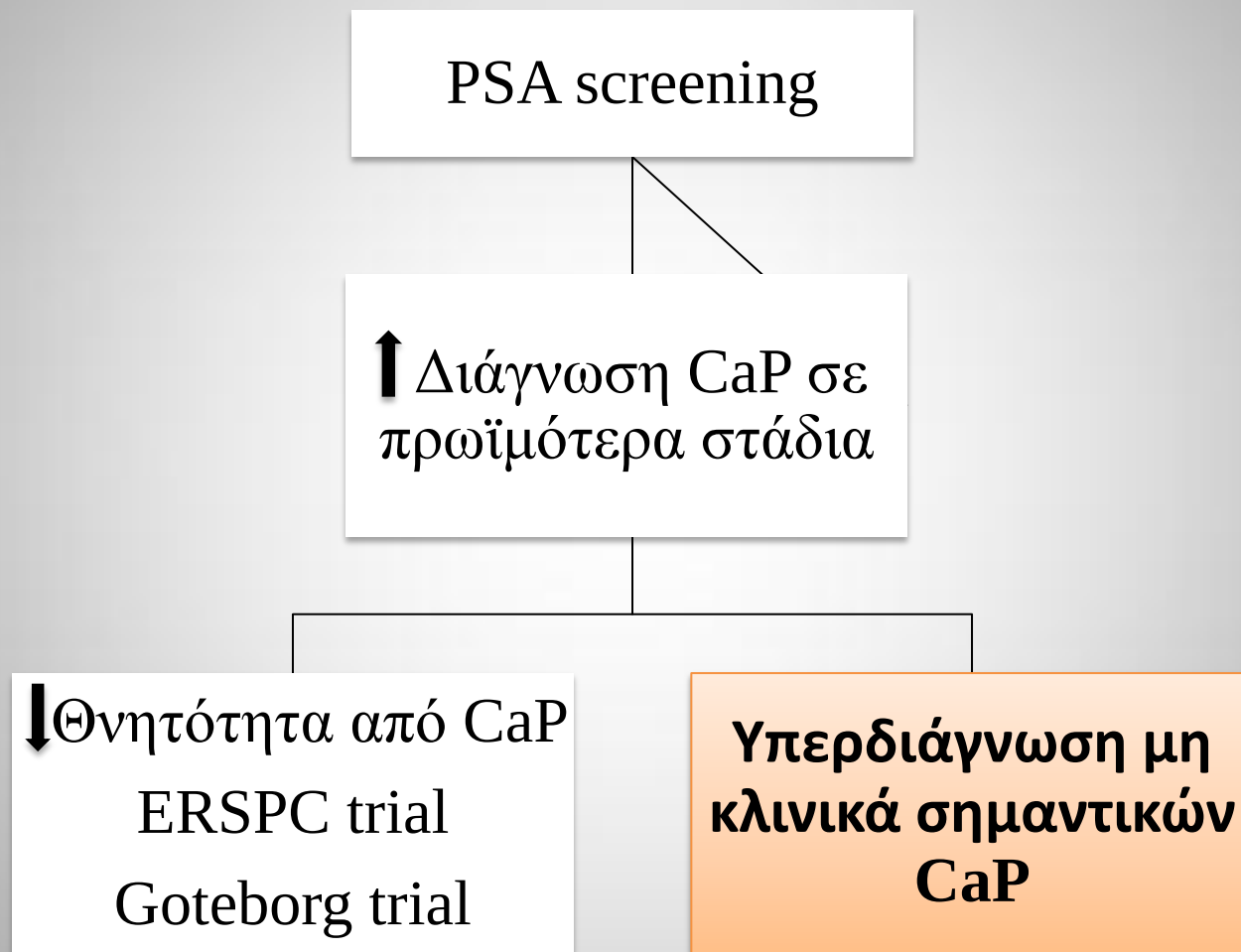


ΔΙΑΤΗΡΗΣΗ ΤΟΥ ΟΡΓΑΝΟΥ ΣΤΟΝ ΚΑΡΚΙΝΟ ΤΟΥ ΠΡΟΣΤΑΤΟΥ

ΙΩΑΝΝΗΣ ΒΑΡΚΑΡΑΚΗΣ
ΕΠΙΚΟΥΡΟΣ ΚΑΘΗΓΗΤΗΣ ΟΥΡΟΛΟΓΙΑΣ
ΙΑΤΡΙΚΗ ΣΧΟΛΗ ΑΘΗΝΩΝ
ΣΙΣΜΑΝΟΓΛΕΙΟ ΝΟΣΟΚΟΜΕΙΟ



ΚΛΙΝΙΚΟ ΥΠΟΒΑΘΡΟ



Overdetection in screening for prostate cancer

Jonas Hugosson^a and Sigrid Carlsson^{a,b}

IMPLICATIONS/CONSEQUENCES OF OVERDETECTION

instinct is to say 'Take it out, at all cost!'. Living with a cancer diagnosis can have a **major psychological** effect on quality of life with increased risks of anxiety, depression, post-traumatic stress disorder, acute myocardial infarction and even suicide

Psychiatric treatment in men with prostate cancer- results from a Nation wide population based cohort study from PCaBa Se Sweden.

Bill-Axelsson A, et al.

Eur J Cancer 2011;64:2195

Risk of suicide in men with low risk prostate cancer.

Carlsson S, et al.

Eur J Cancer 2013;49:1588





Overdetection in screening for prostate cancer

Jonas Hugosson^a and Sigrid Carlsson^{a,b}

IMPLICATIONS/CONSEQUENCES OF OVERDETECTION

With overdiagnosis comes the risk of **overtreatment** (treatment of a disease that without early detection would never have given rise to symptoms). In the USA, most men, including those with a favorable prognosis, are still being treated [43],



Long-Term Functional Outcomes after Treatment for Localized Prostate Cancer

Matthew J. Resnick, M.D., Tatsuki Koyama, Ph.D., Kang-Hsien Fan, M.S.,
Peter C. Albertsen, M.D., Michael Goodman, M.D., M.P.H.,
Ann S. Hamilton, Ph.D., Richard M. Hoffman, M.D., M.P.H.,
Arnold L. Potosky, Ph.D., Janet L. Stanford, Ph.D.,
Antoinette M. Stroup, Ph.D., R. Lawrence Van Horn, Ph.D.,
and David F. Penson, M.D., M.P.H.

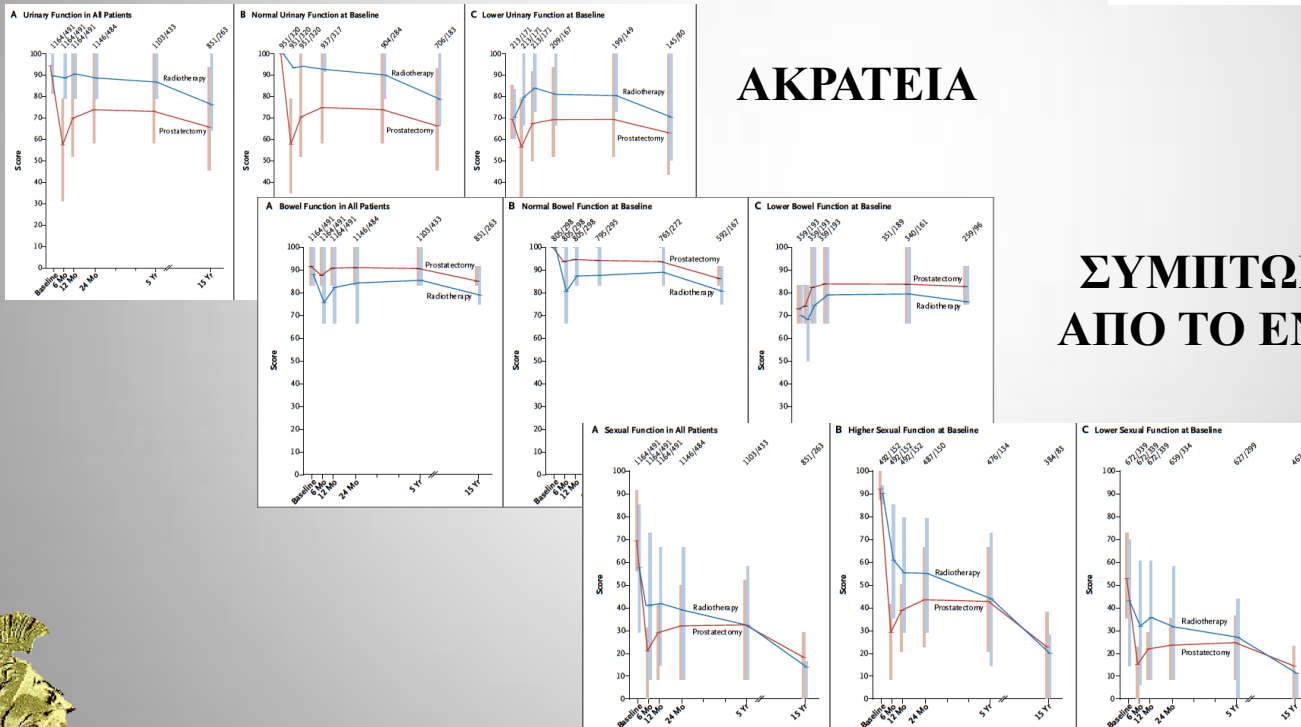


The NEW ENGLAND
JOURNAL of MEDICINE

AKPATEIA

ΣΥΜΠΤΩΜΑΤΑ
ΑΠΟ ΤΟ ΕΝΤΕΡΟ

ΣΤΥΤΙΚΗ
ΔΥΣΛΕΙΤΟΥΡΓΙΑ



Dept. Urology, Athens Medical School

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812

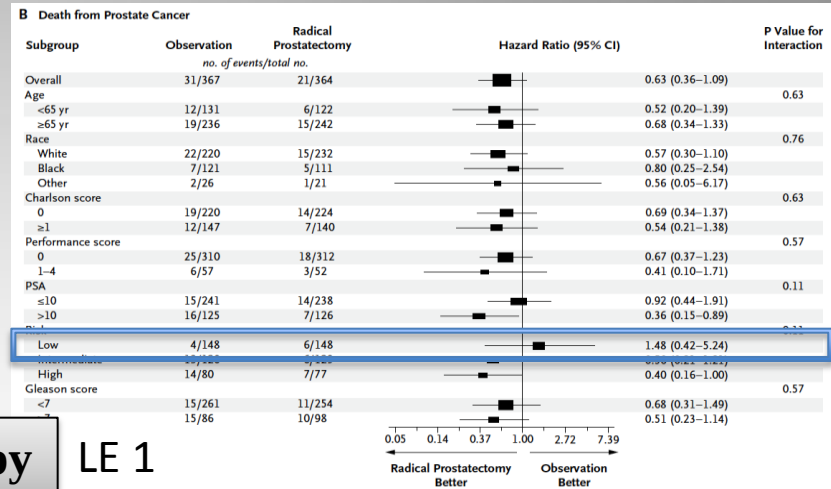
JULY 19, 2012

VOL. 367 NO. 3

Radical Prostatectomy versus Observation for Localized Prostate Cancer

Timothy J. Wilt, M.D., M.P.H., Michael K. Brawer, M.D., Karen M. Jones, M.S., Michael J. Barry, M.D., William J. Aronson, M.D., Steven Fox, M.D., M.P.H., Jeffrey R. Gingrich, M.D., John T. Wei, M.D., Patricia Gilhooly, M.D., B. Mayer Grob, M.D., Imad Nsouli, M.D., Padmini Iyer, M.D., Ruben Cartagena, M.D., Glenn Snider, M.D., Claus Roehrborn, M.D., Ph.D., Roohollah Sharifi, M.D., William Blank, M.D., Parikshit Pandya, M.D., Gerald L. Andriole, M.D., Daniel Culkin, M.D., and Thomas Wheeler, M.D., for the Prostate Cancer Intervention versus Observation Trial (PIVOT) Study Group

Lack of benefit in low risk Dx from radical therapy



LE 1

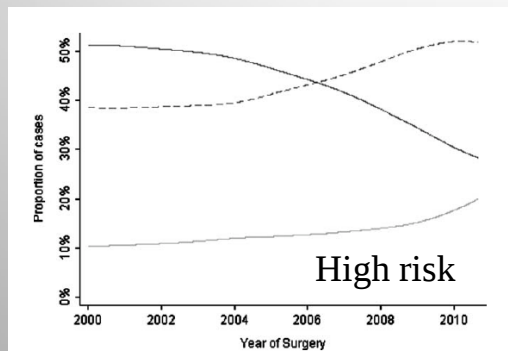


Reverse Stage Shift at a Tertiary Care Center

Escalating Risk in Men Undergoing Radical Prostatectomy

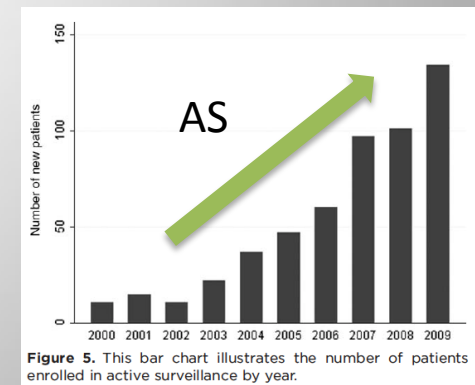
Jonathan L. Silberstein, MD¹; Andrew J. Vickers, PhD²; Nicholas E. Power, MD¹; Samson W. Fine, MD³; Peter T. Scardino, MD¹; James A. Eastham, MD¹; and Vincent P. Laudone, MD¹

Less low risk Pt undergoing RRP



Intermediate risk

Low risk



Dept. Urology, Athens Medical School

Active Surveillance for Prostate Cancer: A Systematic Review of the Literature

Marc A. Dall'Era^{a,*}, Peter C. Albertsen^b, Christopher Bangma^c, Peter R. Carroll^d,
H. Ballentine Carter^e, Matthew R. Cooperberg^d, Stephen J. Freedland^{f,g},
Laurence H. Klotz^h, Christopher Parkerⁱ, Mark S. Soloway^j

EUROPEAN UROLOGY 62 (2012) 976–983



Table 2 – Summarized key findings from the largest published series within the past 2 yr

Institution	Yr	Age, median	n	Follow-up, yr, median	No. treated (%)	Time to treatment, median	Primary trigger for treatment	Treated at 2 yr, %	PCSM, %	ACM, %
Johns Hopkins [8]	2011	66	769	2.7	255 (33)	2.2	Histology	19	0	2
University of Toronto [*] [9]	2010	70.3	450	6.8	135 (30)	NR	PSA	16	1	21.4
UCSF [*] [24]	2011	61.9	649	3.9	113 (30)**	3.5	Histology	–	0	3
ERSPC [*] [25]	2009	66	988	3.9	197 (32)	2.6	NR	22	0.2	11.2
Royal Marsden Hospital [*] [12]	2008	67	326	1.8	65 (20)	1.3	PSA	NR	0	2
MSKCC [13,26]	2011	62	238	1.8***	25 (11)	NR	Histology	NR	NR	NR
University of Miami [15,27]	2011	64	272	2.9	67 (25)	2.6	Histology	NR	0	2



Χωρίς τις παρενέργειες της RRP & XBRT

Dept. Urology, Athens Medical School

Living with untreated prostate cancer: predictors of quality of life

Lara Bellardita^a, Silvia Villa^a, and Riccardo Valdagni^{a,b}

Active surveillance for low risk prostate cancer

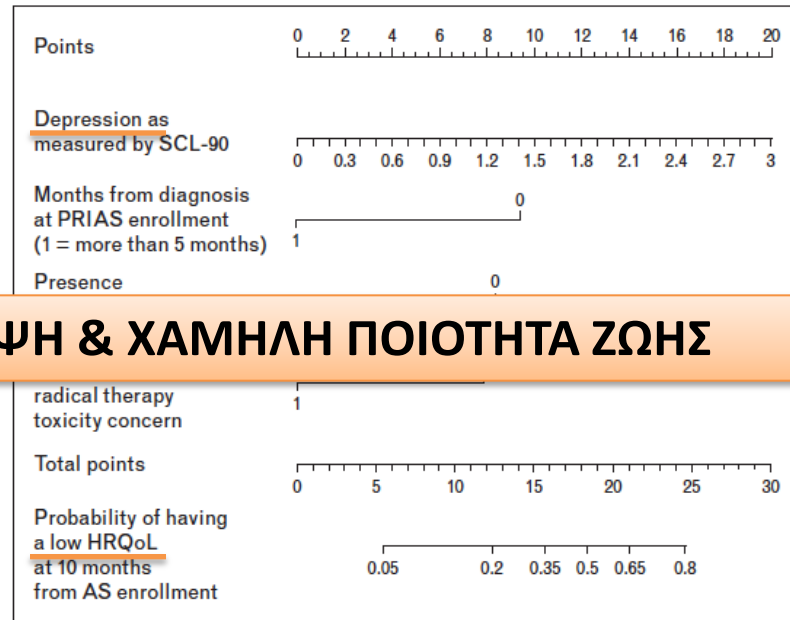


FIGURE 1. Nomogram based on a significant model predicting the probability of low quality of life at 10-months AS follow-up. AS, active surveillance. Reproduced with permission from [47].



**ΕΝΕΡΓΟΣ
ΠΑΡΑΚΟΛΟΥΘΗΣΗ**

Άγχος «δεν κάνω τίποτα»

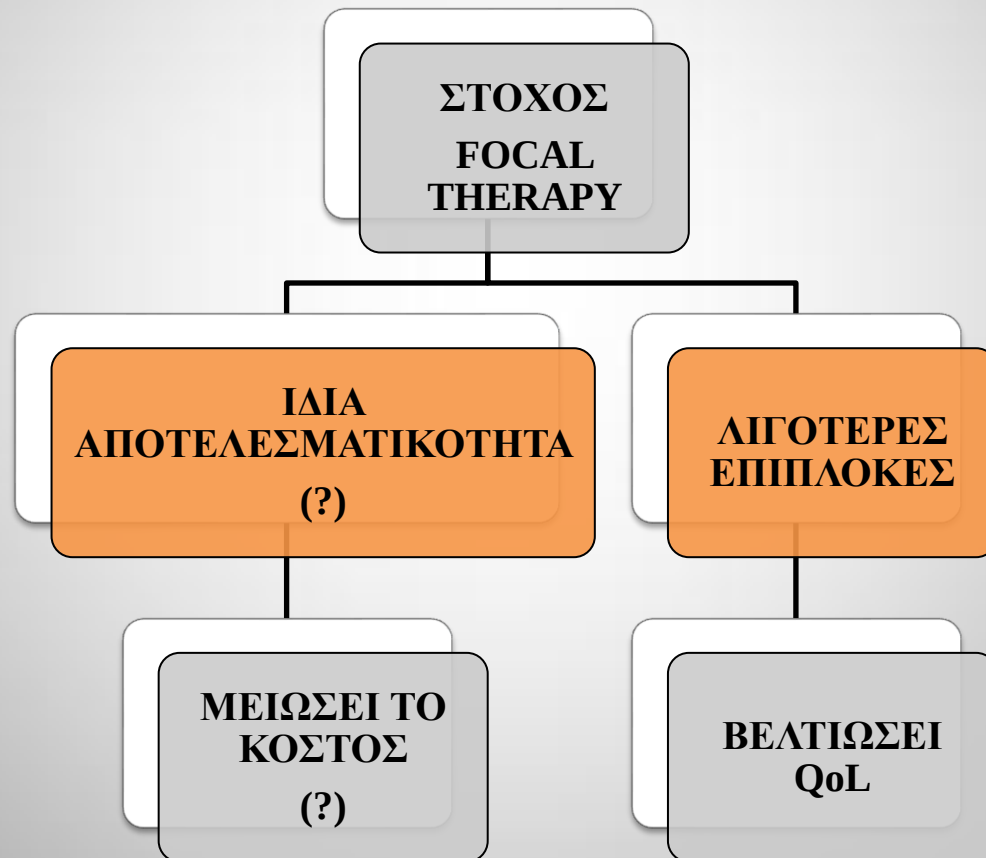
**ΕΣΤΙΑΚΗ
ΘΕΡΑΠΕΙΑ**

**ΡΙΖΙΚΗ
ΑΝΤΙΜΕΤΩΠΙΣΗ**

Άγχος επιπλοκών

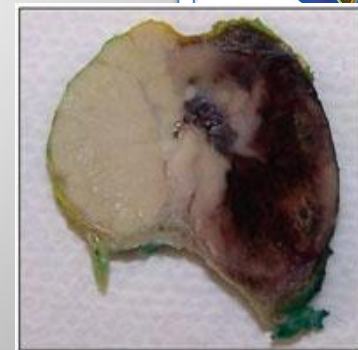
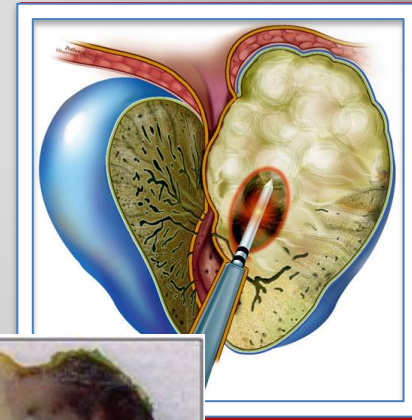


ΠΟΙΟΣ Ο ΣΤΟΧΟΣ ΤΗΣ ΕΣΤΙΑΚΗΣ ΑΝΤΙΜΕΤΩΠΙΣΗΣ ΤΟΥ ΧΑΜΗΛΟΥ ΚΙΝΔΥΝΟΥ CaP ;

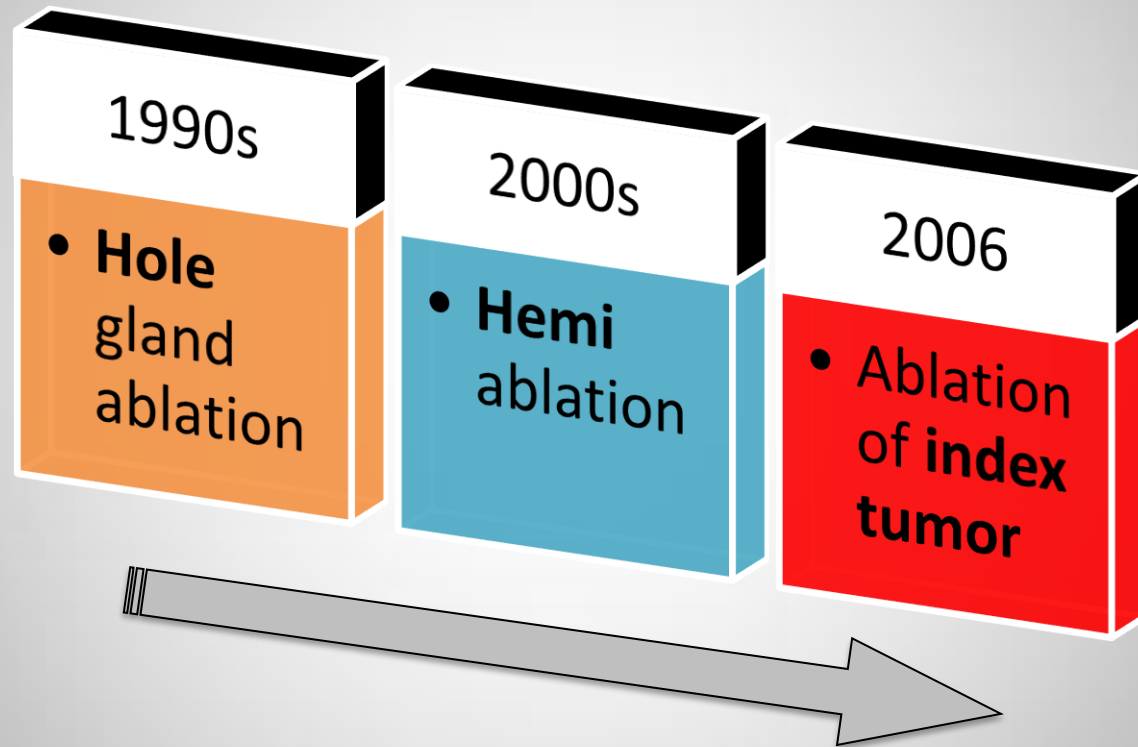


ΤΙ ΕΙΝΑΙ Η ΕΣΤΙΑΚΗ ΘΕΡΑΠΕΙΑ;

«Η **στοχευμένη χορήγηση** μιάς μορφής ενέργειας σε συγκεκριμένο σημείο του προστάτη με σκοπό την καταστροφή του ιστού στο σημείο αυτό και η διατήρηση του υπολοίπου παρεγχύματος χωρίς βλάβη»



ΙΣΤΟΡΙΚΗ ΑΝΑΔΡΟΜΗ ΕΣΤΙΑΚΗΣ ΘΕΡΑΠΕΙΑΣ



ΠΡΟΒΛΗΜΑΤΙΣΜΟΙ ΣΧΕΤΙΚΑ ΜΕ FT_x(I)

ΠΟΛΥΕΣΤΙΑΚΟΤΗΤΑ

PROGNOSTIC FACTORS FOR MULTIFOCAL PROSTATE CANCER IN RADICAL PROSTATECTOMY SPECIMENS: LACK OF SIGNIFICANCE OF SECONDARY CANCERS

MASANORI NOGUCHI, THOMAS A. STAMEY, JOHN E. McNEAL* AND ROSALIE NOLLEY

From the Department of Urology, Kurume University School of Medicine (MN), Kurume, Japan, and Department of Urology, Stanford University School of Medicine (TAS, JEM and RN), Stanford, California

Vol. 170, 459–463, August 2003



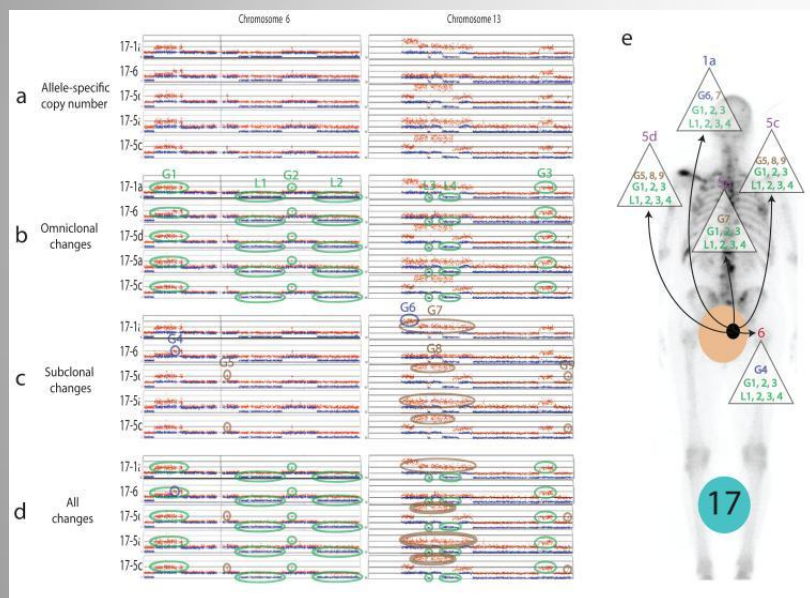
In the current study 76% of all patients had multifocal tumors and there were no differences between unifocal and multifocal tumors with respect to serum PSA and biopsy findings except total cancer length. However, total cancer





Copy Number Analysis Indicates Monoclonal Origin of Lethal Metastatic Prostate Cancer

Wennuan Liu^{1,1}, Sari Laitinen^{1,2}, Sofia Khan³, Mauno Vihinen³, Jeanne Kowalski⁷, Guoqiang Yu⁸, Li Chen⁸, Charles M. Ewing⁵, Mario A. Eisenberger⁶, Michael A. Carducci⁶, William G. Nelson⁶, Srinivasan Yegnashubramanian⁶, Jun Luo^{5,6}, Yue Wang⁸, Jianfeng Xu¹, William B. Isaacs^{5,6}, Tapio Visakorpi², and G. Steven Bova^{4,5,6}



Η επιθετικότητα ενός CaP εξαρτάται από την συμπεριφορά ενός κλώνου που συνήθως είναι ο μεγαλύτερος σε μέγεθος και ο πιο αδιαφοροποίητος (GS 4-5)

INDEX LESION



ΣΤΟΧΟΣ ΕΣΤΙΑΚΗΣ ΘΕΡΑΠΕΙΑΣ ‘ΚΥΡΙΑ ΒΛΑΒΗ’



ΠΡΟΒΛΗΜΑΤΙΣΜΟΙ ΣΧΕΤΙΚΑ ΜΕ FT_x(II)

ΕΝΤΟΠΙΣΗ ΚΑΙ ΑΠΕΙΚΟΝΙΣΗ
ΤΗΣ “INDEX” ΒΛΑΒΗΣ
&
ΧΑΡΤΟΓΡΑΦΗΣΗ ΤΩΝ ΑΛΛΩΝ
ΒΛΑΒΩΝ (μη σημαντικών)



ΑΠΕΙΚΟΝΙΣΗ & ΕΣΤΙΑΚΗ ΘΕΡΑΠΕΙΑ «ΚΛΑΣΣΙΚΗ ΜΕΘΟΔΟΣ: TRUS»

Biopsy accuracy in identifying unilateral prostate cancer depends on prostate weight

Matvey Tsivian, M.D., Daniel M. Moreira, M.D., Leon Sun, M.D., Ph.D.,
Vladimir Mouraviev, M.D., Ph.D., Masaki Kimura, M.D., Judd W. Moul, MD,
Thomas J. Polascik

Division of Urology, Department of Surgery, Duke University

Patient Selection for Hemiablative Focal Therapy of Prostate Cancer

Variables Predictive of Tumor Unilaterality Based Upon Radical Prostatectomy

Thomas J. Polascik, MD¹, Janice M. Mayes, BSc¹, Florian R. Schroeck, MD¹, Leon Sun, MD, PhD¹,
John F. Madden, MD, PhD², Judd W. Moul, MD¹, and Vladimir Mouraviev, MD, PhD¹



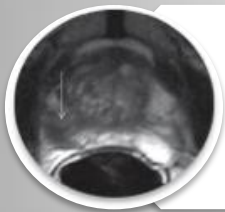
- 12 core systematic ~~TRUS~~ guided biopsies
- Misclassification of tumor volume and grade in up to 30%



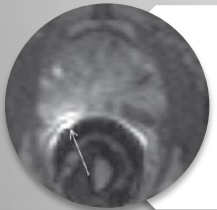
ΑΠΕΙΚΟΝΙΣΗ & ΕΣΤΙΑΚΗ ΘΕΡΑΠΕΙΑ «ΚΑΙΝΟΥΡΓΙΕΣ ΜΕΘΟΔΟΙ»



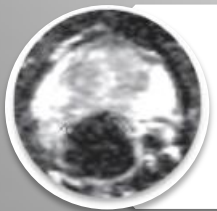
mpMRI



T2w weighted ακολουθία



DCE dynamic contrast enhanced



DWI diffusion weighted imaging



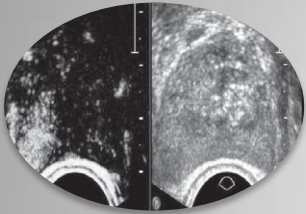
**Διαγνωστική
ακρίβεια**



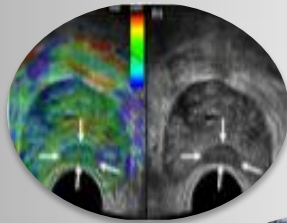
ΑΠΕΙΚΟΝΙΣΗ & ΕΣΤΙΑΚΗ ΘΕΡΑΠΕΙΑ «ΚΑΙΝΟΥΡΓΙΕΣ ΜΕΘΟΔΟΙ»

● mpTRUS

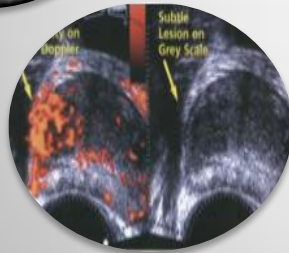
↑ Sensitivity
&
Specificity



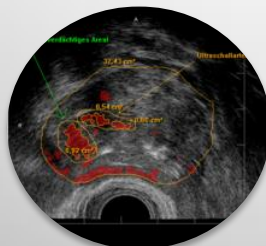
CEUS contrast enhanced US



RTE Elastography



Power doppler US



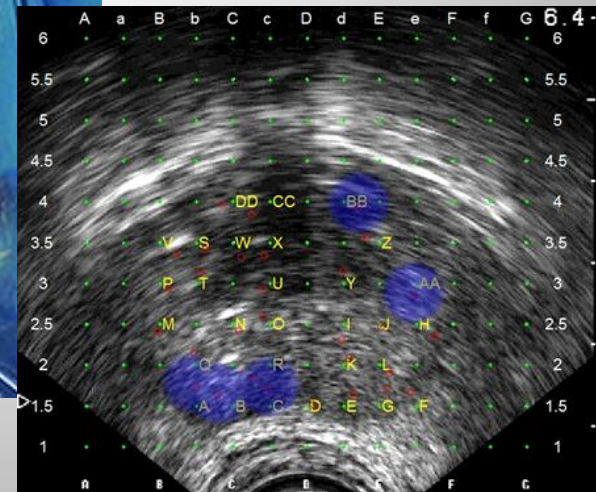
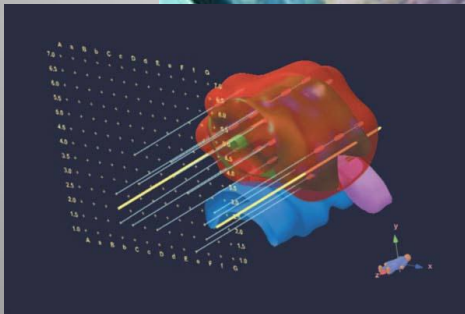
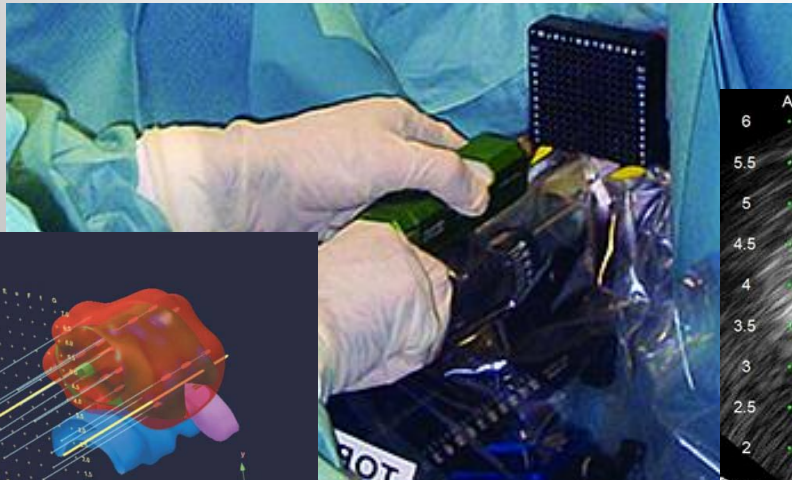
PHS Histoscanning



ΧΑΡΤΟΓΡΑΦΗΣΗ & ΕΣΤΙΑΚΗ ΘΕΡΑΠΕΙΑ ΣΤΡΑΤΗΓΙΚΕΣ ΒΙΟΨΙΑΣ

TRANSPERINEAL PROSTATE MAPPING BIOPSY

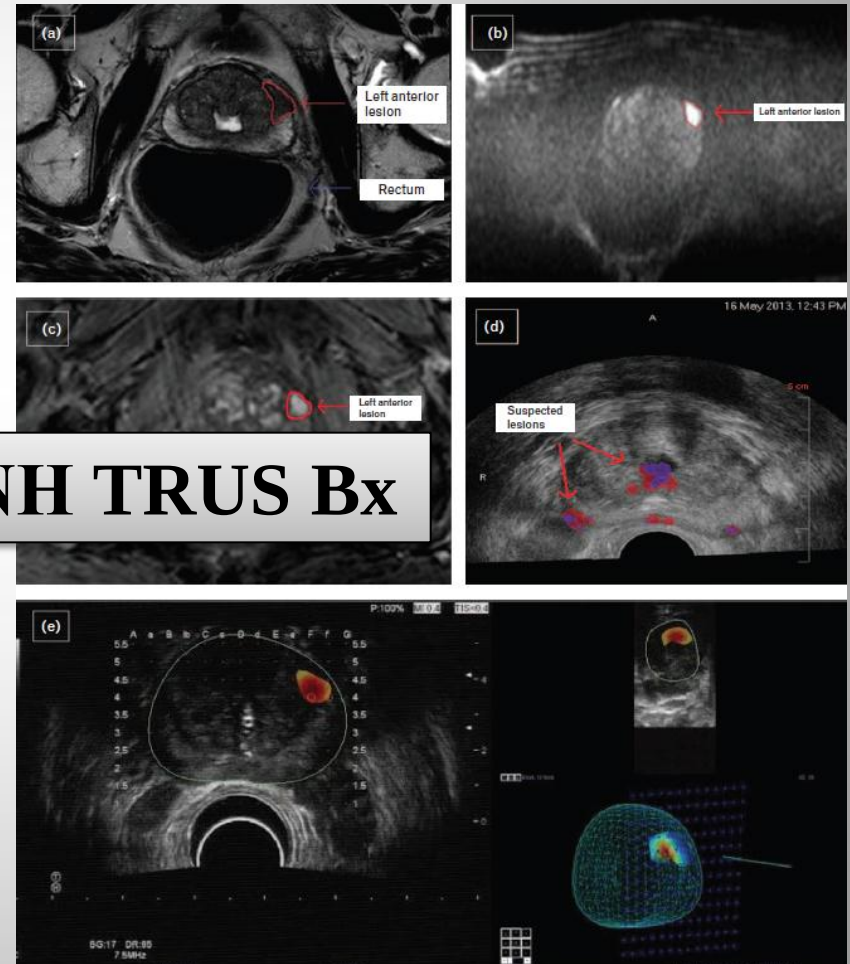
Ακριβέστερη απεικόνιση
της βλάβης σε σχέση με την
κλασσική TRUS



ΧΑΡΤΟΓΡΑΦΗΣΗ & ΕΣΤΙΑΚΗ ΘΕΡΑΠΕΙΑ ΣΤΡΑΤΗΓΙΚΕΣ ΒΙΟΨΙΑΣ

**ΣΥΝΤΗΞΗ
mpMRI-TRUS Bx**

mpMRI ΥΠΟΒΟΗΘΟΥΜΕΝΗ TRUS Bx



ΧΑΡΤΟΓΡΑΦΗΣΗ & ΕΣΤΙΑΚΗ ΘΕΡΑΠΕΙΑ ΣΤΡΑΤΗΓΙΚΕΣ ΒΙΟΨΙΑΣ

MRI-Guided Biopsy of the Prostate Increases Diagnostic Performance in Men with Elevated or Increasing PSA Levels after Previous Negative TRUS Biopsies

Aristotelis G. Anastasiadis^{a,*,1}, Matthias P. Lichy^{b,1}, Udo Nagele^a, Markus A. Kuczyk^a, Axel S. Merseburger^a, Joerg Hennenlotter^a, Stefan Corvin^a, Karl-Dietrich Sievert^a, Claus D. Claussen^b, Arnulf Stenzl^a, Heinz-Peter Schlemmer^b



ΚΑΘΟΔΗΓΟΥΜΕΝΕΣ ΒΙΟΨΙΕΣ

- Καλύτερη ακρίβεια και ειδικότητα για **κλινικά σημαντικές βλάβες**
- Χρειάζονται **λιγότερα κομμάτια**
- **Λιγότερος χρόνος**
- **Λιγότερες επιπλοκές**



ΠΡΟΒΛΗΜΑΤΙΣΜΟΙ ΣΧΕΤΙΚΑ ΜΕ FT_x(III)

**How to diagnose and treat focal therapy failure
and recurrence?**

No guidelines



Eric Barret, Kadi-Ann Harvey-Bryan, Rafael Sanchez-Salas, Francois Rozet, Marc Galiano, and Xavier Cathelineau

ΟΡΙΣΜΟΙ

ΑΠΟΤΥΧΙΑ ΘΕΡΑΠΕΙΑΣ ΥΠΟΤΡΟΠΗ

- (+)Bx στο σημείο της θεραπείας
- (+)Bx εκτός θεραπευμένης εστίας
- (-)Bx στο σημείο της θεραπείας
αλλά διαρκώς αυξανόμενο PSA



ΠΡΟΒΛΗΜΑΤΙΣΜΟΙ ΣΧΕΤΙΚΑ ΜΕ FT_x(V)

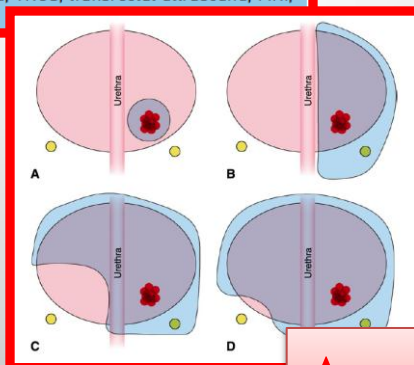
ΕΚΤΙΜΗΣΗ ΑΠΟΤΕΛΕΣΜΑΤΩΝ ΟΜΟΙΟΓΕΝΕΙΑ ΜΕΛΕΤΩΝ

	Modality	Protocol	n	Biopsy	PSA	GS
MSKCC	Cryotherapy	Hemiablation	50	TRUS	<10	≤6
MD Anderson	Cryotherapy	Extended hemiablation	100	TRUS	<10	≤6
Milan, Italy	Cryotherapy	Hemiablation	100	TRUS	<10	≤6
Ahmed/Emberton	HIFU	Focal	43	Template	<15	≤7
Ahmed/Emberton	HIFU	Index lesion	26	Template or TRUS/MRI	<15	≤8
France	HIFU	Hemiablation	120	TRUS/MRI	<10	≤7
Multicenter Europe	HIFU	Focal, Hemiablation, Index lesion	150	Template or TRUS/MRI	<15	≤7
Multicenter Europe	PDT-WST-11	Variable	85	Not reported	Not reported	Not reported

PSA, prostate-specific antigen; GS, Gleason Score; HIFU, high-frequency ultrasound; TRUS, transrectal ultrasound; MRI, magnetic resonance imaging; PDT, photodynamic therapy.

Διαφορετικά πρωτόκολλα!!!

- Focal
- Targeted
- Conformal
- Zonal
- Hemi-treatment
- Lumpectomy



Διαφορετική ορολογία!!!



ΠΡΟΒΛΗΜΑΤΙΣΜΟΙ ΣΧΕΤΙΚΑ ΜΕ ΤΗΝ ΕΣΤΙΑΚΗ ΘΕΡΑΠΕΙΑ ΤΟΥ CaP (III)

POSTABLATION FU

PSA

- Όχι καλός δείκτης (κφ προστάτης)
- 80% του PSA από την INDEX βλάβη
- Αναμένεται πτώση >50% στους 3μήνες

mpMRI

- Εξέταση εκλογής
- Ειδίκευση ακτινολόγου

Postablation Bx

- Bx 12 μήνες μετά την FTx



ΠΡΟΒΛΗΜΑΤΙΣΜΟΙ ΣΧΕΤΙΚΑ ΜΕ FT_x(III)



HOW TO MANAGE FAILURE OR RECURRENCE AFTER FOCAL THERAPY?

No guidelines

Table 3. Management of failure or recurrence: different scenarios possible when interpreting the control biopsy

Biopsy results	PCa characteristics	Management
Negative	—	Routine surveillance
Positive	Insignificant lesion <3 mm and same characteristics as initial PCa	<u>Active Surveillance</u>
Positive/unilateral	Significant lesion from 3 to 10 mm and same characteristics as initial PCa	<u>Focal re-treatment using any energy available</u>
Positive unilateral or bilateral	Significant lesion ≥10 mm or upgrade or upstage	<u>Any radical treatment</u> available, depending on PCa characteristics



ΠΡΟΒΛΗΜΑΤΙΣΜΟΙ ΣΧΕΤΙΚΑ ΜΕ FT_x(IV)

ΠΟΙΟΣ Ο ΚΑΤΑΛΛΗΛΟΣ
ΥΠΟΨΗΦΙΟΣ ΓΙΑ ΕΣΤΙΑΚΗ
ΘΕΡΑΠΕΙΑ;



focal therapy should be limited to patients with a low to moderate risk in investigational settings;



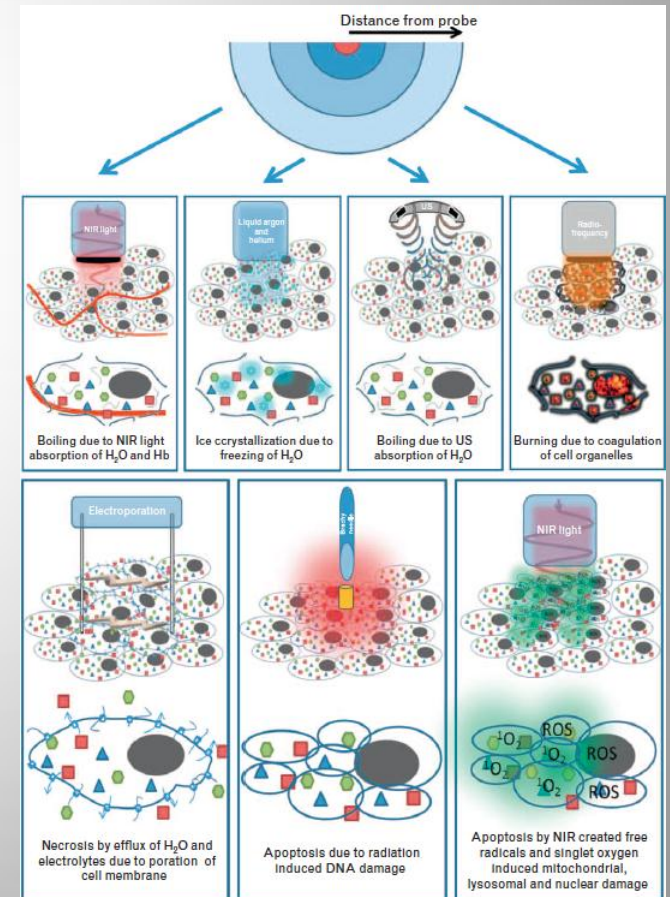
ΠΡΟΒΛΗΜΑΤΙΣΜΟΙ ΣΧΕΤΙΚΑ ΜΕ FT_x(VI)

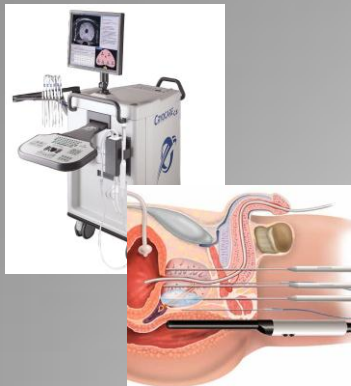
ΠΟΙΑ Η ΚΑΛΥΤΕΡΗ ΠΗΓΗ ΕΝΕΡΓΕΙΑΣ?

- Cryotherapy
- High Intensity Focused Ultrasound
- Radio Frequency Ablation
- Photodynamic therapy
- Electroporation
- Indigo laser
- Focal BRCT
- Focal XBRT (CYBERKNIFE)

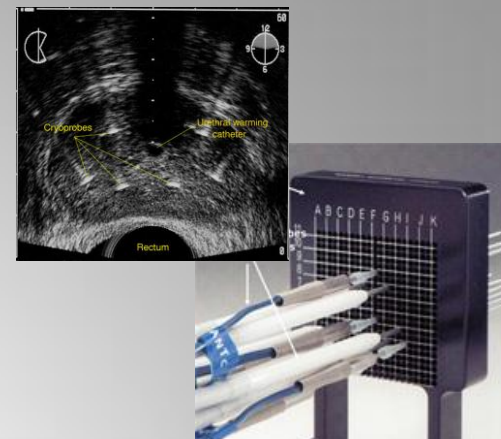


Dept. Urology, Athens Medical School





ΚΡΥΟΘΕΡΑΠΕΙΑ



ΑΡΧΕΣ ΚΡΥΟΒΙΟΛΟΓΙΑΣ

- Ενδοκυττάρια & εξωκυττάρια κρυσταλλοποίηση
- Αφυδάτωση-Ίσχαιμη νέκρωση

ΕΝΔΕΙΞΕΙΣ

- Κρυοθεραπεία ως **πρωτοθεραπεία**
 - LE II-2/3
- Κρυοθεραπεία **διάσωσης**
 - LE II-3
- **Υφολική** κρυοθεραπεία
 - LE III





Focal cryotherapy for localized prostate cancer: a report from the national Cryo On-Line Database (COLD) Registry

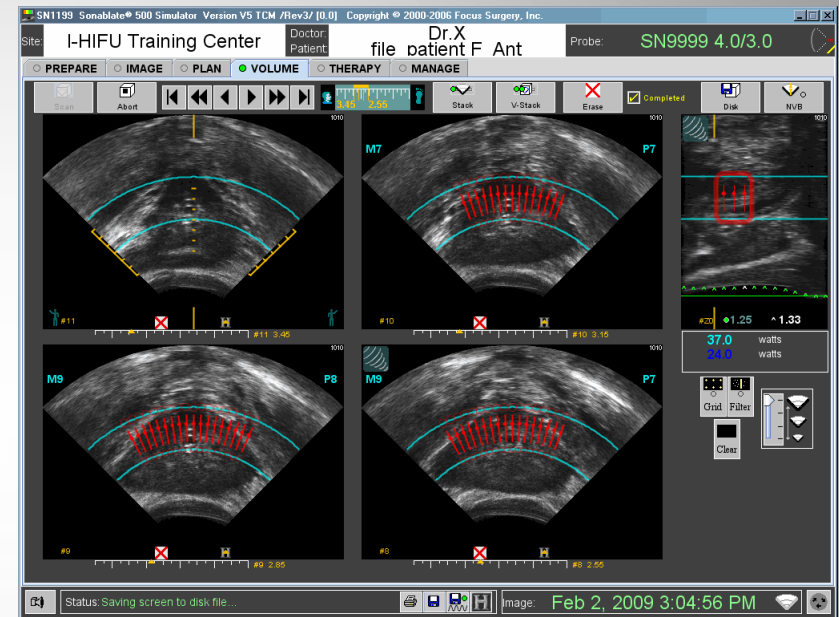
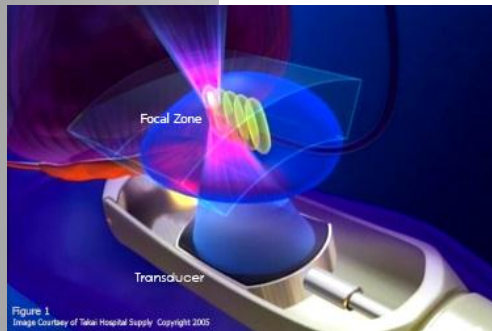
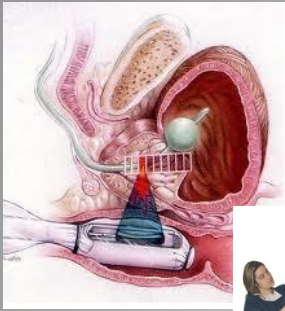


N=1160/5853 (19.8%)
 BRF: 75.7%
 Incontinence: 1.6%
 ED: 41.9%
 Urinary retention: 1.1%
 Fistula: 0.1%

Time from cryosurgery	Biochemical recurrence-free survival	
	Organ preservation prostate cryoablation, %	Whole-gland prostate cryoablation, %
6 months	84.2	83.3
12 months	80.7	78.7
24 months	75.7	75.5
36 months	75.7	75.1



High Intensity Focused Ultrasound HIFU



Κάθε κτύπημα αποτελείται από μία ώση υπερήχων διάρκειας 5sec

Η περιοχή του σημείου εστίασης των υπερήχων είναι πολύ μικρή (19-24 mm μήκος 1.7 mm διάμετρος)



Focal HIFU ablation

Focal therapy for localised unifocal and multifocal prostate cancer: a prospective development study

Hashim U Ahmed, Richard G Hindley, Louise Dickinson, Alex Freeman, Alex P Kirkham, Mahua Sahu, Rebecca Scott, Clare Allen, Jan Van der Meulen, Mark Emberton



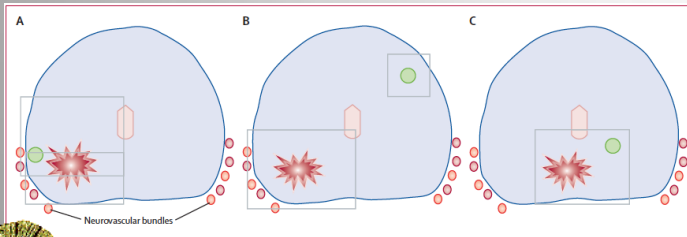
Χαρακτηριστικά ασθενών

- N=42 pt (45-80 years)
- **Low to high risk**
- (PSA ≤ 15 , GS $\leq 4+3$, $\leq cT2$)
- HIFU to “all” lesions

ORT 105min
HS 6h

Επιπλοκές

- **Αιματουρία** 39%
- Δυσουρία 22%
- Ουρολοίμωξη 17%
- Επίσχεση 2%



Καμμία διαφορά @12 μήνες με προεγχειρητικό

- **IIEF-15**
- **EPIC score**
- **IPSS**

(+)Bx 9/39 @ 6mt





Focal Therapy-PDT (TOOKAD)

Vascular Targeted Photodynamic Therapy for Localized Prostate Cancer

VOL. 10 NO. 4 2008 REVIEWS IN UROLOGY

Herbert Lepor, MD

Department of Urology, New York University School of Medicine, New York, NY



Table 1
Advantages of Photosensitizers WST-09 and WST-11

Advantage	Implication
Water soluble (WST-11)	Ease of preparation/administration Avoids complications due to liposomal formulations
Confined to circulation until clearance	Selective tissue destruction
Cleared rapidly from circulation and liver	Avoidance of sunlight exposure reduced to hours
Connective tissue more resistant to VIP effect	Optimize quality-of-life outcomes Allows other treatments if fails
Activated by light at 753-7 nm (WST-011) and 763 nm (WST-09)	Deep penetration into tissue Allows for large volume of destruction in a short treatment time

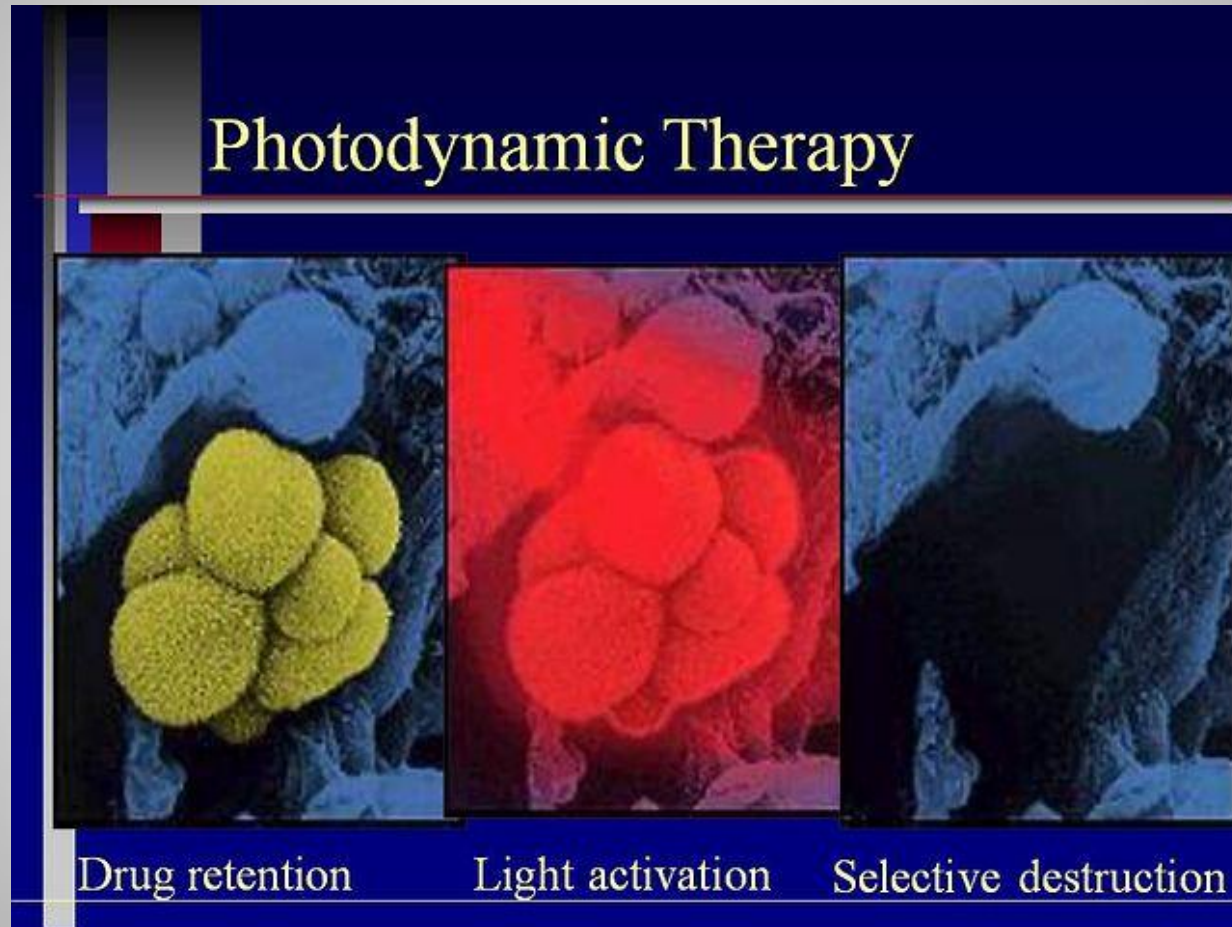
VIP, vascular targeted photodynamic therapy.

- iv photosensitizers
- Βελόνες εκπέμπουν φως ειδικού μήκους κύματος τοποθετούνται μέσα στην βλάβη

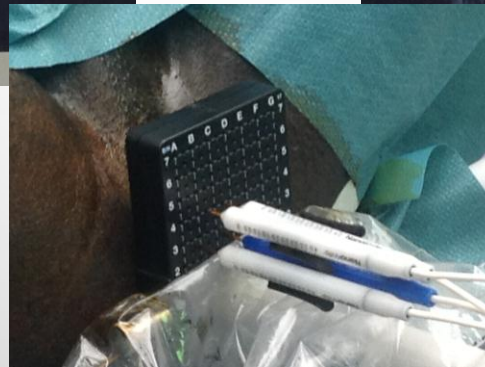
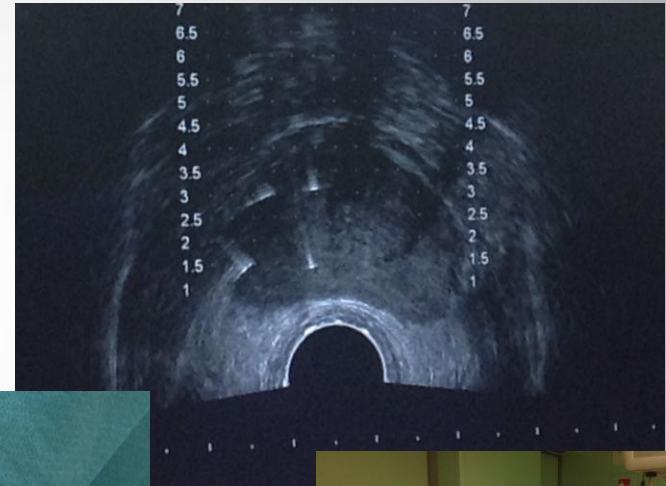
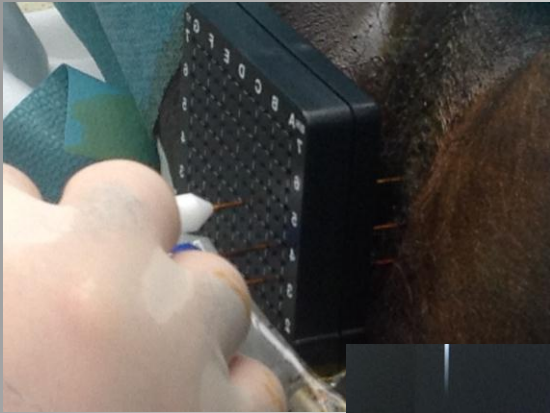


Dept. Urology, Athens Medical School

Focal Therapy-PDT (TOOKAD)



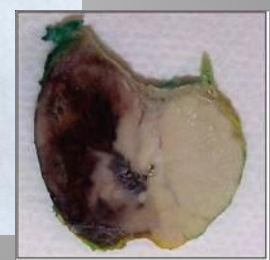
Focal Irreversible electroporation (IRE)



Focal Irreversible electroporation (IRE)



4 ασθενείς
ORT 105 min
HS 1 day
Επίσχεση 1 ασθενής



Dept. Urology, Athens Medical School

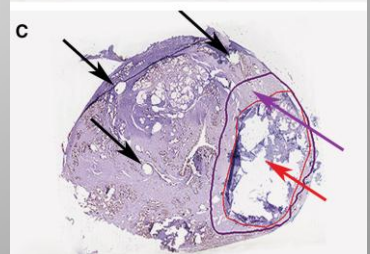
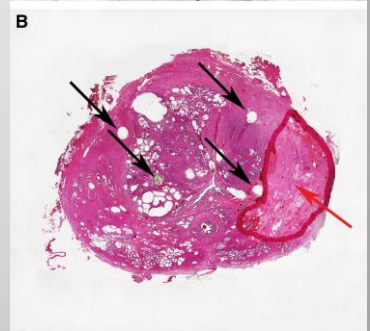
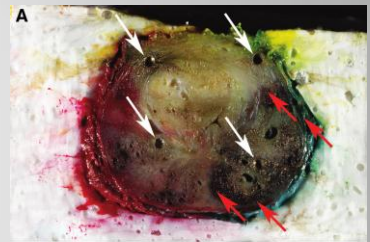
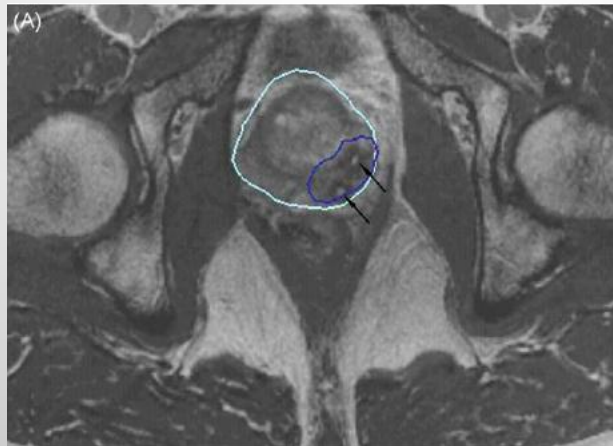
Focal LASER Ablation

Focal Laser Ablation for Prostate Cancer Followed by Radical Prostatectomy: Validation of Focal Therapy and Imaging Accuracy[☆]

Uri Lindner^{a,*}, Nathan Lawrentschuk^a, Robert A. Weersink^b, Sean R.H. Davidson^b, Orit Raz^a, Eugen Hlasny^c, Deanna L. Langer^c, Mark R. Gertner^b, Theodorus Van der Kwast^d, Masoom A. Haider^c, John Trachtenberg^a

EUROPEAN UROLOGY 57 (2010) 1111–1114

Μόνο 4 ασθενείς



Dept. Urology, Athens Medical School

Focal Brachytherapy

Dovepress

open access to scientific and medical research

Cancer Management and Research

[Dove Medical Press](#) | [This Article](#) | [Subscribe](#) | [Submit a Manuscript](#) | [Search](#) | [Follow](#)

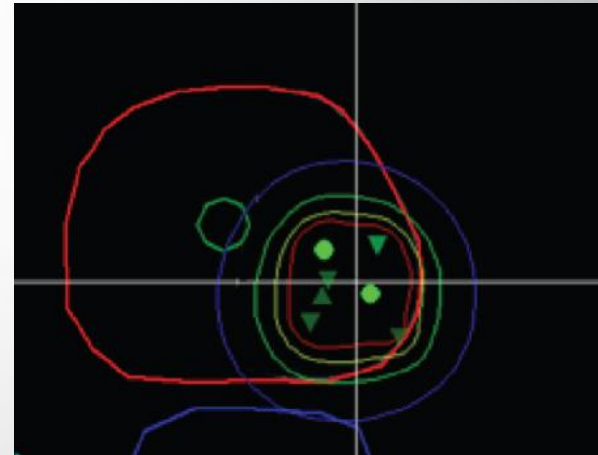
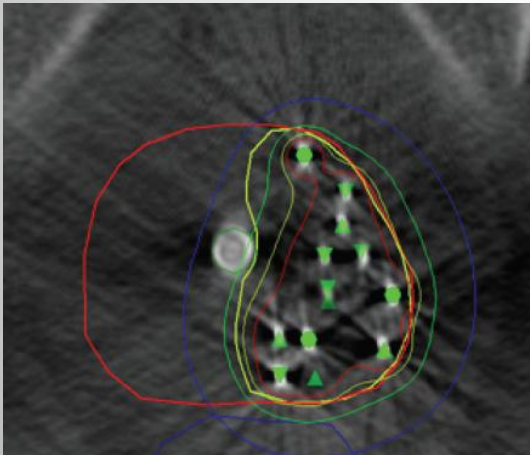
Focal low-dose rate brachytherapy for the treatment of prostate cancer

William Y Tong

Gilad Cohen

Yoshiya Yamada

Department of Radiation Oncology,
Memorial Sloan-Kettering Cancer
Center, New York, NY, USA



Dept. Urology, Athens Medical School

Focal boost radiotherapy

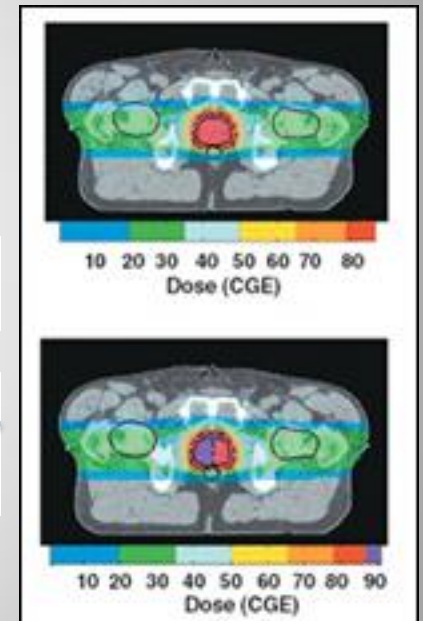


Stereotactic body radiotherapy with a focal boost to the MRI-visible tumor as monotherapy for low- and intermediate-risk prostate cancer: early results

Shafak Aluwini^{1*}, Peter van Rooij¹, Mischa Hoogeman¹, Wim Kirkels², Inger-Karine Kolkman-Deurloo¹ and Chris Bangma²

SBRT to a total dose of 38 Gy delivered in four daily fractions of 9.5 Gy. An integrated boost to 11 Gy per fraction was applied to the dominant lesion if visible on MRI. Toxicity and QoL was assessed prospectively using validated

Conclusions: SBRT to 38 Gy in 4 daily fractions for low- and intermediate-risk PC patients is feasible with low acute and late genitourinary and gastrointestinal toxicity. Longer follow-up preferably within randomized studies, is required to compare these results with standard fractionation schemes.



Conclusions

LE

HIFU has been shown to have a therapeutic effect in low-stage PCa, but prospective randomised comparison studies are not available.

3

Cryotherapy for PCa compares unfavourably with external-beam radiation for the preservation of sexual function.

2

PSA nadir values after ablative therapies may have prognostic value.

3

Focal therapy of any sort is investigational, and the follow-up and retreatment criteria are unclear.

3

HIFU treatment for localised PCa results in mild to moderate urine incontinence in less than 20% of men.

Recommendations

GR

In patients who are unfit for surgery or radiotherapy, CSAP can be an alternative treatment for PCa.

C

If HIFU is offered, the lack of long-term comparative outcome data (> 10 y) should be discussed with the patient.

C

Focal therapy of PCa is still in its infancy and cannot be recommended as a therapeutic alternative outside clinical trials.

A

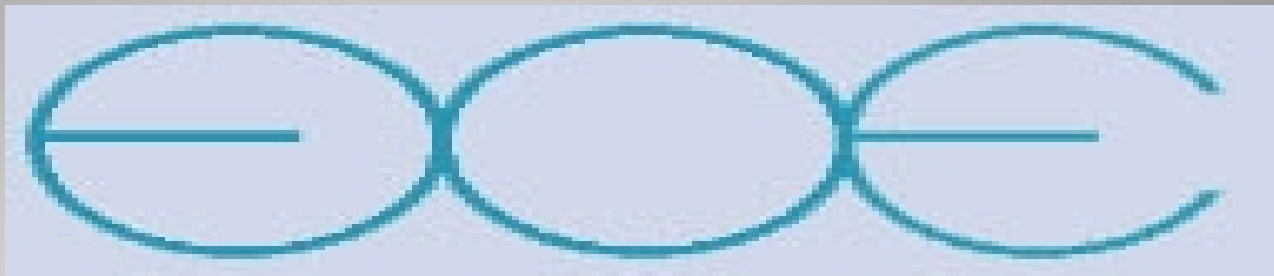


CONCLUSIONS

patients must be informed that:

1. the therapy is investigational;
2. the long-term consequences are unknown;
3. the optimal method for follow-up and the criteria for salvage therapy are not clear;
4. focal therapy is not without toxicity. grade I-III toxicity in 13% of cases





ΕΥΧΑΡΙΣΤΩ



Dept. Urology, Athens Medical School

