The Business of Prostate Cancer Care: A Clinician-Researcher's Perspective

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The Business of Prostate Cancer: Overview

- How much of an economic burden is prostate cancer?
- Is science driving clinical care or is it money?
- What can we do to protect the interests of prostate cancer survivors from the economic forces of the healthcare market?

Economic Burden of Prostate Cancer

- Prostate cancer the most expensive cancer for Medicare
- 50% of costs occur at end of life
- Direct lifetime costs of treatment with LHRH agonists/patient: $31,090

Brown 2002, Taplin 1995, Hilner 1995

Estimated Costs of Treating Prostate Cancer in the United States

Table 22. Expenditures for prostate cancer, by site of service (% of total)

Service Type	1994		1996		1998		2000	
Hospital Outpatient	$129,108,028	12.9%	$62,988,055	6.5%	$112,133,820	11.8%	$174,484,751	13.5%
Physician Office	$97,839,385	9.8%	$115,394,094	12.0%	$143,409,456	15.1%	$305,584,466	23.6%
Ambulatory Surgery	$76,645,818	7.6%	$77,341,725	8.0%	$141,018,192	14.9%	$179,080,421	13.8%
Emergency Room	$9,590,867	1.0%	$10,444,787	1.1%	$13,811,416	1.5%	$15,553,104	1.2%
Inpatient	$689,630,760	68.8%	$697,677,985	72.4%	$537,794,704	56.7%	$621,088,169	47.9%
TOTAL	$1,002,814,857		$963,846,646		$948,167,588		$1,295,800,912	

SOURCE: National Ambulatory and Medical Care Survey; National Hospital and Ambulatory Medical Care Survey; Healthcare Cost and Utilization Project; Medical Expenditure Panel Survey, 1994, 1996, 1998, 2000.

…and this doesn't even include the costs of screening and diagnostic testing!!!

Penson and Chan, UDA, 2006

Medicare Costs for Treating Prostate Cancer

Table 23. Expenditures for Medicare beneficiaries for treatment of prostate cancer, by site of service (% of total)

	Age 65 and over							
Service Type	1992		1995		1998		2001	
Hospital Outpatient	$199,884,080	24.1%	$185,917,800	28.4%	$215,481,000	30.0%	$250,870,360	28.2%
Physician Office	$74,274,100	9.0%	$107,163,440	16.4%	$158,207,040	22.0%	$227,776,200	25.6%
Ambulatory Surgery	$53,091,800	6.4%	$53,952,000	8.2%	$116,847,360	16.2%	$160,356,000	18.0%
Emergency Room	$2,455,000	0.3%	$2,665,680	0.4%	$1,869,840	0.3%	$2,218,220	0.2%
Inpatient	$500,158,960	60.3%	$305,255,600	46.6%	$226,821,840	31.5%	$247,542,400	27.9%
TOTAL	$829,863,740		$654,954,520		$719,227,080		$888,763,180	

	Under 65							
Service Type	1992		1995		1998		2001	
Hospital Outpatient	$2,522,800	15.6%	$5,149,360	27.7%	$6,003,440	26.6%	$8,998,500	23.3%
Physician Office	$922,560	5.7%	$1,910,120	10.3%	$3,118,560	13.8%	$4,447,900	11.5%
Ambulatory Surgery	$805,200	5.0%	$0	0.0%	$3,526,400	15.6%	$8,342,880	21.6%
Emergency Room	---	0.0%	---	0.0%	---	0.0%	---	0.0%
Inpatient	$11,936,800	73.7%	$11,558,820	62.1%	$9,952,820	44.0%	$16,872,060	43.6%
TOTAL	$16,187,360		$18,618,300		$22,601,220		$38,661,340	

SOURCE: Centers for Medicare and Medicaid Services, 1992, 1995, 1998, 2001.

Penson and Chan, UDA, 2006

The Economic Burden of Prostate Cancer

- Prostate Cancer is a BIG ticket item
- There’s a lot of money on the table
- This drives public focus, new drug research and ultimately clinical care

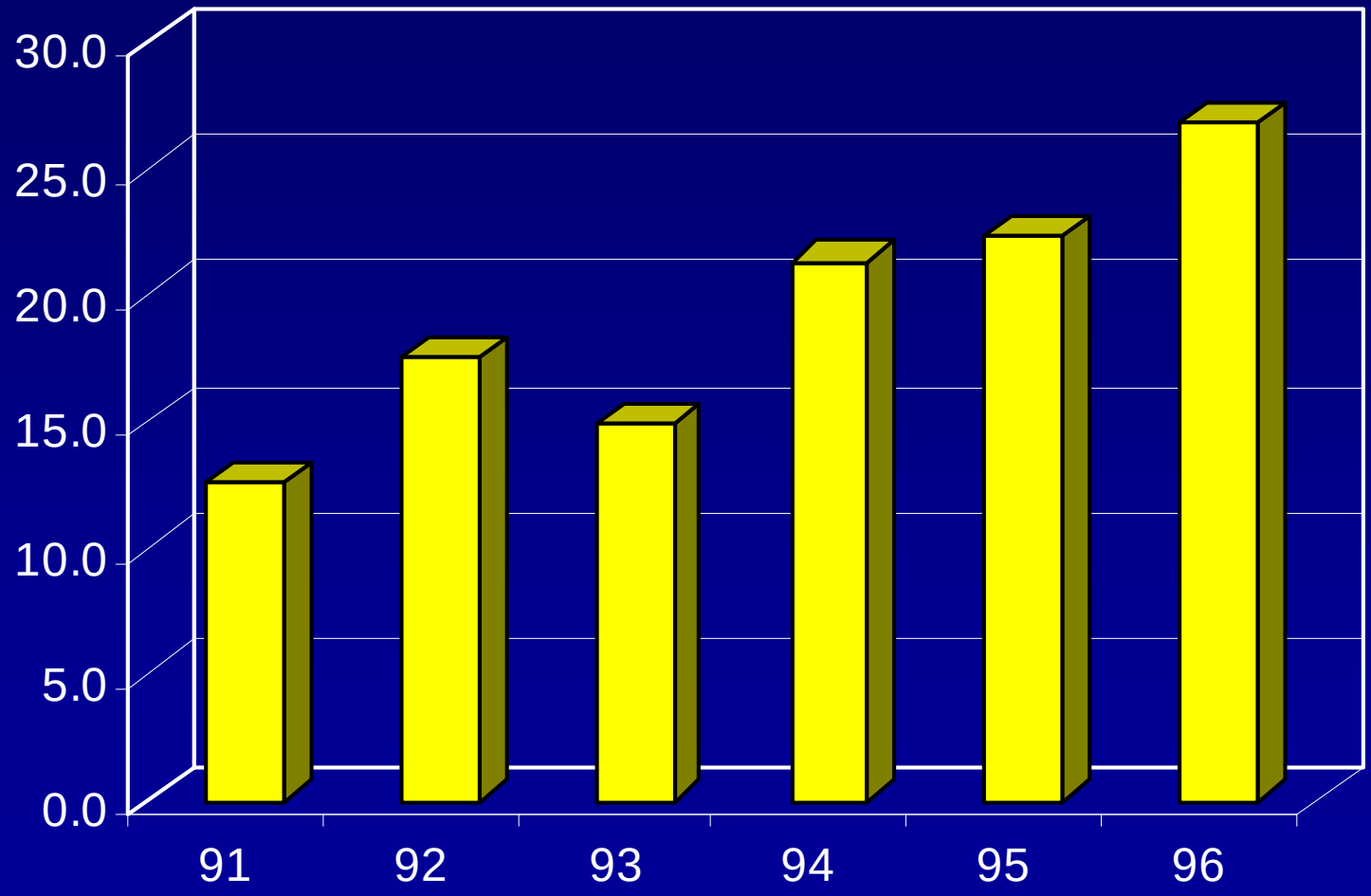
Is Science Driving Care In Prostate Cancer Or Is It The Money? (ok- maybe both)

- Increasing use of androgen deprivation therapy
- Use of expensive new technologies

Hormone Therapy: A tale of use and abuse

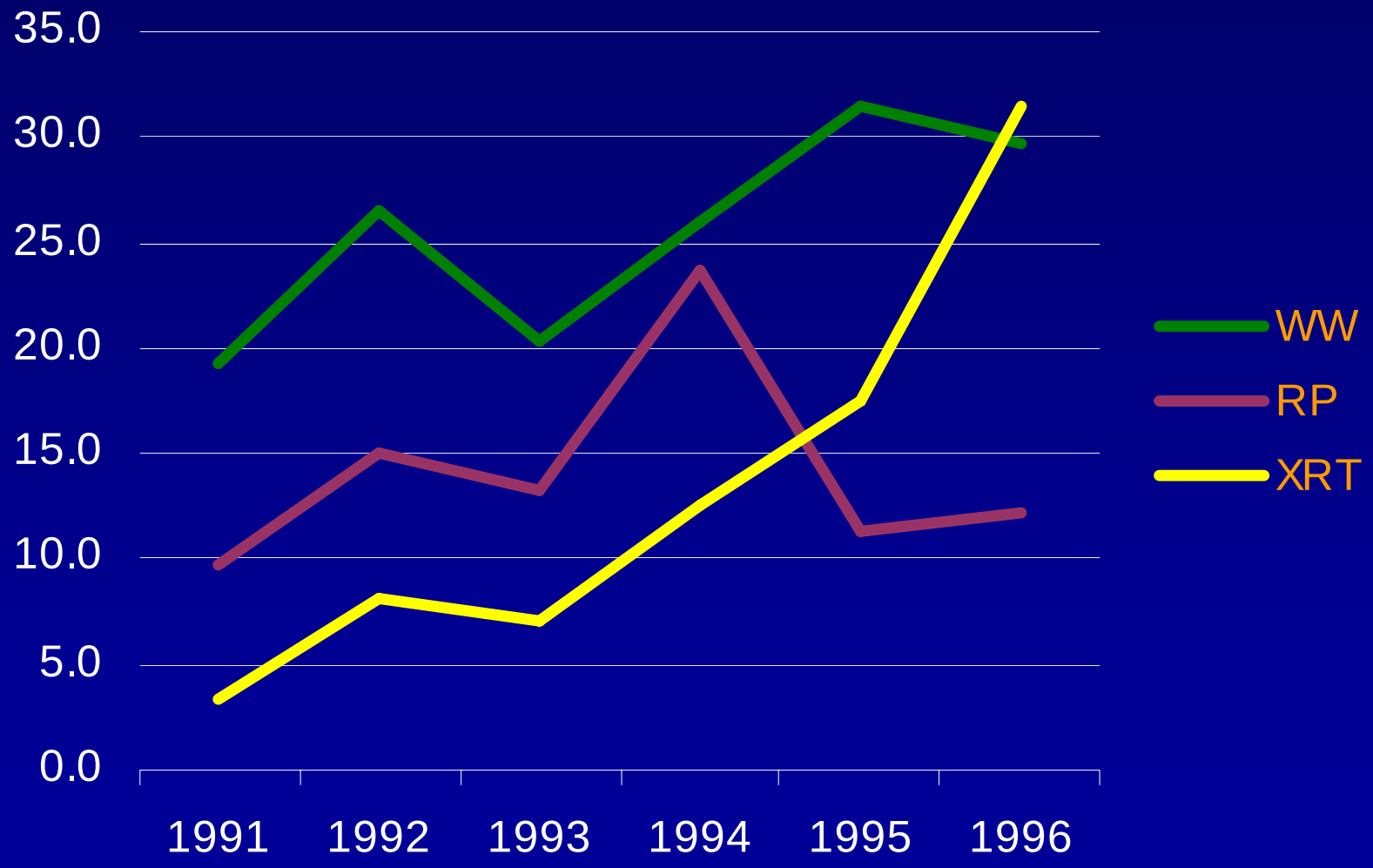
- Primary therapy for men with metastatic disease
  - Long-time debate as to whether should be used early (asymptomatic) vs late (symptomatic)
- Has been shown to extend survival when used as adjuvant therapy in men with high-risk disease receiving XRT
- Has never been shown to have a survival effect as adjuvant or neoadjuvant rx in surgery or as primary rx in localized disease
  - Probably not valuable as adjuvant in low-risk pts receiving XRT

Use of Adjuvant Hormones: Data from SEER-Medicare

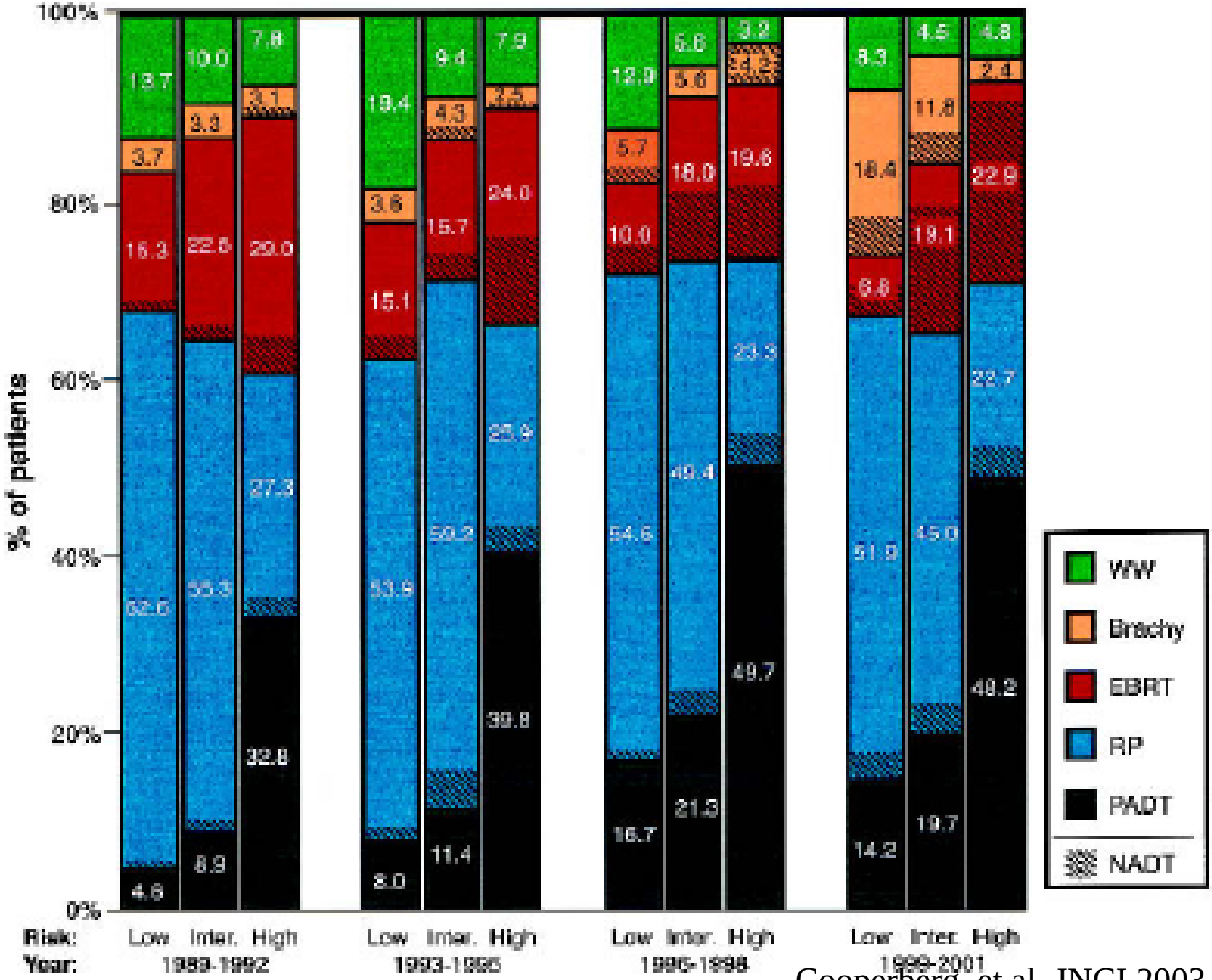


Zeliadt, et al, Urology, 2004

Adjuvant Hormone Use By Primary Treatment: Data from SEER-Medicare



Zeliadt, et al, Urology 2004



Cooperberg, et al, JNCI 2003

The Business of ADT

- Until Jan 1, 2006, Medicare paid 80% of physician-reported charge for drug (pt picked up other 20%) or AWP as reported by pharmaceutical company (whichever was lower).

- MDs would be drug in bulk and would be able to report charges which were lower than AWP but still had VERY high profit margins

The business of ADT

Providers used to make a LOT of money giving ADT in their practices

"We're a five man urology group with a sixth partner…Dr. Lupron"

-comment of an unnamed urologist

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TAP PHARMACEUTICAL PRODUCTS INC. AND SEVEN OTHERS CHARGED WITH HEALTH CARE CRIMES; COMPANY AGREES TO PAY $875 MILLION TO SETTLE CHARGES

all related to price-fixing of Lupron for prostate cancer

Medicare takes action!!!

- On January 1, 2006, CMS enacted AWP + 6% for injectable medications effectively eliminating the financial incentive to give ADT in prostate cancer

CMS preliminary analysis of 2006 ADT utilization reveals a MARKED drop in utilization

SIDE EFFECTS

Profit and Questions on Prostate Cancer Therapy

Maxine Hicks for The New York Times

Dr. Shawn Zimberg prepared a prostate cancer patient to receive multiple beam radiation therapy recently in Plainview, N.Y.

By STEPHANIE SAUL

The nearly 240,000 men in the United States who will learn they have prostate cancer this year have one more thing to worry about: Are their doctors making treatment decisions on the basis of money as much as medicine?

Published in the New York Times, December 1, 2006

What's In It For The Doctors?

- IMRT is an effective treatment for localized CaP
- Allows higher dosing with minimal side-effects
- Patients derive a benefit from treatment

Treatment	Approximate Medicare Reimbursement to Provider
Active Surveillance	???
Radical Prostatectomy	$1500-2000
Brachytherapy	$10,000-15,000 (includes radiation planning, treatment, etc. and facility fee)
IMRT	$40,000-50,000 (if doctor owns the IMRT vault and receives facility fee)

New York Times, December 1, 2006

From the NY Times Article…

- The pitch has circulated among urologists across the country: “Each month that a urology group delays its decision to join the Urorad national prostate I.M.R.T. consortium, a Urorad member realized an additional $500,000 of net revenue.”

- One analysis that Urorad performed for a urology group calculated the “break even” point at four patients a month. If the doctors could achieve the level of 21 I.M.R.T. patients a month, according to the analysis, the annual revenue per doctor would amount to $425,000.

New York Times, December 1, 2006

Government will likely find a way to remove this perverse financial incentive…
likely through Stark laws

But, in the mean time, if a group of providers invest $3 million for an IMRT *AND USE IT*, they'll make money fairly quickly

New York Times, December 1, 2006

Other Expensive Technologies/Tests Where Dollars Are Driving Use

- CT Scans
- DEXA Scans
- PSA testing
- Pathologic analysis of biopsies

If doctors own radiology facilities and/or laboratory and collect facility fee, there is a financial incentive to perform EXTRA testing

“These days, we make 30% of our income on clinical care and 70% on ancillary services, such as pod labs, CT and DEXA scans…”

- A respected urologist who manages a large group practice in Orange County, CA

Marketing and Prostate Cancer

(Who needs evidence when you have a website?)

www.davincisurgery.com
(bolding added for emphasis)

da Vinci® Prostatectomy is more accurately a robot-assisted, minimally invasive surgery that is quickly becoming **the preferred treatment** for removal of the prostate following early diagnosis of prostate cancer. **In fact, studies suggest that *da Vinci* Prostatectomy may be the most effective, least invasive prostate surgery performed today.**

da Vinci Prostatectomy is performed with the assistance of the *da Vinci* Surgical System – the latest evolution in robotics technology. The *da Vinci* Surgical System enables surgeons to operate with unmatched precision and control using only a few small incisions. **Recent studies suggest that *da Vinci* Prostatectomy may offer improved cancer control and a faster return to potency and continence.**

da Vinci Prostatectomy also offers these potential benefits:

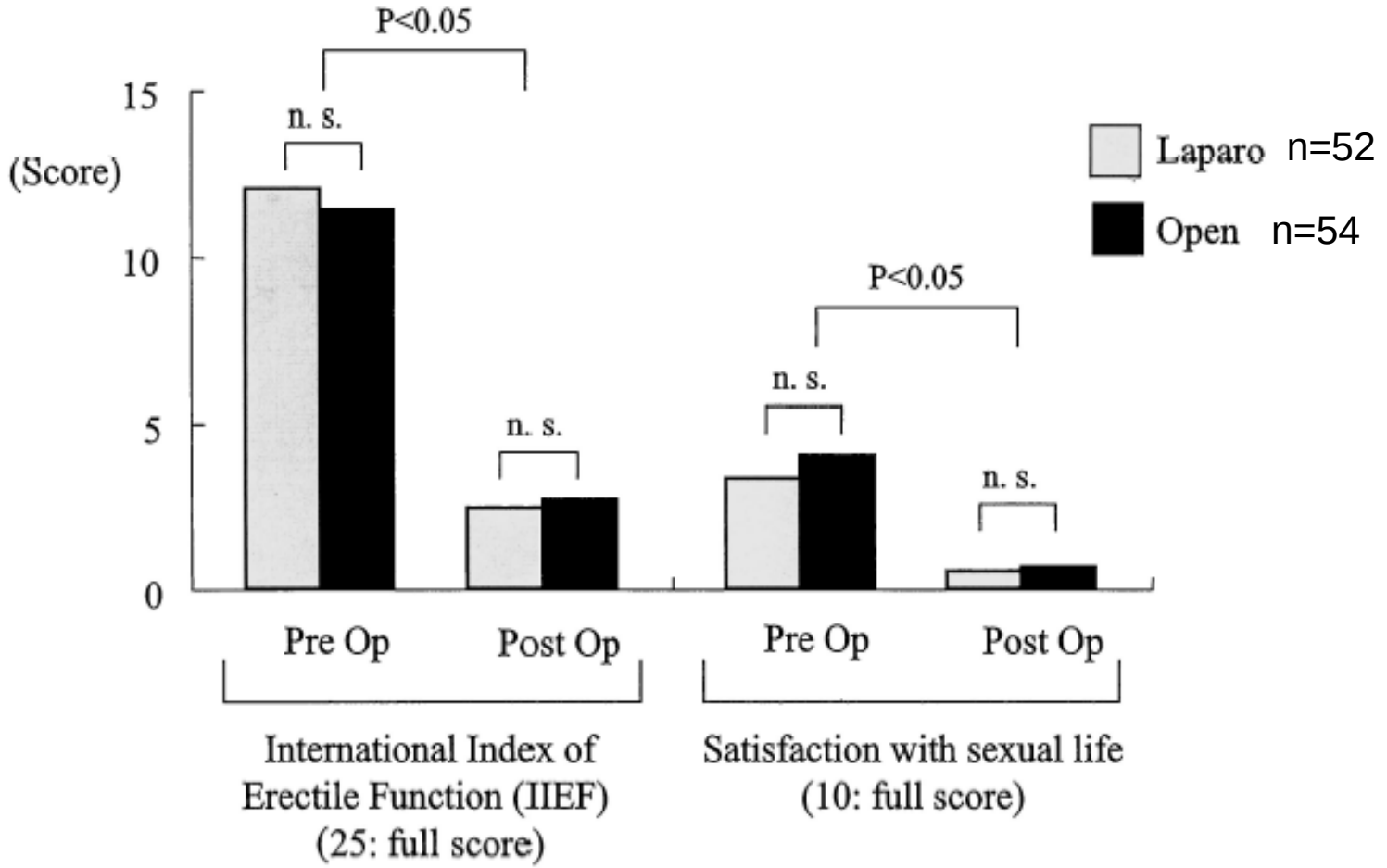
- Significantly less pain
- Less blood loss
- Fewer complications
- Less scarring
- A shorter hospital stay
- And a faster return to normal daily activities

From a Private Practice Urologist from Florida's website
(underlines added for emphasis)

"Using the da Vinci robot system, I am able to perform a minimally-invasive radical prostatectomy in less than three hours and my patients experience minimal or no blood loss. As a result patients are able to leave the hospital in 12 hours and only require a catheter for five days. In addition, patients experience a quicker return to normal activity, earlier return to sexual activity and excellent urinary control, which is why we are excited to provide this advanced option to patients. Browse our website to learn more about the da Vinci robot prostatectomy procedure and contact us for even more information."

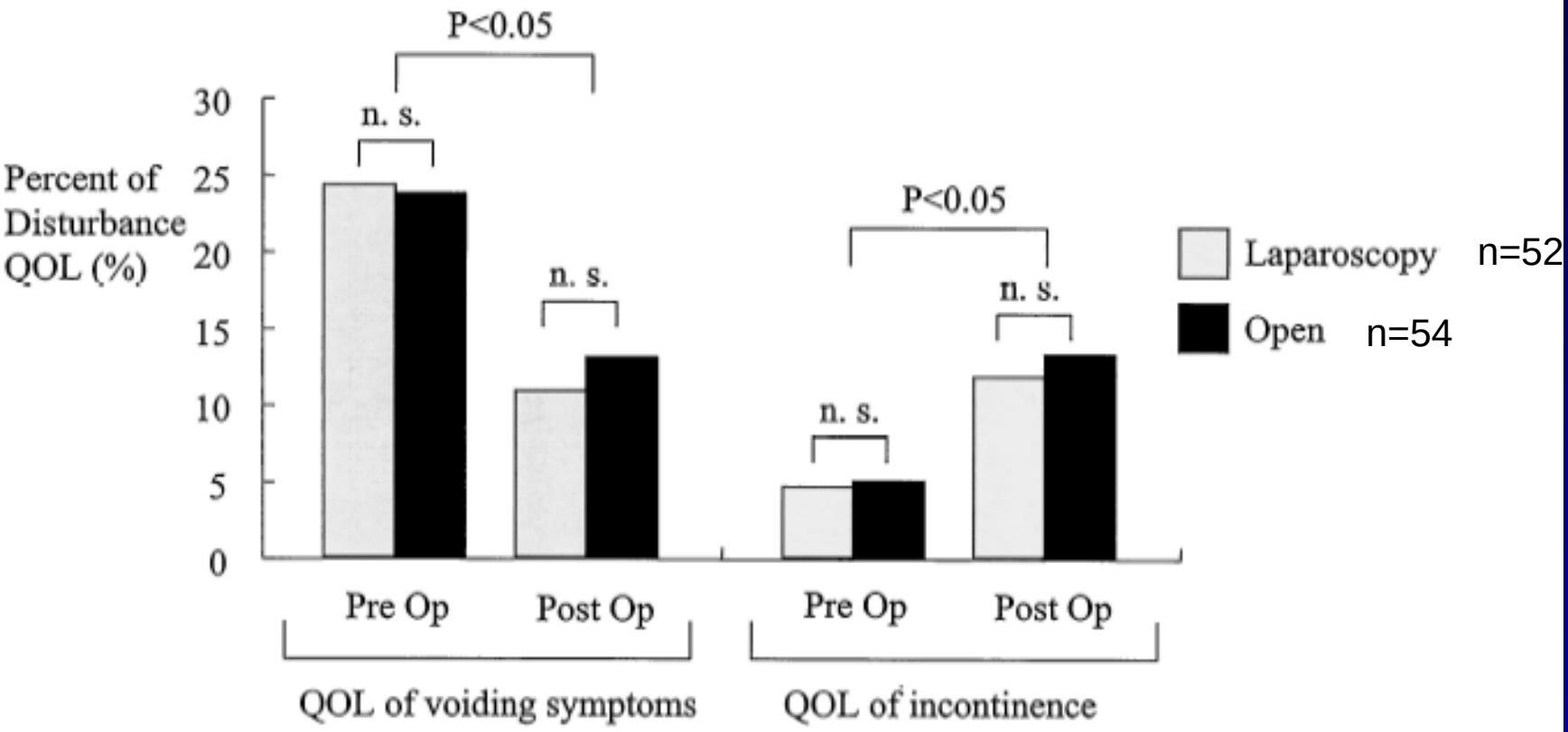
WHAT IS THE EVIDENCE?

Lap vs. Open RP: Sexual QOL



Hara, et al, *J Urol,* 2003

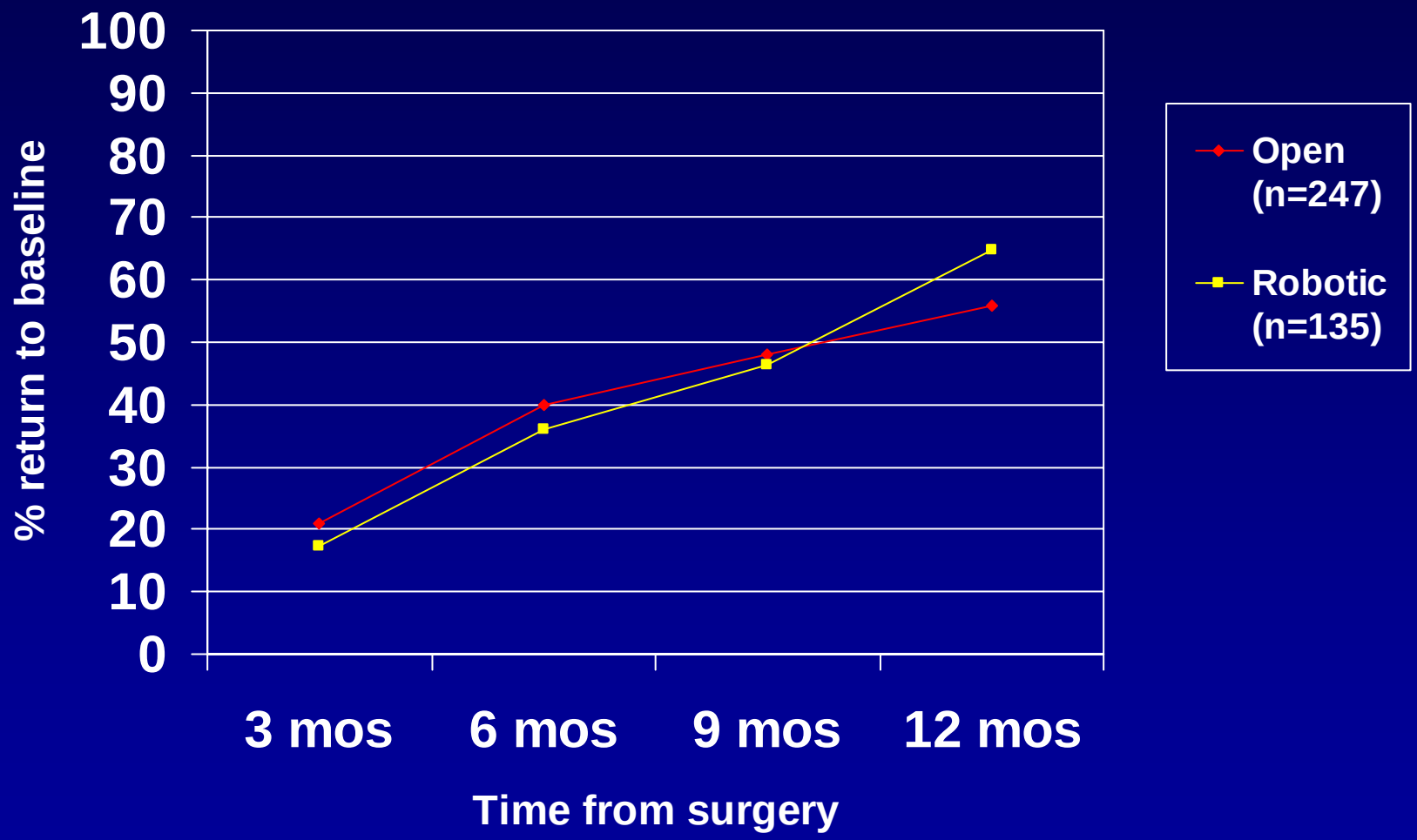
Lap vs. Open RP: Urinary QOL



Hara, et al, *J Urol,* 2003

Time to return to baseline for urinary continence

(assessed using urinary function score of UCLA PCI or incontinence score of EPIC)

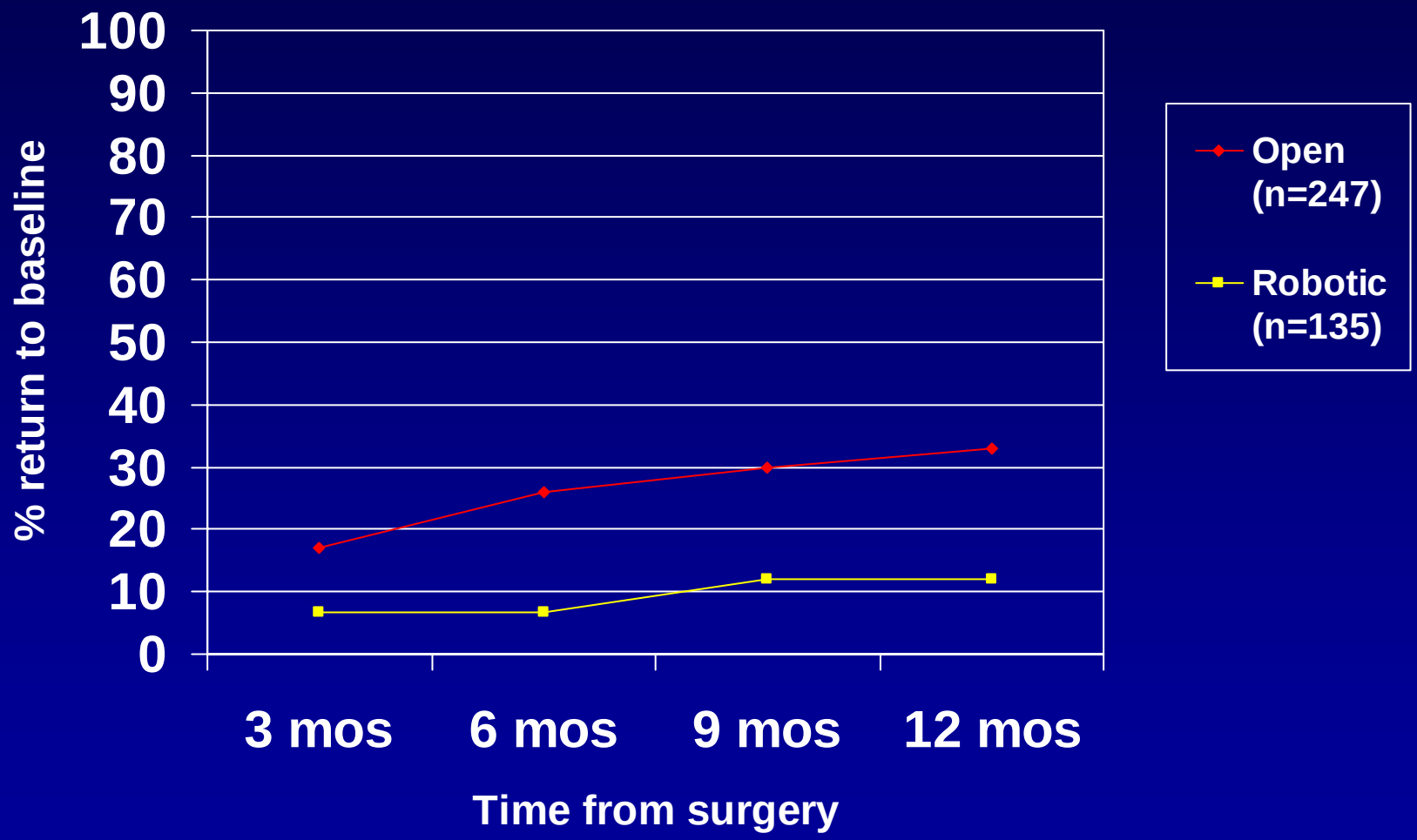


Litwin, et al, J Urol, 2001

Tseng, et al, Urology, 2006

Time to return to baseline for sexual function

(assessed using sexual function score of UCLA PCI or EPIC)



Litwin, et al, J Urol, 2001

Tseng, et al, Urology, 2006

Laparoscopic Robotic Assisted Prostatectomy

- Patient-driven technology
  - Well-marketed by device company and centers which have the machine
- "Latest and Greatest" phenomenon

For better or worse, the robot is here to stay

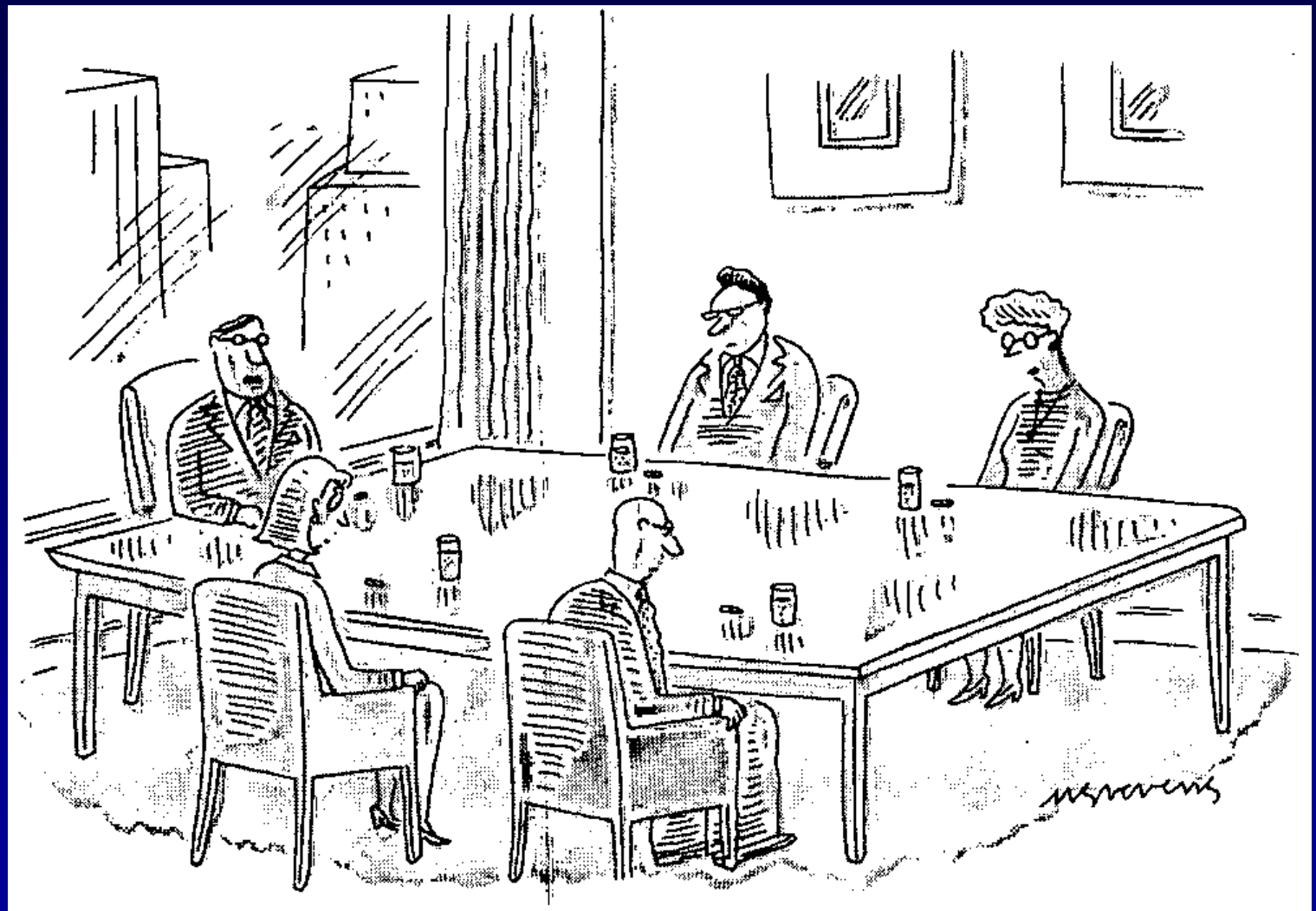
How can we protect the interests of the patient from the economic free market forces of medicine?

The “Nirvana” Solution

A single payor healthcare system that uses level I evidence to determine which treatments/therapies are covered and has rules, regulations and mechanisms in place to prevent perverse financial incentives from influencing healthcare decisions.

A More Realistic Approach..
It wont fix the problem, but it may lessen it

- Support randomized clinical trial research to identify best practices and eliminate clinical uncertainty
- Reduce direct-to-consumer advertising and place stricter regulations on the pharma and device industry
- Create better firewalls between healthcare providers and ancillary care services
  - …and find ways to replace the lost income and enact tort reform.
- Make patients carry a great financial responsibility for their healthcare…particularly if they elect treatments of uncertain value



"Before each of you, you will find a bitter pill and a glass of water."