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Oncologic outcome after extraperitoneal laparoscopic radical prostatectomy: midterm follow-up of 1115 procedures.

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Fig 1. Biochemical progression-free survival stratified by preoperative PSA

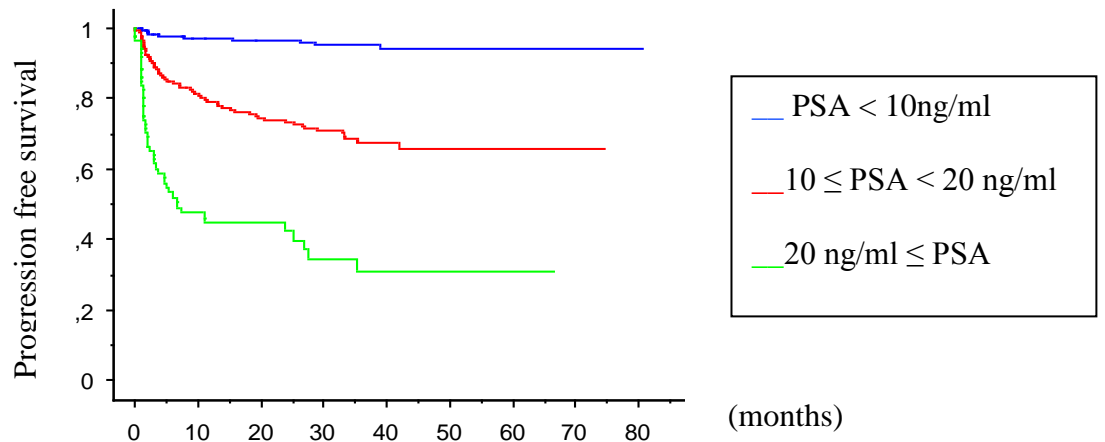


Fig 2. Biochemical progression-free survival stratified by Gleason score

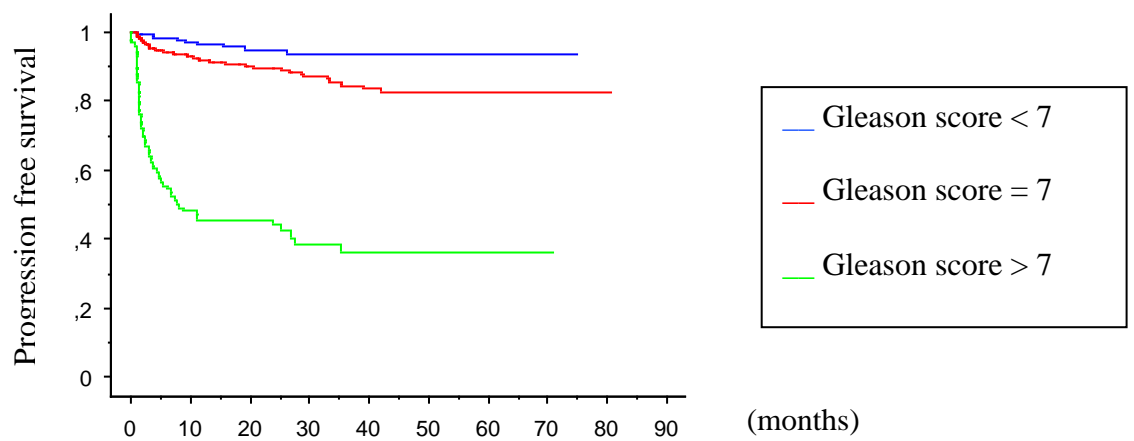


Fig 3. Biochemical progression-free survival stratified by surgical margins

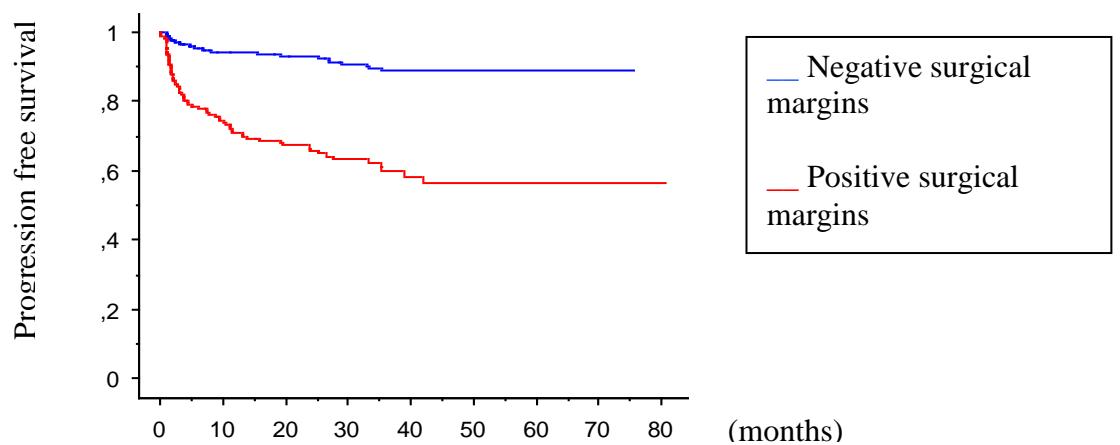


Fig 4. Biochemical progression-free survival stratified by pathological stage

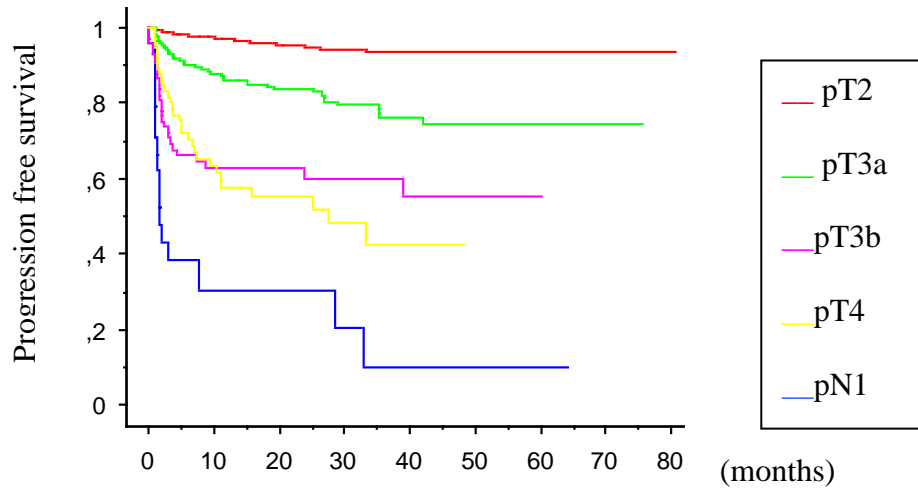


Fig 5. Biochemical progression-free survival stratified by pathological stage and surgical margins

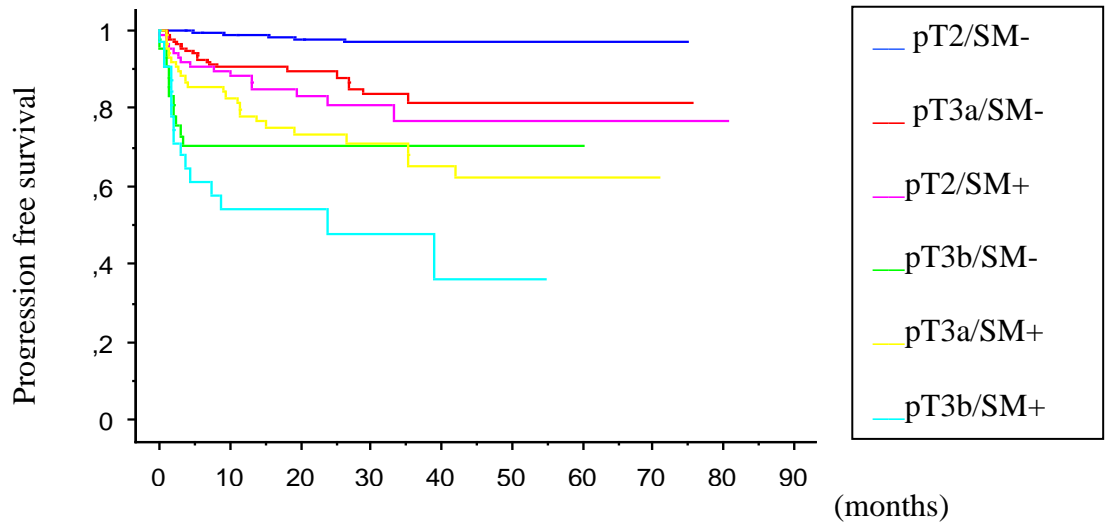


Table 1 : Preoperative patient characteristics

| | |
|--------------------|--------------|
| No. pts | 1115 |
| Mean age (range) | 62.5 (42-81) |
| Clinical stage (%) | |
| T1a-b | 18 (1.6) |
| T1c | 894 (80.2) |
| T2 | 193 (17.3) |
| T3 | 10 (0.9) |
| Mean PSA (ng/ml) | 9.8 (0.8-99) |
| Gleason score (%) | |
| <7 | 739 (66) |
| =7 | 326 (29) |
| >7 | 50 (5) |

Table 2 : Postoperative patients characteristics

| Stage | pN | Total | Positive margin (%) | Gleason score (%) | | |
|-------|---------|-------------|---------------------|-------------------|------------|----------|
| | | | | <7 | =7 | >7 |
| pT2a | pN0/pNx | 126 (11.2%) | 7 (5.5) | 76 (6.7) | 47 (4.2) | 3 (0.3) |
| pT2b | pN0/pNx | 30 (2.7%) | 3 (10) | 10 (1) | 19 (1.6) | 1 (0.1) |
| pT2c | pN0/pNx | 508 (45.6%) | 97 (19.1) | 175 (15.6) | 323 (29) | 10 (1) |
| pT2c | pN1 | 3 (0.2%) | 0 | 0 | 3 (0.2) | 0 |
| pT3a | pN0/pNx | 250 (22.4%) | 82 (32.8) | 20 (2) | 197 (17.6) | 33 (2.8) |
| pT3a | pN1 | 5 (0.5%) | 2 (40) | 0 | 2 (0.2) | 3 (0.3) |
| pT3b | pN0/pNx | 100 (9%) | 41 (41) | 3 (0.3) | 56 (5) | 41 (3.7) |
| pT3b | pN1 | 10 (1%) | 3 (30) | 0 | 7 (0.7) | 3 (0.3) |
| pT4 | pN0/pNx | 77 (6.9%) | 57 (74) | 4 (0.3) | 45 (4) | 18 (2.6) |
| pT4 | pN1 | 6 (0.5%) | 4 (66.6) | 0 | 2 (0.2) | 4 (0.3) |

Table 3: Multivariate Cox proportional hazard model for different variables for prediction of biochemical recurrence risk

| | Risk Ratio | 95% CI | P value |
|--------------------------|------------|--------------|---------|
| PSA < 10 ng/ml | 1 | | |
| PSA 10-20 ng/ml | 1,243 | 0,795-1,943 | 0,339 |
| PSA ≥ 20 ng/ml | 2,920 | 1,743-4,894 | <0,0001 |
| Gleason score < 7 | 1 | | |
| Gleason score = 7 | 1,280 | 0,583-2,809 | 0,538 |
| Gleason score > 7 | 4,447 | 1,868-10,584 | 0,001 |
| pT2 | 1 | | |
| pT3a | 2,759 | 1,640-4,643 | <0,0001 |
| pT3b | 3,682 | 1,928-7,032 | <0,0001 |
| Negative lymph nodes | 1 | | |
| Positive lymph nodes | 5,606 | 2,904-10,825 | <0,0001 |
| Negative surgical margin | 1 | | |
| Positive surgical margin | 2,717 | 1,817-4,063 | <0,0001 |

(95% CI: 95% confidence interval, PSA: prostate-specific antigen)

Table 4 : Oncological results of open, TLRP and ELRP prostatectomy

| References | N° Pts | % Surgical margins | | Progression-free survival (%) | | | |
|---|--------|--------------------|------|-------------------------------|------|--------|------|
| | | | | 3-year | | 5-year | |
| | | | | pT2 | pT3 | pT2 | pT3 |
| Open prostatectomy | | | | | | | |
| <i>Catalona and Smith</i> ^[19] | 1778 | 20.9 | | 92.5 | 78.7 | 90 | 68.7 |
| <i>Han et al</i> ^[17] | 2494 | - | 26.4 | 85 | 75 | 75 | 60 |
| <i>Hul et al</i> ^[21] | 1000 | 12.8 | | 95.6 | 85.3 | 94.9 | 75.3 |
| TLRP | | | | | | | |
| <i>Guillonnet al</i> ^[9] | 1000 | 15.5 | 31.1 | 89 | 67 | - | - |
| <i>Rassweiler et al</i> ^[10] | 500 | 7.4 | 31.8 | 95.2 | 71.6 | 89.5 | 68.2 |
| <i>Lein et al</i> ^[23] | 1000 | 13.6 | 51.5 | 95.4 | 78.6 | - | - |
| <i>Hara I</i> ^[24] | 136 | 27.5 | 68 | 91.8 | 51 | - | - |
| <i>Pavlovich et al</i> ^[18] | 528 | 6.2 | 39.3 | 98.2 | 78.5 | - | - |
| <i>la te rejiuo</i> ^[16] | 1564 | - | - | - | - | 83 | 69 |
| ELRP | | | | | | | |
| <i>Rozet et al</i> ^[14] | 600 | 14.6 | 25.6 | - | - | - | - |
| <i>Stolzenburg et al</i> ^[15] | 1300 | 9.8 | 34.3 | - | - | - | - |
| <i>Present series</i> | 1115 | 16 | 34.8 | 93.4 | 72.5 | 93.4 | 70.2 |