18-2059 - Prevalence and diversity of management of prostate cancer patients classified as low risk using D'Amico group or Cancer of the Prostate Risk Assessment (CAPRA) score: a French multicenter study.

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Objectives

Currently, the French Health Authority doesn't recommend mass screening for prostate cancer (PCa), due to the risk of over-treatment, notably of low risk patients.

In the absence of clinical guidelines supporting any given treatment approach over another for localized PCa, clinician and patient preferences may lead to substantial variation in treatment use.

Our study is intended to reflect the therapeutic attitudes for the management of patients classified as low risk of progression in French clinical centers.

Methods

A systematic review of all positive prostate biopsies done for PCa diagnosis between 2012 January 1st and 2013 December 31st was performed.

Clinicopathological characteristics needed to establish the D'Amico score and the Cancer of the Prostate Risk Assessment (CAPRA) score were collected, as well as first treatment after diagnosis for low risk patients.

Distribution of clinical data were compared between centers using chi-square analyses.

Association between age at diagnosis and Gleason score was assessed using odds ratios (OR) and 95% confidence intervals (95% CI) estimated from logistic regression models.

All statistical tests were carried out with StatView version 5.0.

Results

- A total of 985 patients were included (Table 1) .
- According to the d'Amico and CAPRA classifications, 30.4% and 35.0% of patients were at low, 34.5% and 33.2% at intermediate, 35.1% and 31.8% at high risk.
- Diagnosis severity increased with age (p <0.0001; Figure 1).
- The main treatment for low risk patients was radical prostatectomy (41.6% and 42.0% for d'Amico and CAPRA, respectively), but active surveillance was the most frequent treatment if diagnosed after 75 years old (Figure 2).
- The management of low risk patients varied significantly between centers (p <0.0001), according to the therapeutic platforms available within the hospital (Figure 3).

Table 1 : Characteristics of patients (N=985)

	Center 1 N=361	Center 2 N=217	Center 3 N=186	Center 4 N=134	Center 5 N=87	Total N=985
Median age (years)	65.8	66.6	66.0	68.9	66.5	66.0
[range]	[46.7-87.6]	[49.5-93.9]	[45.1-92.0]	[49.8-92.7]	[50-90]	[45-93]
Age at diagnosis						
<65	164 (45.4%)	80 (36.9%)	76 (40.9%)	43 (32.1%)	34 (40.5%)	397 (40.4%)
65-75	153 (42.4%)	94 (43.3%)	82 (44.1%)	61 (45.5%)	30 (35.7%)	420 (42.8%)
>75	44 (12.2%)	43 (19.8%)	28 (15.0%)	30 (22.4%)	20 (23.8%)	165 (16.8%)
Median PSA (ng/mL)	8.35	8.07	9.7	9.47	7.7	8.50
[range]	[0.5->10,000]	[2.5-3,000]	[1.2-5,600]	[1.5-3,069]	[1.0->10,000]	[0.5->10,000]
PSA level at diagnosis						
<10	218 (60.4%)	135 (62.2%)	97 (52.2%)	70 (52.2%)	50 (57.5%)	570 (57.9%)
10-20	85 (23.5%)	43 (19.8%)	40 (21.5%)	36(26.9%)	15 (17.2%)	219 (22.2%)
>20	58 (16.1%)	39 (18.0%)	49 (26.3%)	28 (20.9%)	22 (25.3%)	196 (19.9%)
Gleason score						
<7	169 (46.8%)	120 (55.3%)	54 (29.0%)	54 (40.3%)	56 (64.4%)	453 (46.0%)
7	112 (31.0%)	60 (27.7%)	73 (39.3%)	53 (39.6%)	15 (17.2%)	313 (31.8%)
>7	80 (22.2%)	37 (17.0%)	59 (31.7%)	27 (20.1%)	16 (18.4%)	219 (22.2%)
Positive biopsy cores > 34%	158 (43.8%)	103 (47.9%)	96 (52.2%)	77 (57.5%)	36 (43.4%)	470 (48.1%)
D'Amico score						
Low	111 (30.7%)	80 (36.9%)	37 (19.9%)	36 (26.9%)	35 (40.2%)	299 (30.4%)
Intermediate	128 (35.5%)	66 (30.4%)	70 (37.6%)	56 (41.8%)	20 (23.0%)	340 (34.5%)
High	122 (33.8%)	71 (32.7%)	79 (42.5%)	42 (31.3%)	32 (36.8%)	346 (35.1%)
CAPRA score						
Low 0-2	129 (35.7%)	88 (40.6%)	49 (26.4%)	40 (29.9%)	39 (44.8%)	345 (35.0%)
Intermediate 3-5	119 (33.0%)	74 (34.1%)	62 (33.3%)	48 (35.8%)	24 (27.6%)	327 (33.2 %)
High 6-10	113 (31.3%)	55 (25.3%)	75 (40.3%)	46 (34.3%)	24 (27.6%)	313 (31.8%)
Pre-operative MRI	273 (75.6%)	81 (37.3%)	15 (8.1%)	0 (0.0%)	34 (39.1%)	403 (40.9%)

Figure 1: Distribution of d'Amico (A) and CAPRA (B) groups by age class.

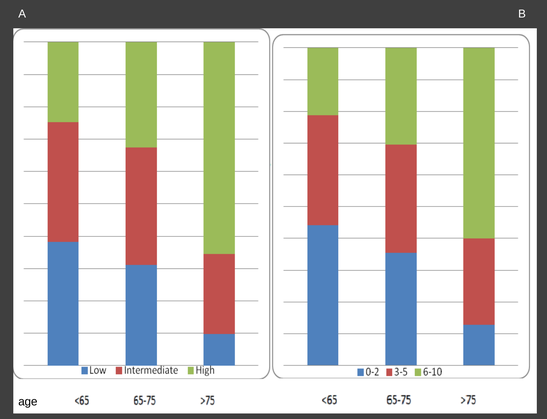


Figure 2 : Treatment distribution by age class among patients with low risk according d'Amico (A) and CAPRA score (B).

RP: radical prostatectomy; AS: active surveillance; BT: Brachytherapy; RT/HT:radiotherapy or hormonoradiotherapy; Other: Focal therapy or local protocol.

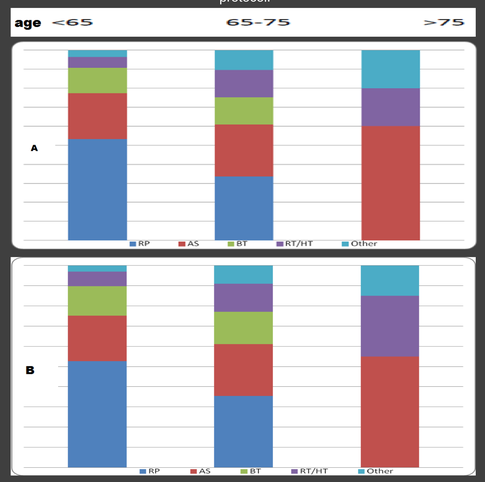
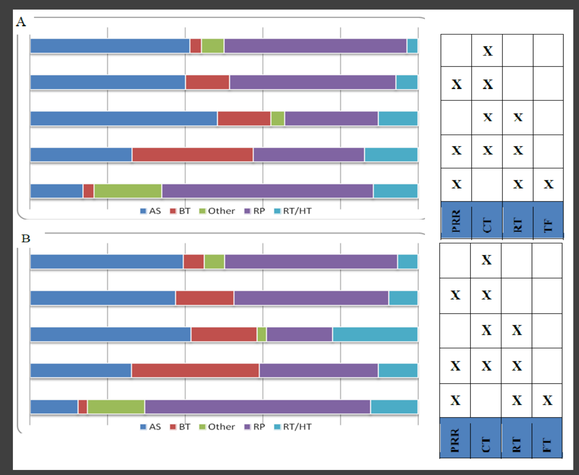


Figure 3: Distribution of treatment of prostate cancer patients with low risk according to d'Amico (A; N= 281) or CAPRA score (B; N= 329) in each urological center in relation with the local available therapeutic platforms.



RRP: robotic assisted radical prostatectomy;

Conclusions

In absence of strong progression predictor, the management of low risk PCa remains based on center habits and local therapeutic platforms. New predictive markers, such as multiparametric MRI or molecular tests, are needed to guide rational management of low risk PCa.