1. Introduction and Objective

Approximately 20-30% of prostate cancer (PC) patients experience a biochemical recurrence (BCR), requiring secondary systemic interventions (SI) – ADT, ADT+RT, RT.

To delay time to SI, the present study seeks to evaluate the impact of intent to treat with a heart-healthy diet and exercise (DE) on time to SI for patients with BCR.

2. Materials and Methods

32 DE patients with BCR (PSA >0.2 ng/mL), doubling times (DTs) >12 months were included in the study.

The DE group was stratified into DE success (DES, n=18) with increasing DT or DE fail (DEF, n=14) based on rapidly decreasing DTs and need for SI.

24 Matched Historic Controls (MHC) who predated DE were selected based on age, oncologic factors, DTs, and BMI. PSA, PSAdt increasing/decreasing pattern, and time to SI were evaluated.

3. Results

Intervention occurred in all MHC patients, with adverse DT kinetics (decreasing DT, DT <12 mos) versus 44% (14/32) of DE patients at median 3.7 years versus 8.9 years, respectively (p<0.001).

At the end of study, DT was significantly longer in the DE (22.2±12.5 mo) versus the MHC (9.4±4.7 mo, p<0.001).

Furthermore, end of study comparisons between DES versus DEF, and DEF versus MHC confirmed benefits of intent to treat with DE.

DT was significantly longer in the DES (26.7±11.7 mo) versus DEF group (17.3±13.7 mo) (p=0.045).

When DEF was compared to MHC, DT patterns (p=0.001), DT (p=0.008), and time to SI (p<0.001) differed significantly from the MHC group.

4. Conclusion

- DE patients, 56% have avoided Sys. Intervention mean 8 yrs.
- Even DE failures significantly delayed time to systemic intervention by 3.8 years (increased DT to 17.3 mos) compared to MHC (10.0 mos).
- We hypothesize that this benefit is due to improved metabolic syndrome.