

Diffusion of Leutenizing Hormone-Releasing Hormone (LHRH) Agonists for Treatment of Advanced Prostate Cancer

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Background: Lupron/Leuprolide and Goseriline are leutenizing hormone-releasing hormone (LHRH) agonists indicated for treatment of stage IV prostate cancer. Survival with LHRH agonists has been shown to be equal to that of the previous standard of treatment, bilateral surgical castration (orchiectomy). The purpose of this study is to examine the differential diffusion of LHRH agonists, and the decline in use of surgical orchiectomy.

Methods: SEER-Medicare data were used for years 1991-1999. The patient population included all individuals over age 65, enrolled in the Medicare program, with complete claims, and a diagnosis of stage IV prostate cancer during the study period, and no other cancer diagnoses. The primary dependent variable was the treatment the patient received – orchiectomy or LHRH agonists using specific codes from Medicare claims.

Results: There were 2,994 patients in the study. Overall, NCI-designated cancer centers appear to have demonstrated a more rapid adoption of LHRH agonists than other academic medical centers, as seen through a greater proportion of stage IV prostate cancer patients receiving this treatment over the alternative of orchiectomy, with this difference increasing over time.

Conclusion: The increasing adoption of LHRH agonists was noted in this study. More research is needed to identify those factors at both patient and physician levels that are associated with receipt of newer and older treatment modalities for stage IV prostate cancer as well as time to receipt of these modalities and type of LHRH used.