

High Risk Prostate Cancer

- wich should be the best definition -

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Why Is Important?

- Indolent Vs. Killing cancer
- Under Vs. Overtreatment
- To establish the role of surgery
- Step forward in genetic era

D' Amico def...

- PSA > 20 ng/ml
- Gleason score 8 – 10
- Clinical stage $\geq$ T2c

D' Amico def...?

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- Gleason score 8 – 10
- Clinical stage $\geq$ T2c
- Not single criteria but combination of them
 - High PSA but Gleason $\leq$ 7 good outcomes after surgery
 - Multiple high risks poor outcomes despite surgery

Subgroups

- PSA, clinical stage, G Score
- Joniau S, 2012 – 1632 patients High Risk...
 - PSA > 20 ng/ml, GS 8 -10, cT3 – 4
 - Resulted a complex system of 7 subgroups
 - Too complicated

Subgroups

- Reestablished 3 subgroups prognosis
 - Good
 - PSA above 20 ng/ml or cT3/4 or GS 8 - 10
 - Intermediate
 - PSA above 20 ng/ml and cT3/4
 - Poor
 - GS 8 – 10 + PSA above 20 ng/ml and/or cT3/4

Subgroups

- Ten years after surgery or surgery + ...
 - Good
 - PSA above 20 ng/ml or cT3/4 or GS 8 - 10
 - **95 % alive**
 - Poor
 - GS 8 – 10 + PSA above 20 ng/ml and/or cT3/4
 - **CancerSpecificDeath – 20% in multimodal approach**

D' Amico def...?

- PSA > 20 ng/ml
- Gleason score 8 – 10
- Clinical stage $\geq$ T2c
- Not single criteria but combination of them
- If single criteria → good support for surgery indication + ...

Natural history of surgically treated high-risk

- Overall the 5 year BCR-free survival – 52.2%
- Stratifying on BCR
 - < 36 months → CSM 19.1% at 10 years
 - > 36 months → CSM 4.4% at 10 years

Briganti A et al, Urol Oncol 2015

What About Image

MRI data significantly improves the predictive capacity of BPFS when using the D'Amico model data

[Algarra R](#), [Zudaire B](#) et al. Optimizing D'Amico risk groups in radical prostatectomy through the addition of magnetic resonance imaging data. [Actas Urol Esp](#). 2014 Nov;38(9):594-9

What About Image

Value of 11 C-choline PET and diffusion-weighted MRI

nodal staging in High Risk PCa

low sensitivity (high heterogeneity of high risk PCa)

van den BerghL, et al, Urol Oncol 2015

Genetics

- Methylation of HOXD3, PITX2, RASSF1 and TDRD1 are predictors of BCR in high risk PCa patients
- Practice
 - High level PCA 3
 - ↑ aggressiveness
 - High Gleason score

[Merola R1](#), [Tomao L](#) et al. PCA3 in prostate cancer and tumor aggressiveness detection on 407 high-risk patients: a National Cancer Institute experience. [J Exp Clin Cancer Res](#). 2015 Feb 6;34(1):15

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