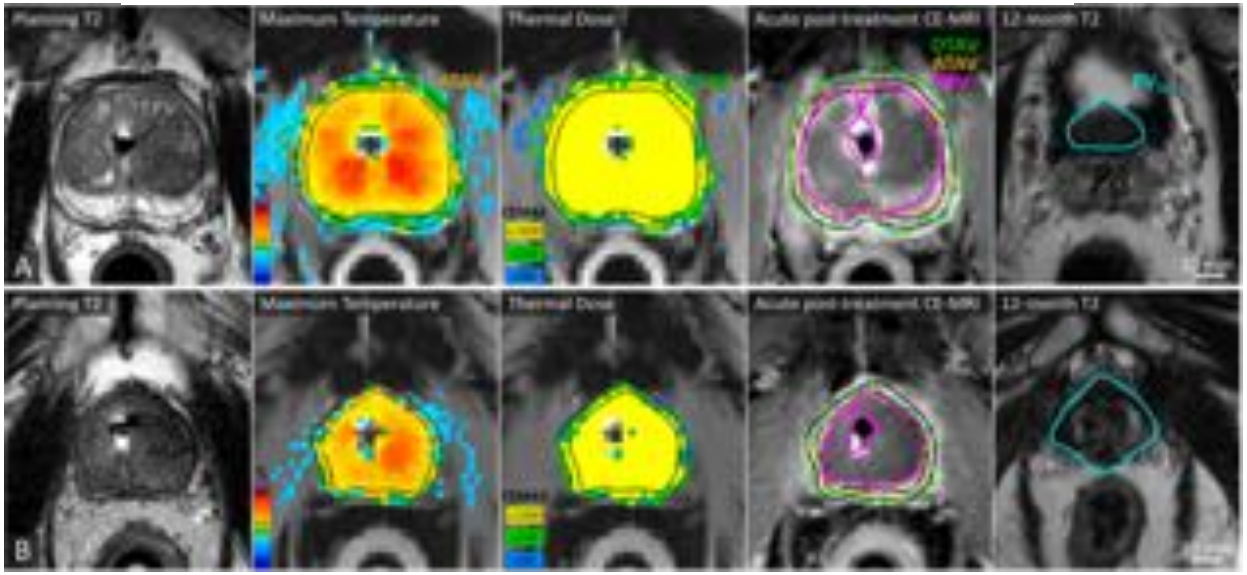
Phase I: Correlation of Thermal Ablation to Prostate Volume & PSA reduction



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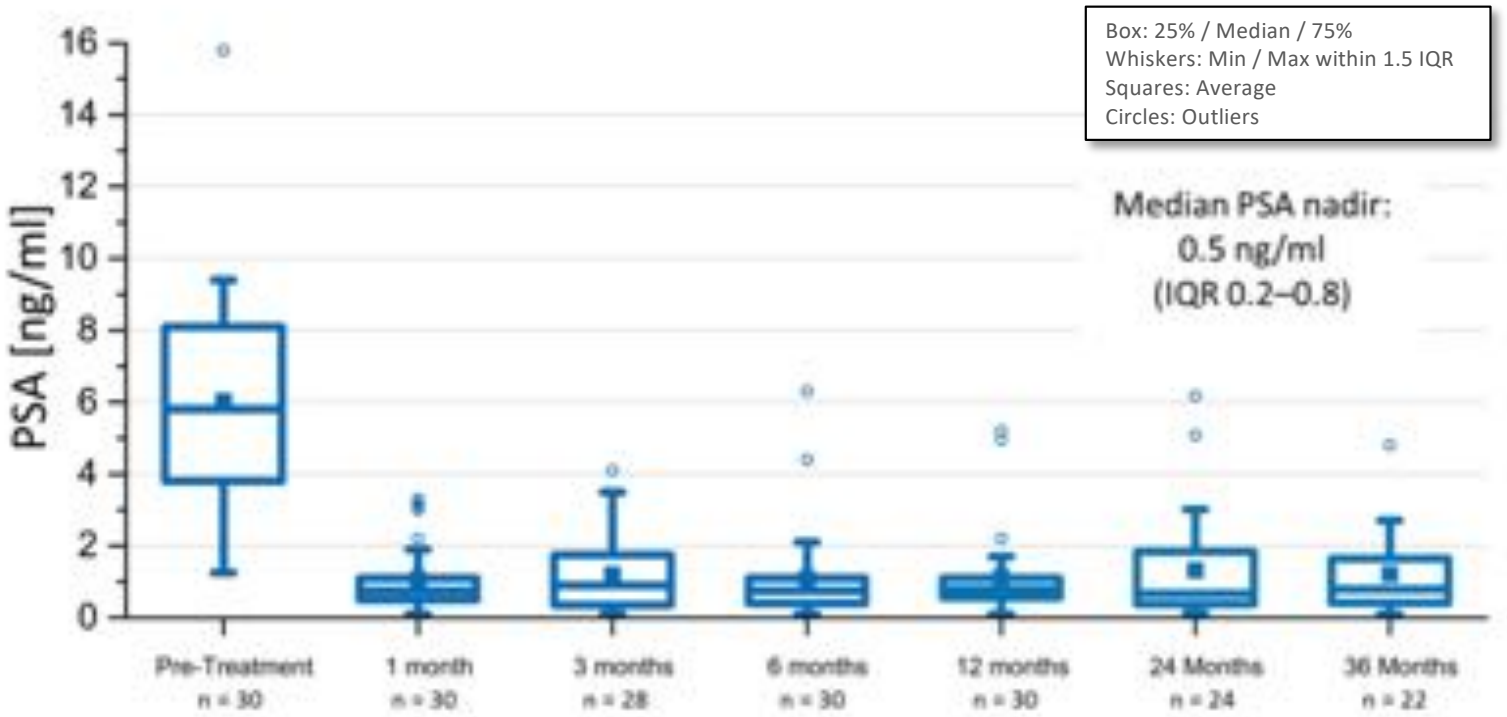
Phase I Ablation Efficacy: PSA

- PSA reduction in agreement with treatment plan
- Decreased 90% to nadir and stable to 36 months



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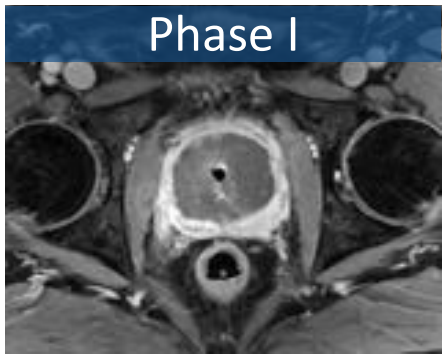
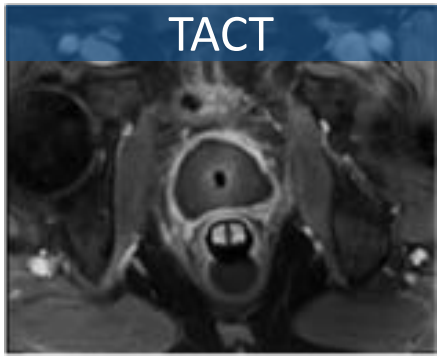
TULSA – TACT – Pivotal Study, Whole Gland Ablation to Capsule





Preclinical	Clinical Feasibility	Treat-and-Resect	Phase I	TACT
2000-2012	2010	2012-2013	2013-2014	2017-

- 115 patients, Gleason 3+3 & 3+4, 45 - 80 years old
- 13 clinical sites
- Millimeter ablation precision on MR thermometry
- Expected 12 month full data release Q1 2019

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TACT Pivotal Trial: Full Prostate Volume Ablation (99%)

To support FDA application, enrollment completion Feb 2018

Study Population: Intermediate and low risk patients, 45 – 80 years old, n=115, 13 clinical sites

Primary Endpoints

- Safety – Frequency and severity of adverse events
- Efficacy – PSA reduction ≥ 75%
  - Proportion of patients achieving PSA nadir ≤ 25% of the pre-treatment baseline value
  - Performance goal for the success proportion is 50% of patients

Secondary Endpoints

- Prostate volume reduction on MRI at 12 months, PSA nadir – % patients with PSA ≤ 0.5 ng/ml, PSA stability – % patients with PSA ≤ 0.5 ng/ml at 12 months
- Prostate TRUS biopsy – % patients with negative biopsy at 12 months
- Erectile function – Change in % patients with IIEF-5 ≥ 17, Erection firmness sufficient for penetration – Change in % patients with IIEF Q2 ≥ 2
- Urinary incontinence – Change in % patients using ≥ 1 pad / day
- Quality of life – IPSS, IIEF-15 & EPIC-50
- Targeting accuracy – Accuracy and precision of conformal thermal ablation of target prostate volume

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TACT Pivotal Trial – Study Population

Characteristics	Planned	Actual
Enrollment	110	115
Age (years)	45 – 80 y	64 (IQR 59 – 69) y
PSA (ng/ml)	≤ 15	6.4 (IQR 5.0 – 8.3) ng/ml
Gleason Score 6 (3 + 3) 7 (3 + 4)	≤ 3 + 4	 45 (39%) 3+3 70 (61%) 3+4
D'Amico Risk Low risk Intermediate risk	 Low to Intermediate	 39 (34%) Low-risk 76 (66%) Intermediate-risk
Targeted Prostate Volume		34 (range 15 – 88) cc
Actual Treatment Time		55 (IQR 41 – 70) min

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PSA – TACT Primary Efficacy Endpoint **Successful**

Primary Efficacy Endpoint: Proportion of patients achieving PSA nadir ≤ 25% of pre-tx baseline value

Hypothesis: TULSA-PRO would be of clinical interest if > 50% of patients had a PSA reduction ≥ 75%

N=115

- Median PSA reduction to-date is 95%
- Median PSA nadir to-date 0.36 ng/ml
- 95% of pts (109/115) meeting endpoint of ≥ 75% PSA reduction

- Number of patients with 12-month QoL data is not yet large enough to assess

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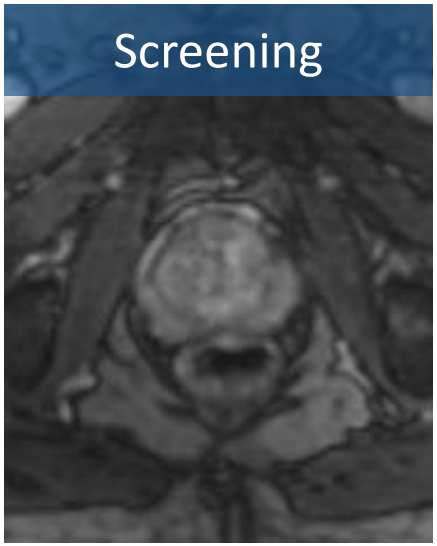
Case Study: TACT Pivotal Trial:

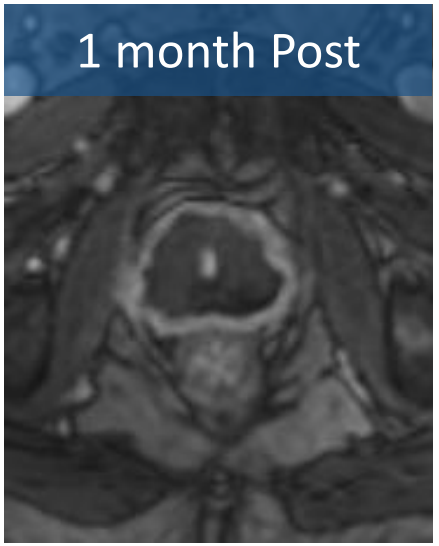
67 year old

Gleason 3+4 (L mid, R apex, R anterior)

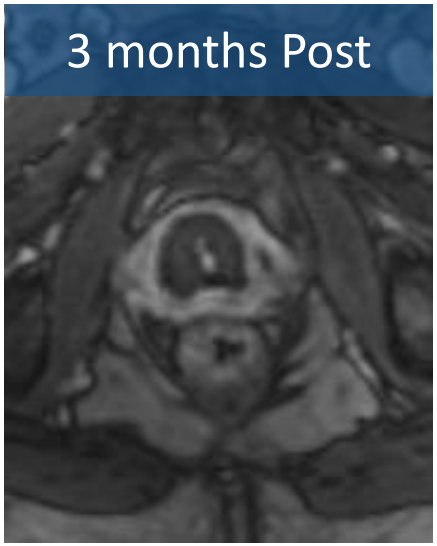
MRI-visible L mid anterior 14mm



PSA 6.0 ng/ml



PSA 0.28 ng/ml



PSA 0.09 ng/ml

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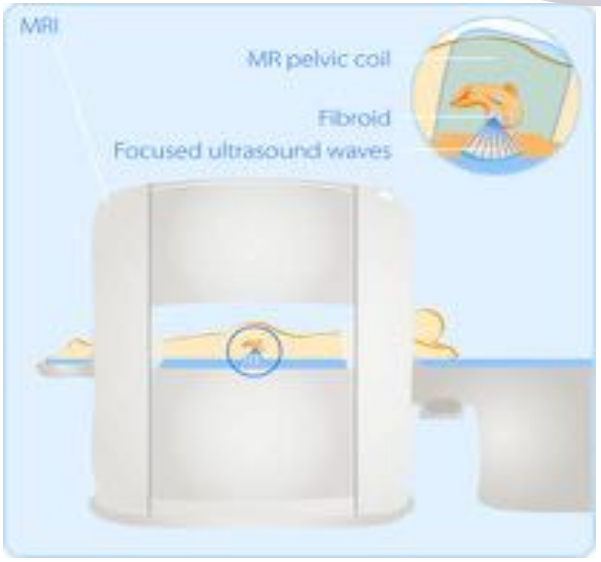
SONALLEVE

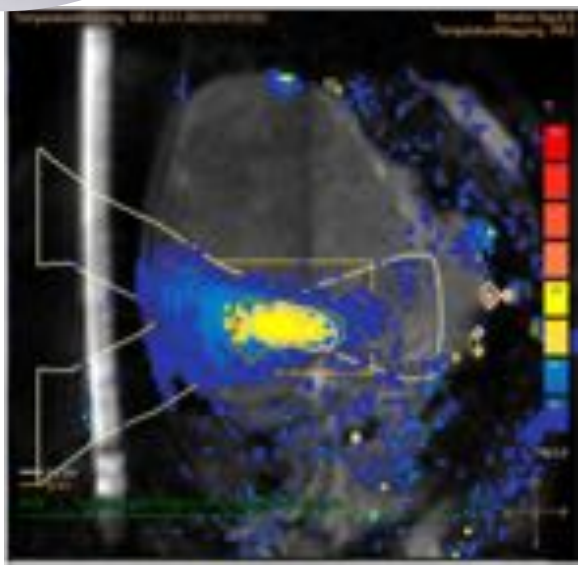
Technology platform for:

- Uterine Fibroid Treatment
- Bone Metastasis Pain
- Pediatric bone
- Hyperthermia

Over 200 publications from leading US and European clinicians and hospitals

CE Marked





Uterine Fibroid: Symptom **Relief** & **Durability**

In normal commercial use, over 85% of patients experienced sustained symptom improvement

Months post-procedure	Patients available for follow-up	Symptom improvement		
		Improved	No relief	Worse
3 months	105	90 (85.7%)	14 (13.3%)	1 (1%)
6 months	99	92 (92.9%)	7 (7.1%)	0
12 months	89	78 (87.6%)	11 (12.4%)	0

Durability of the therapeutic effect compared to other uterine preserving treatments

Need for alternative treatment	@ 12 month	@ 24 month	References
Myomectomy	10.6 %	13-16.5 %	1,2,3,4
UAE (Uterine Artery Embolization)	7-10 %	12.7-23.7 %	5,6,7
MR-HIFU/MRgFUSNPV >60%	6 %	13 %	8

"Volumetric MR-guided high-intensity focused ultrasound ablation of uterine fibroids: treatment speed and factors influencing speed," M. J. Park, Y. S. Kim, B. Keserci, H. Rhim, and H. K. Lim, Eur Radiol, vol. 23, no. 4, pp. 943–950, Apr. 2013. 1. Gorny KR, Woodrum DA et al. Magnetic resonance–guided focused ultrasound of uterine leiomyomas: review of a 12-month outcome of 130 clinical patients. J Vasc Interv Radiol 2011 2. Subramanian S, Clark MA, Isaacson K. Outcome and resource use associated with myomectomy. Obs & Gyn.2001; 98: 583-587 3. Nezhat FR, Roemisch M, et al. Recurrence rate after laparoscopic myomectomy. Am Assoc Gynecol Laparosc. 1998;5: 237-240 4. Rossseti et al. Long term results of laparoscopic myomectomy: recurrence rate in comparison with abdominal myomectomy. Hum Reprod. 2001:16:770-774 5. Doridot et al. Recurrence of leiomyomata after laparoscopic myomectomy. J Am Assoc Gynecol Laparosc. 2001;8: 495-500 6. Spies JB, Bruno J, et al. Long-term outcome of uterine artery embolization of leiomyomata. Obstet Gynecol. 2005; 106: 933-939 7. Goodwin SC, Spies JB, et al. Uterine artery embolization for treatment of leiomyomata: long-term outcomes from FIBROID registry. Obstet & Gynecol. 2008; 111: 22-32 8. Sharp HT. Assessment of new technology in the treatment of idiopathic menorrhagia and uterine leiomyomata. Obstet Gynecol. 2006;108: 990–1003

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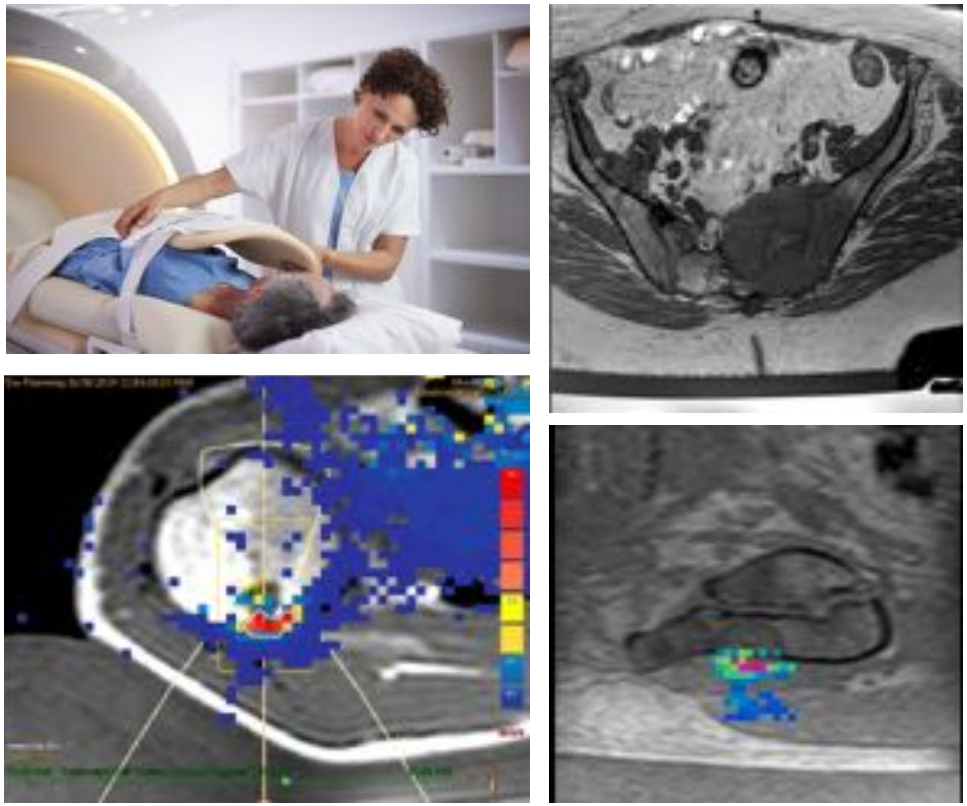
Sonalleve: **Bone Metastasis** Pain Therapy

Non-invasive alternative to radiotherapy

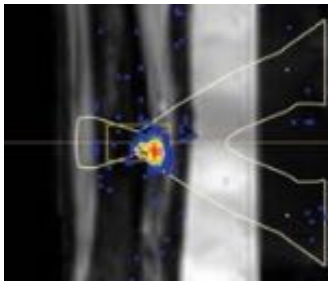
Most patients with slow growing tumors develop bone metastasis in the later stage of the disease. Bone changes and malformations irritate nerve endings creating significant pain for patients.

- Radiotherapy standard of care for bone mets, but 20-30% of patients do not respond
- Sonalleve as non-invasive alternative to radiotherapy
- Heating of bone surface, ablation of periosteal nerves
- Quick pain relieve in 2-3 days, vs. radiotherapy typical 3 weeks



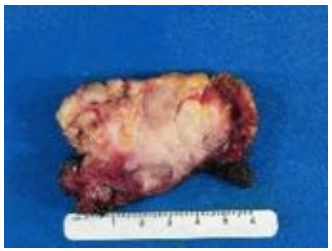
Exploring **Further Indications** on Current Platform

Pediatrics, Hyperthermia



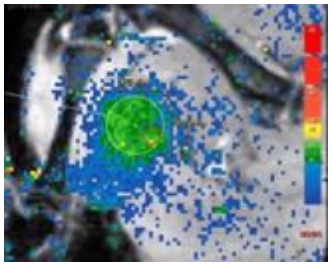
Pediatrics: Osteoid osteoma

- Very painful, benign bone tumor in children and young adults
- MR-HIFU very effective, immediate pain relief and bone restructuring
- Standard of care is radiofrequency ablation (RFA, invasive)



Pediatrics: Desmoid tumors (Fibromatosis)

- Benign aggressively growing tumors, everywhere in the body
- Can cause severe (bulk) symptoms
- Surgery (+/- radiotherapy) is standard of care, but high risk of recurrence
- Successful MR-HIFU treatments presented as individual case studies

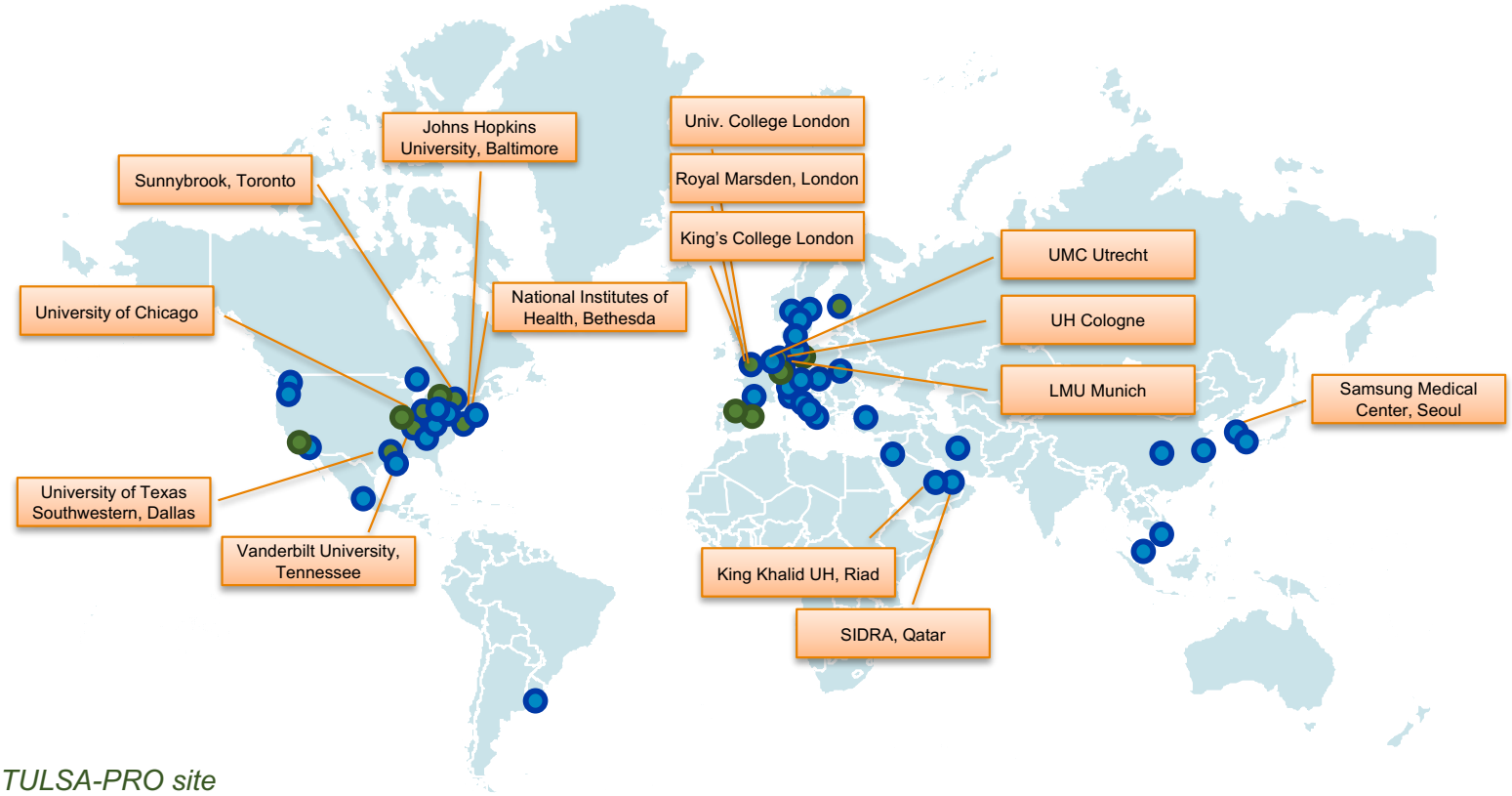


Hyperthermia

- Increase tumor sensitivity to Radiation and Chemo Therapy
- Local heating to 40 – 43°C, precise control of temperature and lesion size
- Adjuvant therapy to chemotherapy or radiation therapy
- Enabling technology for Local Drug Delivery

Commercialization

Strong **Global Network** of Clinical Partners



- *Indicates TULSA-PRO site*
- *Indicates Sonalleve site*
- *Indicates Sonalleve & TULSA-PRO site*

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Market Introduction **Strategy**

- Expanded distribution partnerships with Philips and Siemens MR groups
  - Capital Sales
  - Co-selling
  - Co-marketing
- Build direct sales to drive procedure adoption and disposable sales
- Sales Focus
  - Sonalleve – Asian market and academic hospitals in North America and Europe
  - TULSA-PRO – Europe

Reimbursement

US

PROCEDURE	APPROXIMATE HOSPITAL PAYMENT	APPROXIMATE SURGEON PAYMENT
Laparoscopic Radical Prostatectomy	$10,000/$20,000	$1,450
Radiation Therapy (IMRT Simple, 40 Sessions)	$40,000	Fee bundled into primary APC
Cryoablation	$10,000	$1,000

Initiation of clinical trial for salvage patients – Q4-2018, to support inclusion in NCCN guidelines as a recommended alternative

Germany

TULSA-PRO part of DRG payment to the hospital 3,963 Euros as of January 2018

* Payment is the sum of the indicated APC/CPT codes
** Payments are for Medicare patients. Private payer payments for these procedures will vary and may result in higher payments than published Medicare rates.

Profound Medical

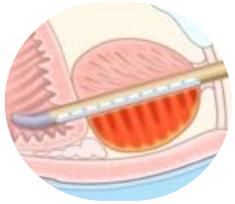
– About disease treatment not organ removal

Incision-free Procedures

Real-Time MR guided

1. **Precise**
2. **Flexible**
3. **Safe**

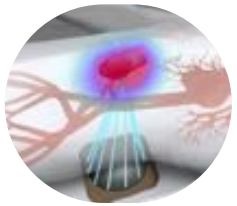
TULSA-PRO®



Treatment for prostate disease

- CE marked
- FDA expected H2-2019

Sonalleve



Treatment for uterine fibroids, bone metastasis, pediatric

- CE marked
- China FDA approved for uterine fibroids