

Is active surveillance safe for
Gleason 7 prostate cancer?

Answer: Sometimes

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Why surveillance for some GG2 pts:

- **Radical prostatectomy and radiation—too many side effects**
- **Focal therapy—many unanswered questions**
 - No long term outcome data with robust end points
 - Concerns about effects of sub-lethal treatment on disease progression—'accelerated re-population'
 - Uncertainty about patient selection, treatment parameters
 - Salvage therapy may be compromised
- **GG 2 patients have 'wobble room' (usually indolent)**
- **MRI & biomarkers allow effective stratification to identify good and bad actors**

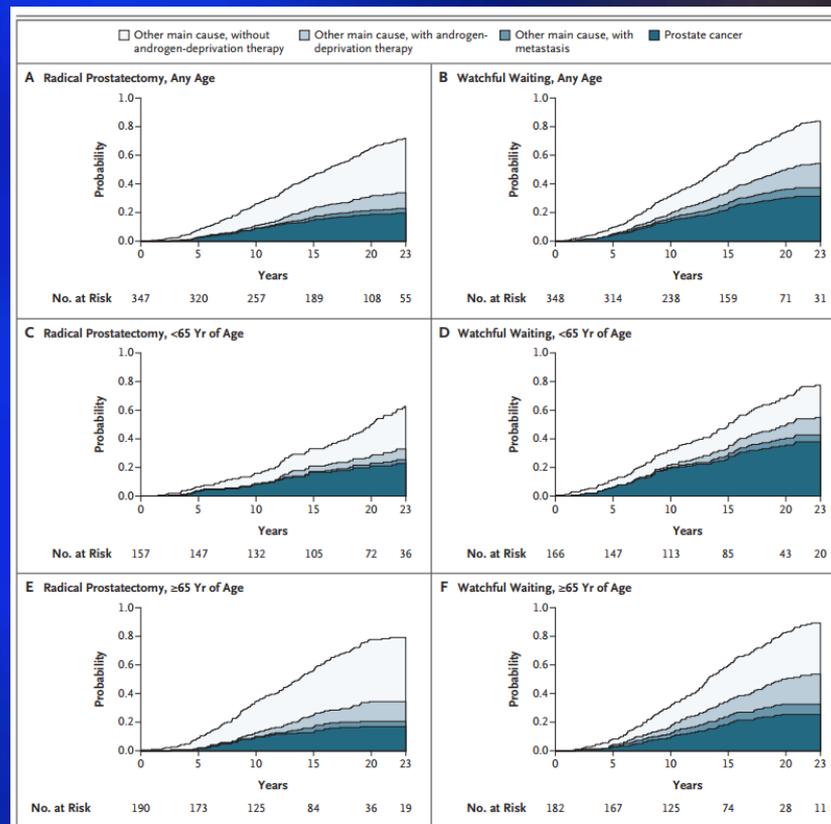
The CAPRA score at 10 years: Brajtbord JS, Leapman MS, Cooperberg MR. Eur Urol. 2017 May;71(5):705-709.

Gleason 3+ 4 adds one Capra point compared to 3+3
 Note: 0–2 low risk; 3–5, intermediate risk; and 6–10, high risk.

Variable	Level	Points	Variable	Level	Points
PSA	2.0–6	0	T stage	T1/T2	0
	6.1–10	1		T3a	1
	10.1–20	2	% pos bx	<34%	0
	20.1–30	3		≥34%	1
	>30	4			
Gleason	1-3/1-3	0	Age	<50	0
	1-3/4-5	1		≥50	1
	4-5/1-5	3			

Radical Prostatectomy or Watchful Waiting in Prostate Cancer - 29-Year Follow-up.

**Bill-Axelsson A,
N Engl J Med. 2018
Dec 13;379(24):2319-2329.**



RP: No benefit for Gleason 3+4

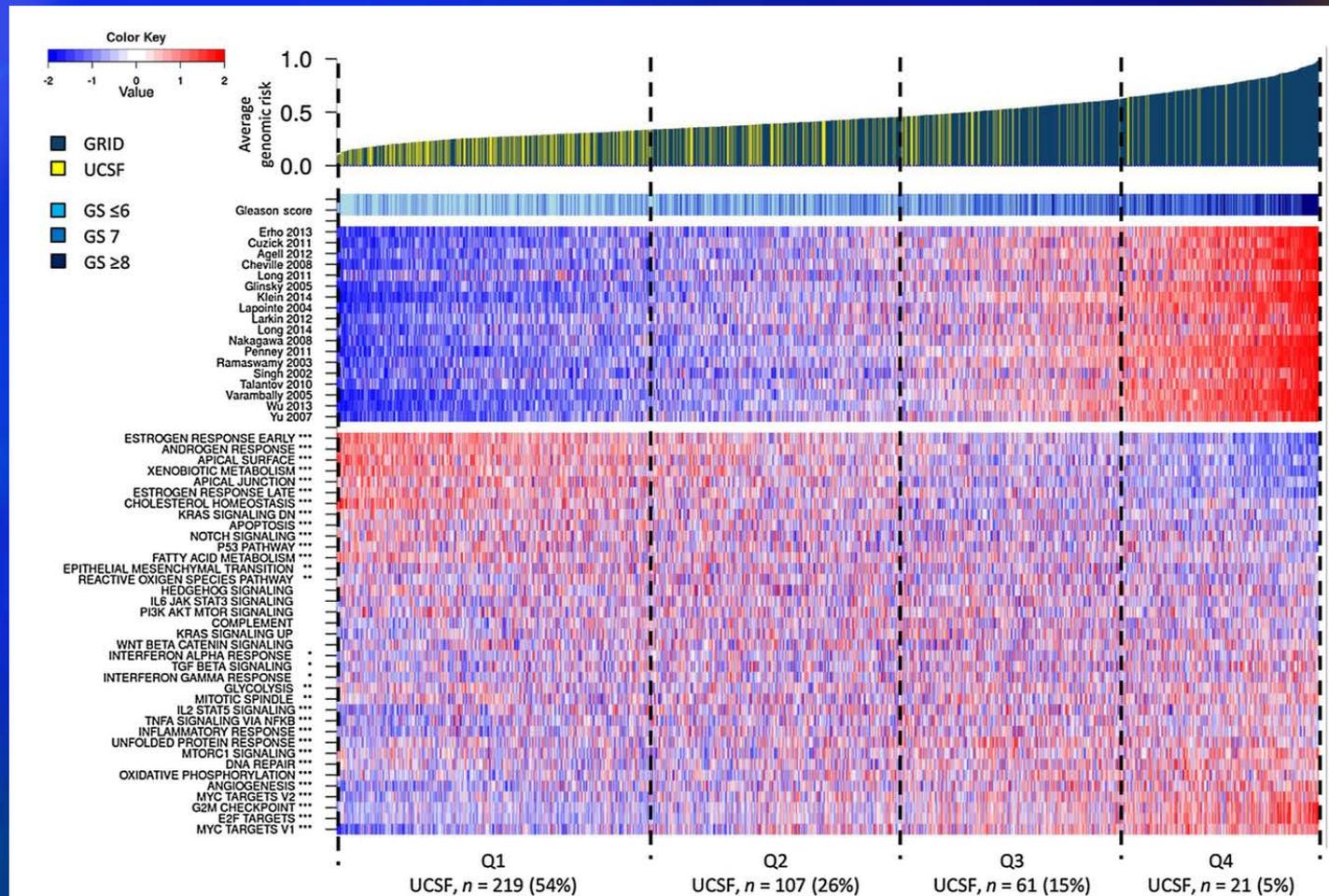
End Point and Risk Factor	No. of Men	No. of Events	Relative Risk with Adjustment for Age Group (95% CI)*	Relative Risk with Adjustment for Age Group and Additional Factors (95% CI)†
Gleason score of prostatectomy specimen				
3-6	88	3	Reference	Reference
3+4	87	5	1.91 (0.46-7.99)	0.99 (0.23-4.33)
4+3	70	21	11.78 (3.51-39.55)	5.73 (1.59-20.67)
8 or 9	38	19	20.06 (5.93-67.91)	10.63 (3.03-37.30)

The Diverse Genomic Landscape of Clinically Low-risk Prostate Cancer

Cooperberg M, Euro Urol Epub May 2018

- AGR: A 'Meta-score' of genetic aberrancy and aggressivity
- GG1 and 2: 2% and 14% in highest AGR quartile

- Average Genomic Risk(AGR)
- Gleason
- Scores for 18 prognostic signatures
- Gene set scores and correlation to AGR

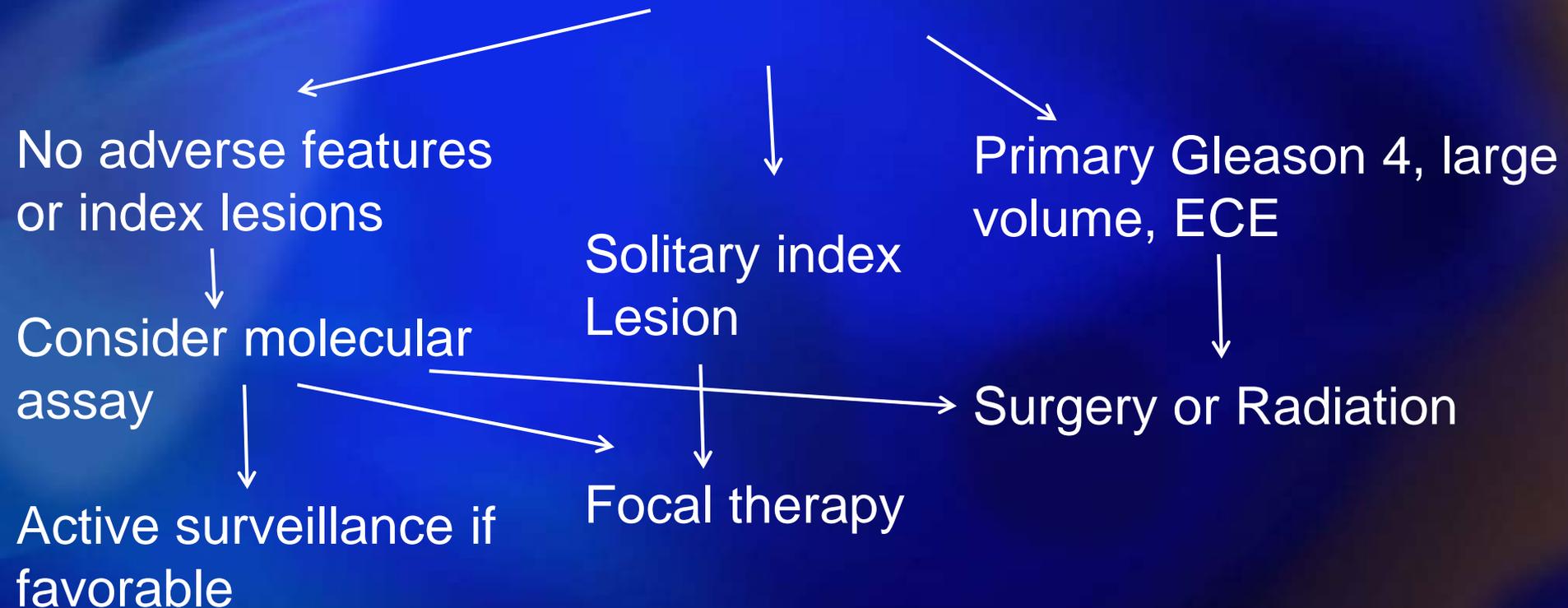


Is the glass half empty or half full?

- Many Gleason 3+ small percentage 4 are overgraded
- Many true Gleason 3+4 are indolent
- Key is patient selection and relevant triggers
- MRI and biomarkers, despite limitations, enhance risk stratification
 - Favorable Intermediate risk with negative MRI: VERY favorable
 - Gleason 3+4 is the 'sweet spot' for tissue based genetic biomarkers
- Active surveillance for these FIR patients is safe and enhances QOL compared to other therapies

Personalized treatment of GG 2 (Gleason 3+4) patients

mpMRI



What would you do if it was you?

- Risk incontinence, proctitis, erectile dysfunction for a disease that is likely to be indolent?
- Undergo an unproven therapy (focal) that could compromise subsequent curative treatment?

OR

- Use contemporary, widely available tests (MRI, genetic biomarkers) to risk stratify, have surveillance if favorable, and undergo successful delayed intervention if your risk is re-classified.
- I know what I would do!