

Assessing Quality of Life

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Cancer Institute

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Assessing Quality of Life Outline

- What is Quality of Life (QoL)?
- Why measure QoL?
- How to assess QoL?
- Examples from trials of radiotherapy for prostate cancer
- Take home messages

What is Quality of Life?

- An individual's perceptions of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns
- It is a broad ranging concept affected in a complex way by the persons' physical health, psychological state, level of independence, social relationships and their relationship to salient features of their environment

Health-Related Quality of Life (HRQOL)

- Symptoms of disease and treatment
- Physical health
- Psychological state
- Social relationships
- Spiritual functioning
- Environment
- Financial issues
- Independence level
- ...

**Symposium Genitourinary Cancer
and
Quality of Life**

Friday 28 June 2019

Panorama Room - 15th floor, Inntel Hotels Rotterdam Centre
Rotterdam, The Netherlands



WELCOME!

CHAIR
Prof. Luca Incrocci, MD, PhD
Erasmus MC
Rotterdam, The Netherlands

CME
CME will be available for Dutch attendees

NVRO (Nederlandse Vereniging voor Radiotherapie en Oncologie):
6 CME Credits

NIV (Nederlandse Internisten Vereniging):
6 CME Credits

NVU (Nederlandse Vereniging voor Urologie):
6 CME Credits

Why Measure Quality of Life?

1. Collection of QoL data in **clinical practice** allows unique insight into the experiences of patients:

It provides unique information not captured by standard clinical or laboratory information

It facilitates clinical decision-making

It helps monitoring disease progression

It improves accuracy of prognosis

It helps improving physician-patient communication

2. Collection of data **in clinical research**:

It helps stratifying patients for cancer clinical trials

It helps better understanding trial results

It identifies sensitive scales for a specific population



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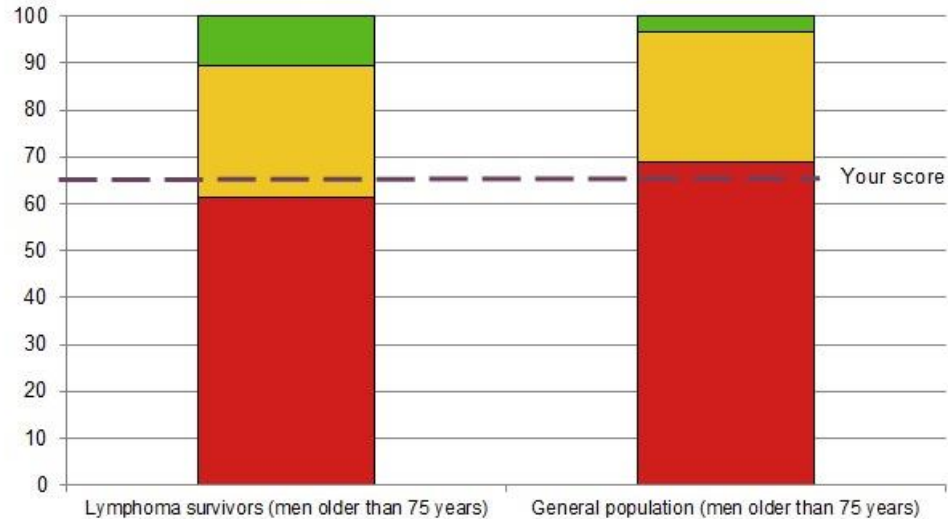
It helps better understanding trial results




It identifies sensitive scales for a specific population



Feedback to Patient (and Clinician)

Your score for cognitive functioning: 65



-  The green part represents all scores that are higher than the average.
-  The yellow part represents all average scores.
-  The red part represents all scores that are lower than the average.

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Why Measure Quality of Life? (cont'd)

- Clinicians have the propensity to underestimate the incidence, severity and distress of symptoms experienced by cancer patients
- In addition, patients report symptom onsets earlier than clinicians do
- QoL data provide independent prognostic information for survival
- Major efforts are needed to implement such knowledge into routine care applications

Systematic review n=36 studies

Xiao C et al, *Cancer Nurs* 2013;36:E1-16

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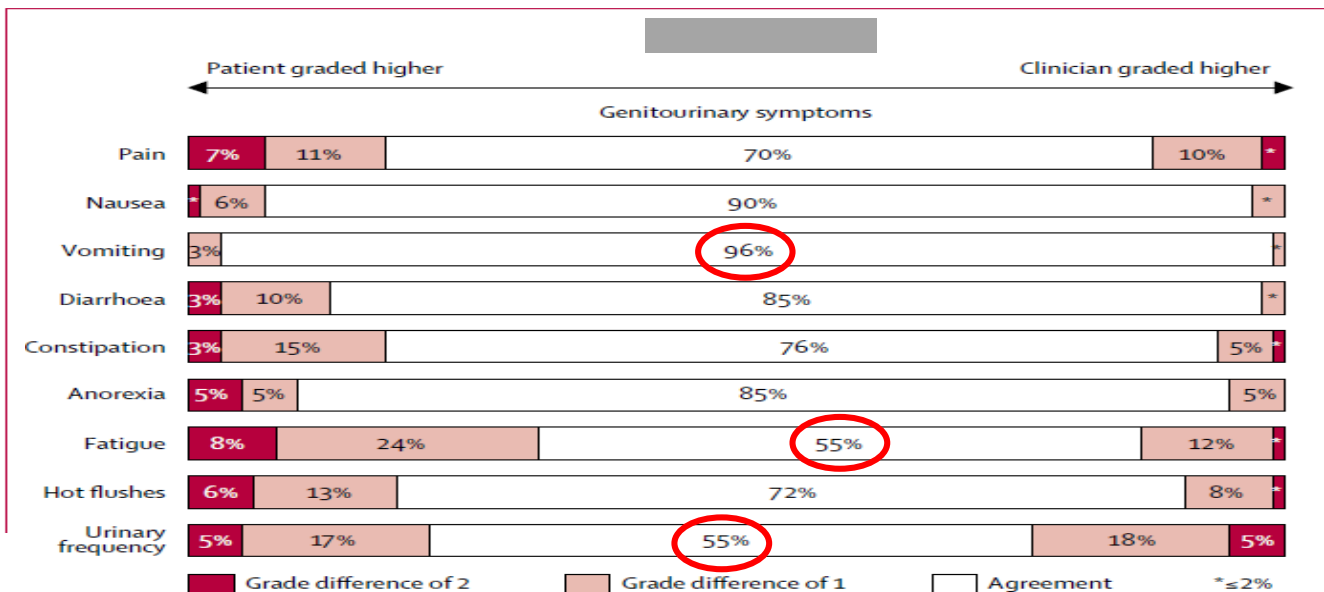


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Reporting Symptoms: Patient vs. Clinician

n=200, genito-urinary cancers (94% prostate cancer)

Observable symptoms (vomiting) vs. subjective symptoms (fatigue)



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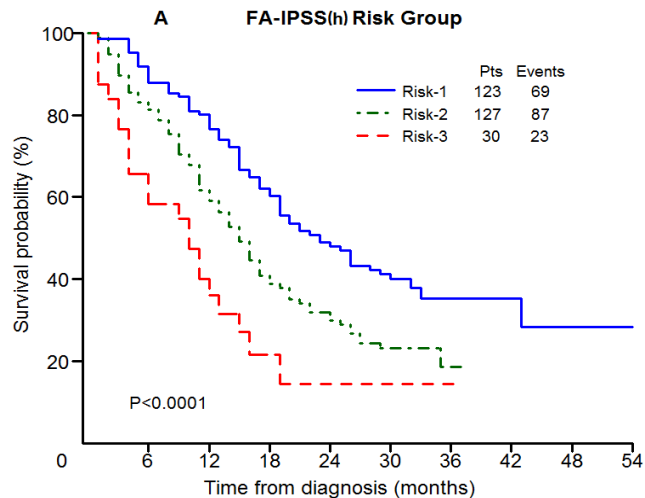
Is Quality of Life Predictive of Overall Survival?

n=137 studies with QoL data published over the last 5 yrs

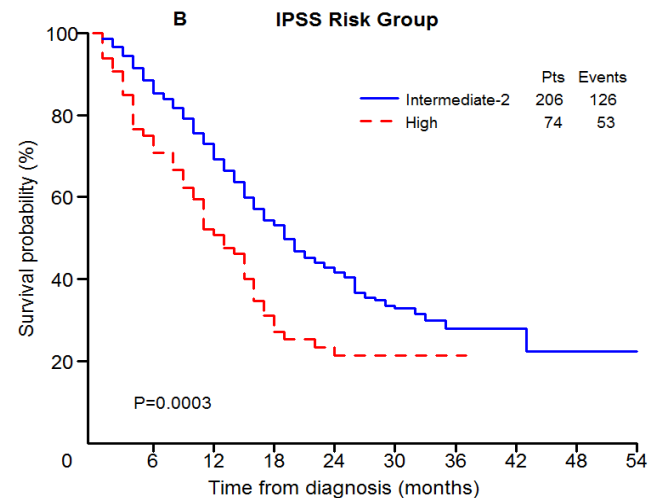
Yes =118 (86%)

No=19 (14%)

IPSS: International Prognostic Scoring System



	No. of patients at risk								
	0-6	6-12	12-18	18-24	24-30	30-36	36-42	42-48	48-54
Risk-1	112	91	66	51	38	10	6	1	
Risk-2	99	70	43	31	15	3	0	0	
Risk-3	18	10	3	2	2	1	0	0	



	No. of patients at risk								
	0-6	6-12	12-18	18-24	24-30	30-36	36-42	42-48	48-54
Intermediate-2	176	136	96	72	46	12	6	1	
High	53	35	16	12	9	2	0	0	

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Patient Reported Outcome (Measures)

PRO(Ms): Umbrella term for symptoms, functioning, quality of life (QoL), well-being:

- It is provided by the patient without interpretation or adjustment from clinician (or anybody else)
- Proxy ratings are only acceptable when individuals are unable to make their own judgements

FDA and EMA recognize PROMs as:

- Indicator for quality of care
- Guidelines for evaluation in clinical trials and effectiveness studies



How to Evaluate Quality of Life?

- Several measures:
 - **EORTC QLQ-C30**
 - FACT-G (Functional Assessment of Cancer Therapy)
 - EPIC-26 (Expanded Prostate Cancer Index Composite)
 - PROMIS (Patient-Reported Outcomes Measurement Information System)
 - (PRO)-CTCAE (Common Terminology Criteria for Adverse Events)
 - ...
- CTCAE is the most widely used method for quantifying harm from treatment experienced by patients
- QoL is not (only) toxicity
- Think of patient's burden
- Make a careful selection
- Use questionnaires that are meaningful also to patients
- Minimize overlap
- If possible, use computerized adaptive testing (CAT)

EORTC QLQ-C30

Five functional scales:

- Physical
- Role
- Cognitive
- Emotional
- Social

Three symptom scales:

- Fatigue
- Pain
- Nausea/vomiting

Global health and quality of life scale

Single items (dyspnoea, insomnia, appetite loss, constipation, diarrhoea, financial impact)

Several specific modules

EORTC QLQ-C30 (version 3)

We are interested in some things about you and your health. Please answer all of the questions yourself by circling the number that best applies to you. There are no "right" or "wrong" answers. The information that you provide will remain strictly confidential.

Please fill in your initials:
Your initials (Day, Month, Year):
Today's date (Day, Month, Year):

	Not at All	A Little	Quite a Bit	Very Much
1. Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase?	1	2	3	4
2. Do you have any trouble taking a long walk?	1	2	3	4
3. Do you have any trouble taking a short walk outside of the house?	1	2	3	4
4. Do you need to stop at bed or a chair during the day?	1	2	3	4
5. Do you need help with eating, dressing, washing yourself or using the toilet?	1	2	3	4

During the past week:

	Not at All	A Little	Quite a Bit	Very Much
6. Were you limited in doing either your work or your daily activities or leisure time activities?	1	2	3	4
7. Were you limited in pursuing your hobbies or other leisure time activities?	1	2	3	4
8. Were you short of breath?	1	2	3	4
9. Have you had pain?	1	2	3	4
10. Did you need to rest?	1	2	3	4
11. Have you had trouble sleeping?	1	2	3	4
12. Have you felt weak?	1	2	3	4
13. Have you lacked appetite?	1	2	3	4
14. Have you felt unwell?	1	2	3	4
15. Have you vomited?	1	2	3	4
16. Have you been constipated?	1	2	3	4

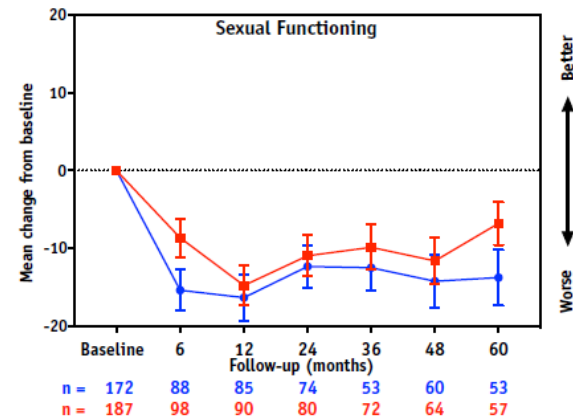
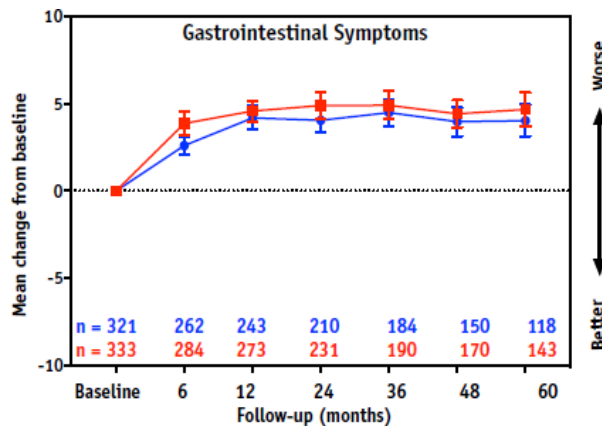
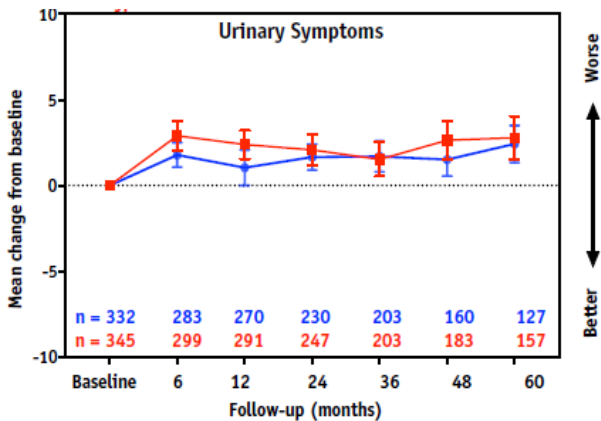
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HYPRO Trial: Quality of Life

EORTC QLQ-PR 25: Prostate (not radiotherapy) specific; 6 domains; scale score 0-100

Bowel	: blood loss, bloated feeling, incontinency
Urinary	: frequency, nocturia, urgency, dysuria, incontinence
Sexual function	: erectile function, ejaculation, pleasure
Sexual activity	: activity, interest
Hormone	: flushes, swollen nipples, weight gain, masculinity
Incontinence	: problems related to use of pads

HYPRO Trial: EORTC QLQ-PR 25



—●— Conventional Fractionation

—■— Hypofractionation

Association Between Moderate-Severe QoL Reduction and RTOG-EORTC Grade ≥ 2 Toxicity

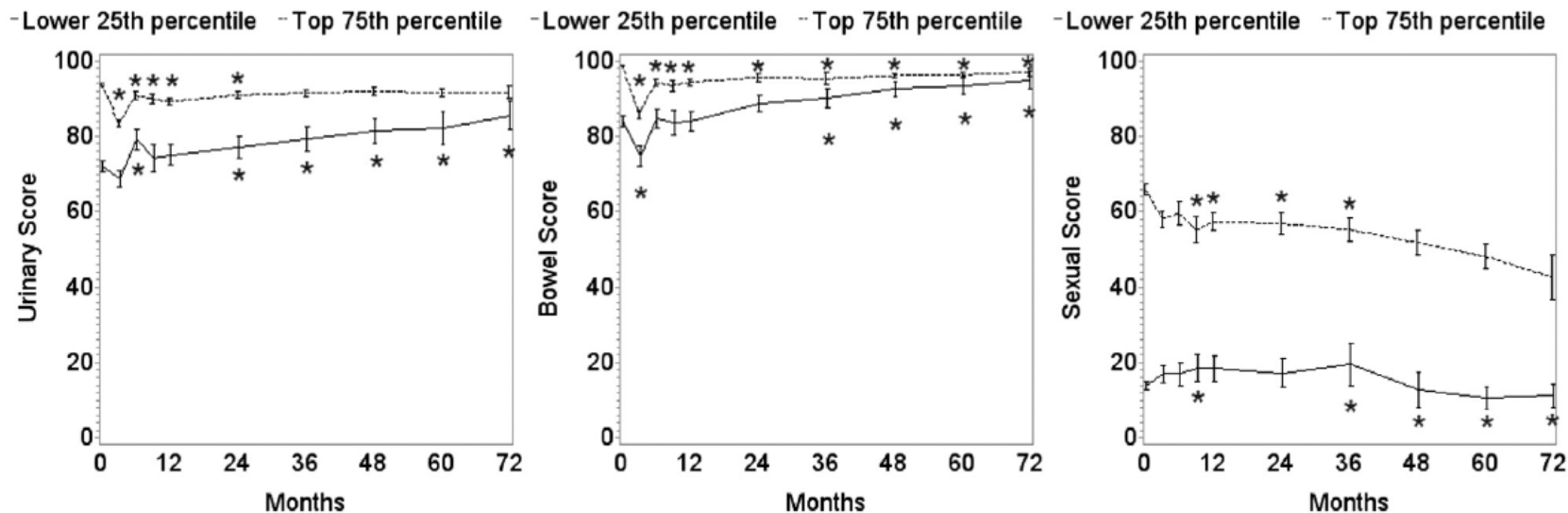
Genitourinary toxicity			
	Arm	Grade ≥ 2	Grade 0-1
>10 points reduction in QoL over baseline	39 x 2 Gy	53.7 %	46.3%
	19 x 3.4 Gy	62.8%	37.2%
Gastrointestinal toxicity			
	Arm	Grade ≥ 2	Grade 0-1
>10 points reduction in QoL over baseline	39 x 2 Gy	34.7 %	65.3%
	19 x 3.4 Gy	42.1%	57.9%

Genitourinary, Gastrointestinal and Sexual Toxicity over Time

n=864 patients with QOL data); dose 36.25 Gy (84%); EPIC questionnaire

Baseline, 1,2,3 mos, then 3-6 mos intervals. Clinically significant is change of $> \frac{1}{2}$ SD of baseline value

EPIC (scale 0-100>better)



Take Home Messages

- Quality of Life (QoL) should be routinely assessed in clinical practice and in cancer trials
- QoL data improve decision-making, help monitoring treatment outcome, and improve physician-patient communication
- QoL data are prognostic for overall survival
- Several instruments are available, make the right choice!
- In hypofractionation trials of prostate cancer, QoL decreases but in the same way as in conventional schedules





Thank you

