| Diagnosis on review | No. and (%) of biopsy cases | No. and (%) of TURP cases | |
|---------------------|-----------------------------|---------------------------|--|
| Adenosis | 13 (57) | 6 (85) | |
| Partial atrophy | 3 (13) | 0 | |
| PIN | 2 (8) | 0 | |
| Seminal vesicle | 1 (4) | 0 | |
| ASAP | 4 (17) | 0 | |
| Hyperplasia | 0 | 1 (15) | |

Table 1. Reasons for the diagnostic error. There were 30 false-positive diagnoses of prostate cancer out of a total of 1359 cases reviewed (2.2%).

Abbreviations:

• PIN: prostatic intraepithelial neoplasia

• ASAP: atypical small acinar proliferation

| | Bostwick et al ⁶ | Epstein et al ⁷ | Kwast et al ¹⁰ | Berney et al ⁸ | Brimo et al ⁹ | Beltran et al |
|------------|-----------------------------|----------------------------|---------------------------|---------------------------|--------------------------|---------------|
| Period | 1960-1970 | 1993-1994 | 1994-2002 | 1990-1996 | 2008 | 1990-2003# |
| Follow up | Yes | No | No | Yes | No | Yes |
| IHC | No | No | Not provided | No | No | Yes |
| Biopsies | 0 | 535 | 1950 | 877 | 855 | 1080 |
| TURP | 150 | 0 | 0 | 914 | 0 | 314 |
| Error rate | 21% | 1.30% | 0.36% | 7.40% | 1.20% | 2.20% |
| Most | Adenosis (31%) | Adenosis | Post- | Adenosis | Not provided | Adenosis |
| common | | (71%) | atrophic | (28%)* | | (66%) |
| error | | | hyperplasia | | | |
| Second | Basal cell | Atrophy | Errors in | Inflammation | | Partial |
| most | hyperplasia | (29%) | labelling | (11%) | | atrophy |
| common | (25%) | | | | | (10%) |
| error | | | | | | |

Table 2. Comparison of studies into false-positive diagnoses of prostate cancer.

Abbreviations:

• IHC: immunohistochemistry

• TURP: trans-urethral resection of prostate

^{*} No reason for error was found in 35% of the cases

[#] Mean = 2002