# Meeting abstract

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# Prostatic mapping in diagnosis and follow-up for prostatic cancer patients treated by CT-RT

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## Aim of study

Prostate cancer (PCa) ranks third in cancer incidence and is the fourth leading cause of cancer-related deaths in Italy. The widespread use of the PSA test in clinical practice has been associated with a constant increase in the number of diagnosed PCa cases both in the USA (170 per 100,000) and Europe. In Italy the rate rose from 20 cases per 100,000 in 1976 to 40 per 100,000 in 1997.

## Materials and methods

We performed in "Dipartimento di Scienze Chirurgiche, Trapianti d'Organo e Tecnologie Avanzate", Università di Catania in the last five years, 96 prostatic mapping in patients (over 80 years old). All patients presented a Prostatic Specific Antigen level (PSA) over 2.5 ng/ml. In patients with PSA rate under 10 ng/ml and with E.D.A.R. or negative transanal US, dosage PSA free/tot. was lower than 15 per cent.

45 patients constituted this group, aged between 80 and 88 years old. We performed all prostatic mapping by local anesthesia using a 18 GG needle.

## Results

This method permits to demonstrate a positive diagnosis for cancer in 27 patients (60%); other patients underwent to another prostatic mapping after an year because of high PSA level (18 prostatic mapping, just a case positive for cancer). Other three follow-up patients, demonstrated a high PSA level higher than 0.5 ng/ml. Prostatic mapping (12 biopsy) allowed us to confirm a recurrence neoplasm.

## Conclusion

This reduction in the PCa mortality rate, which has coincided with the widespread use of the PSA test, is to be attributed to the higher number of organ-confined (and therefore curable) cancers detected but also to a more effective treatment of the advanced disease and to a more accurate identification of causes of death; in fact, the areas with the highest rates of early detection and treatment (USA and Canada) do not report the lowest mortality rates. The reduction in PCa mortality in Italy has been noted in all the age groups where there had been the highest increase in the incidence of this cancer. Early diagnosis of an increasing number of organ-confined cases and the resulting intention-to-treat approach are likely to have contributed to this outcome.

Early diagnosis, screening for this kind of cancer (PSA dosage and prostatic mapping), natural biological behavior and evolution in medical and surgical treatment had improved prognosis, life quality for patient who had diagnosed prostatic cancer.