

BACKGROUND

- **In vitro** data suggest **antitumoral** and **radiosensitizing** properties of statins
- **Mixed results** from **clinical** prostate cancer studies
- **Radiobiological differences** between **EBRT** and **brachytherapy** could contribute to the conflicting results
- **Aim:** Investigate the effect of statin use on BCR in patients treated with **LDR**, **EBRT** or **HDR + EBRT**

METHODS

- **Retrospective review** of **prospectively maintained** institutional database
- **Localized prostate cancer** treated with **LDR**, **EBRT** or **HDR + EBRT** from 2001 to 2022
- Stratified according to **statin use**
- **Kaplan-Meier plots** and **multivariable Cox regression** for 5- and 10-year BCR-free survival, adjusting for D'Amico risk, treatment modality, age, PSA, and ADT
- Repeated separately for **intermediate-** and **high-risk EBRT-treated** patients and for **low- and intermediate-risk LDR-treated** patients

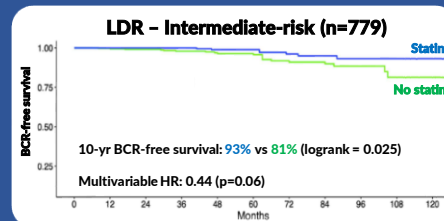
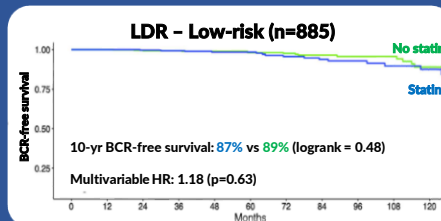
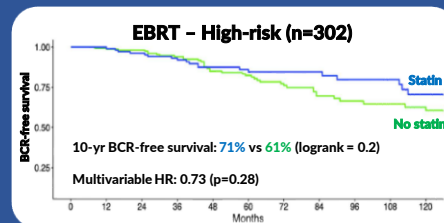
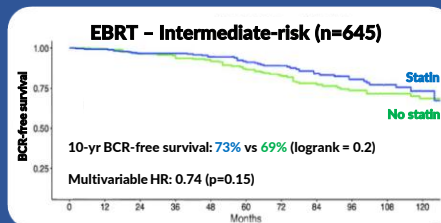
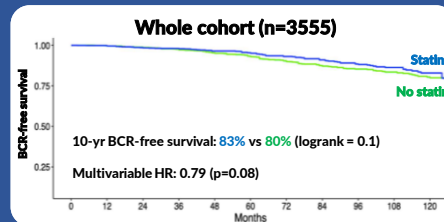
RESULTS

- 3555 patients
- 35% **EBRT**, 48% **LDR**, 17% **HDR + EBRT**
- 33% **low-**, 53% **intermediate-**, 14% **high-risk**
- 43% **taking statins**
- Median follow-up **52 months**
- Only **intermediate-risk LDR-treated** patients fared better with statins in **univariate** analysis (**HR: 0.38; p=0.03**), but not significant in **multivariate** analysis (**HR: 0.44; p=0.06**)

DISCUSSION

- **No apparent effect of statins on BCR** from **EBRT-** or **brachytherapy-treated** prostate cancer in a large population
- Retrospective analysis
- No details regarding **duration**, **dose** and **type** of statins
- Potential for predictive biomarkers?

Statins have no effect on biochemical recurrence from radiotherapy-treated prostate



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