

## Adherence, persistence and economic evaluation in the treatment of Prostate cancer.

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### Objects of

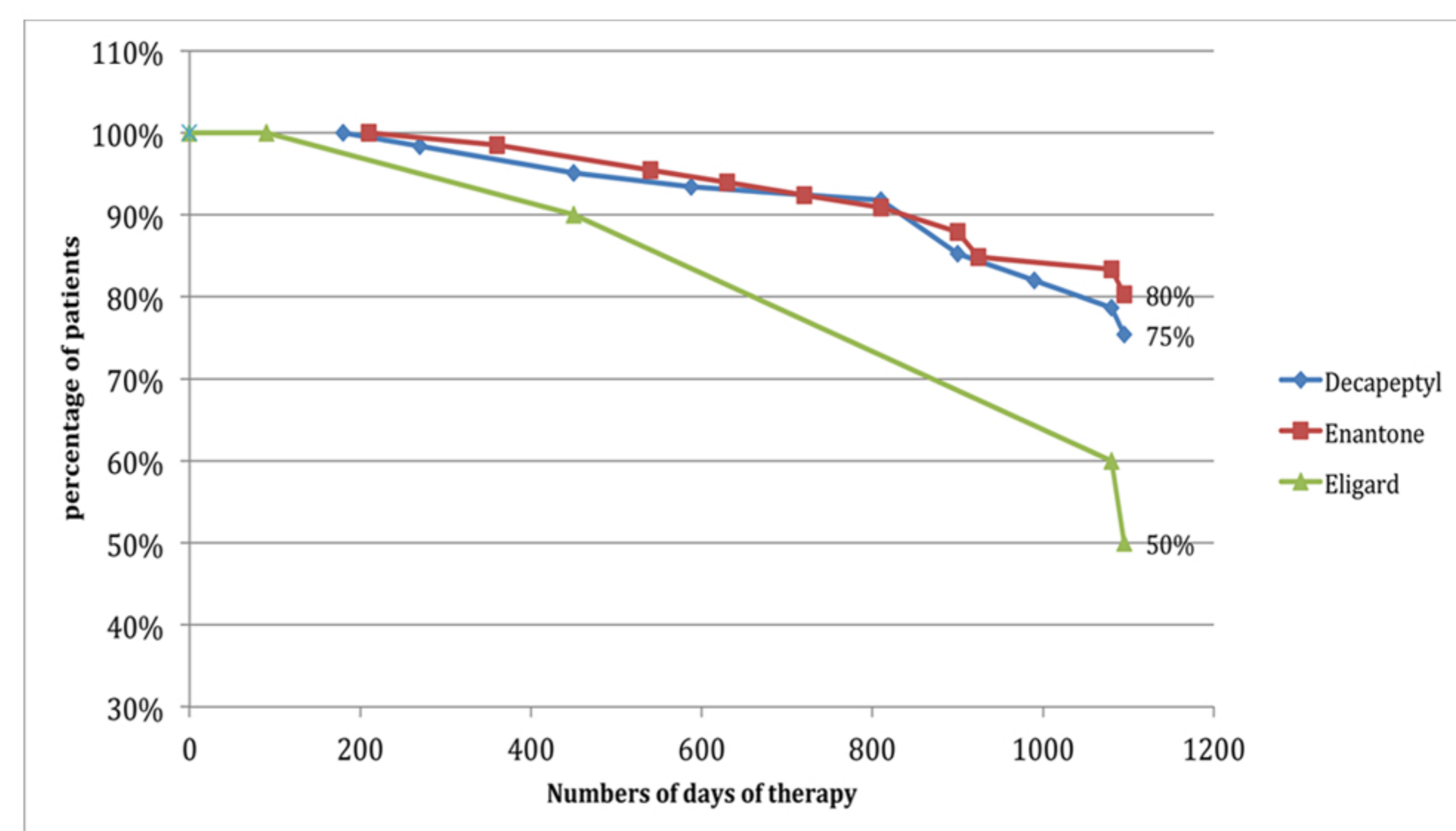
The successful home treatment is strongly influenced by patient adherence to treatment. Nonadherence to treatment represents not only an important issue for the patient, affecting both the clinical efficacy and safety of the drug treatment, but also has financial and social implications for the community. This study evaluated the adherence to treatment, persistence, and the daily cost of therapy in patients with prostate cancer treated with gonadotropin-releasing hormone agonists, comparing Leuprorelin 3.75-11.25, Leuprorelin 7.5-22.5 and Triptorelin.

### Methods

The study was carried out from 2007 to 2011. Adherence to treatment was measured as the ratio between the Received Daily Dose (RDD) and the Prescribed Daily Dose (PDD), using a software developed ad hoc by the hospital pharmacists. The RDD was calculated as the sum of the number of days between two consecutive drug refills, whilst the PDD was determined based on the treatment regimen as prescribed by the physician. The persistence was calculated as the sum of the number of days the patient had stayed on treatment. The cost of daily treatment was calculated on the basis of the RDD.

### Results

126 patients were enrolled in this study for Triptorelin, 143 for Leuprorelin 3.75-11.25 and 31 for Leuprorelin 7.5-22.5. The adherence values for all drugs ranged between 0.95 and 0.99, showing good quality management of treatment at-home. The analysis of persistence conducted in three years showed a decrease by 20% for Leuprorelin 3.75-11.25, 25% for Triptorelin and 50% for Leuprorelin 7.5-22.5. The cost per RDD was of 2.15 €, 2.24 € and 2.84 € for Leuprorelin 7.5-22.5, Leuprorelin 3.75-11.25 and Triptorelin respectively.



### Conclusions

The excellent adherence values showed that all the drugs studied have a good safety profile and easy administration. In fact, patients comply with the dosage and medication regimens as recommended by prescribers. The persistence values are overlapping. The cost per RDD for Triptorelin was 23% higher than Leuprorelin.

