# PD40-01: Patient Perspectives on Communication of Life Expectancy in Prostate Cancer Treatment Consultations

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**Patent Pending** 

Remote Ambulation Monitoring System



# Life Expectancy: A Critical Factor in CaP Decision Making

 Life expectancy predicts:

 Sufficient longevity to benefit from treatment





Daskivich et al, Ann Int Med 2013

# Life Expectancy: A Critical Factor in CaP Decision Making

- Life expectancy predicts:
   Sufficient longevity to benefit
  - from treatment
  - Quality of life after definitive treatment



Pre-treat 6 months 12 months 18 months 24 months Time from Treatment



- Life expectancy predicts:
  - Sufficient longevity to benefit from treatment
  - Quality of life after definitive treatment
  - Effectiveness of definitive treatment

Charlson Group	Treatment Type	Cumulative Incidence of PC Mortality at 15 years after Diagnosis (%)	15-Year Absolute Risk Reduction: Aggressive vs. Nonaggressive Treatment (%)
Charlson 0	Aggressive	6.5	6.1
	Nonaggressive	12.6	
Charlson 1	Aggressive	5	4.3
	Nonaggressive	9.3	
Charlson 2	Aggressive	4.9	3.9
	Nonaggressive	8.8	
Charlson 3+	Aggressive	5.6	0.9
	Nonaggressive	6.5	



### Life Expectancy and Treatment Guidelines







## Life Expectancy is Easy to Calculate

#### Age Score

< 66	0
66-71	1
72-77	2
78-83	3
84-89	4
>90	5

#### **Comorbidity Score**

Moderate-Severe Liver Disease	6
Metastatic Solid Tumor	6
Lymphoma	6
Leukemia	6
Moderate-Severe COPD	3
Moderate-Severe Renal Disease	3
Dementia	3
Hemiplegia	3
Congestive Heart Failure	3
Mild Liver Disease	2
Peripheral Vascular Disease	2
Other Neurologic Disease	2
Mild Renal Disease	2
Angina	2
Mild COPD	2
Arrhythmia	2
Valve Disease	2
Connective Tissue Disease	2
GI Bleed	2
Inflammatory Bowel Disease	2
Peptic Ulcer Disease	2
Cerebrovascular Disease	1
Any tumor	1
Diabetes with End Organ Damage	1

#### Non-Cancer Mortality by Prostate Cancer Comorbidity Index (PCCI) Score



181,009 men with CaP from national VA database



Daskivich et al, J Urol 2011, 2015, and 2018

### Overtreatment by Life Expectancy in Prostate Cancer

- 54% of men diagnosed with low- and intermediategrade prostate cancers in SEER-Medicare have observed survival of less than ten years
- Over half of these men received surgery or radiation
- Same phenomenon has been demonstrated in other population-based cohorts and VA



- Randomized trial of LE counseling on decisional conflict in men with clinically localized prostate cancer
  - o 105 men PCCI-derived LE estimate vs. 123 standard of care
     o Significant decisional conflict: 10% (LE group) vs. 18% (SOC), p=0.08
  - Average decisional conflict: -2.7 (95% CI -6.8–1.3) favoring LE group



## Is communication the key to reducing overtreatment?

- Goal: To develop patient-centered strategies to optimize communication of LE through interviews of men considering treatment
- Sample: 20 men with newly diagnosed low- and intermediate-risk prostate cancer at Cedars-Sinai, across 10 providers (urology, rad oncology, medical oncology)
- •Semi-structured interviews:
  - Experience of LE in Consult
  - Barriers to Discussing LE
  - Confidence in LE
  - Communication Preferences





# Experience of LE communication during consultation

- Recalled discussing LE: 75% (15/20)
   Would have preferred to hear LE: 80% (4/5)
- Recalled mode of communication of LE:
   Not mentioned: 25% (5/20)
   Generalization: 25% (5/20)
  - $_{\odot}$  Number of years: 15% (3/20)
  - Percent survival to a timepoint: 35% (7/20)





# Barriers to Discussing Life Expectancy

- Barriers to Discussing LE:
  None: 30% (6/20)
  Imprecise Measurement: 15% (3/20)
  Anxiety: 60% (12/20)
  - Ways to reduce anxiety:
    - $_{\circ}$  Range of years ("10-15 years")
    - $_{\circ}$  Acknowledge imprecision
    - Generalizations to large groups("For people like you...")
    - Ask how much patient wants to know





# Confidence in LE Estimates

#### Confidence in LE estimates

- Low: 32% (6/19)
- Moderate: 47% (9/19)
- High: 4/19 (21%)
- Ways to improve confidence:
  - Explain calculation: 45% (9/20)
  - Include health status: 25% (5/20)
  - Experience of doctor: 20% (4/20)
  - Include family history: 20% (4/20)
  - Nothing: 20% (4/20)
  - Second opinion: 10% (2/20)





- In a hypothetical scenario where treatment benefit is delayed by 10 years but LE due to other causes is predicted to be ~7 years.
  Subjects preferred LE expressed as:
  - $_{\odot}$  Number of years: 63% (12/19)
  - o Probability of living to 10 years: 21% (4/19)
  - o Generalization: 3/19 (16%)
- Endorsed that LE should always be communicated in treatment consultations: 90% (18/20)





## Take Home Points: What Patients Want to Hear

- Patients want to hear information on LE
- Patients prefer specific, years-based mode of communication
- Anxiety is the main barrier from patient perspective
- Confidence in LE estimates is low/moderate 80% of the time but can be improved by explaining calculation and including health status





Life expectancy for men like you is between 5-7 years. This estimate is based on your age and medical conditions and is derived from statistical models of a sample of 180,000 men with prostate cancer. Although statistical models are never perfect, very few patients with your age and health status live longer than 10 years.

What do you want to do?



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What do you want to do?



### Conclusions

- It is important to patient to discuss life expectancy during treatment consultations
- Patient-centered strategy for engaging patients on discussions of of life expectancy should recognize preferences for:
  - Mode of communication of LE (number of years)
  - Ways to minimize anxiety (range of years, depersonalize)
  - Ways to improve confidence (explain calculation, include health status)
- Pairing precise LE estimates with patient-centered communication strategies may help to improve decision making



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