

ANSWER KEY

PRESENTATION 1: TREATMENT OF HIGH-RISK PROSTATE CANCER

QUESTION 1

Regarding the “high-risk” classification used by NCCN in 2014, which of the following is true:

- A. Gleason 6 cancer with PSA of 21 would be considered intermediate risk.
- B. Low volume Gleason 8 cancer in one core would be considered intermediate risk.
- C. High volume, bilaterally palpable cancer, T2c, would be considered high risk.
- D. Radical prostatectomy is considered an option for any high-risk patient.

DISCUSSION RE: ANSWER OPTIONS

Correct answer is D.

The NCCN guidelines have evolved over several years and radical prostatectomy is an option for all high risk prostate cancer. It is not recommended for very high risk prostate cancer if there is fixation.

REFERENCE FOR QUESTION 1

Ref: http://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf

QUESTION 2

EORTC showed that 3 years of hormonal therapy in addition to RT was beneficial for high risk prostate cancer. EORTC’s follow up study was what?

- A. 3 years vs. 5 years
- B. 3 years vs. 3 years plus docetaxel
- C. 3 years vs. 6 months
- D. 3 years vs. 18 months

DISCUSSION RE: ANSWER OPTIONS

Correct answer is C.

The EORTC was interested in reducing the morbidity from hormonal therapy and chose to study a dramatically shorter hormonal course, but found that 6 months was not, non-inferior.

REFERENCE FOR QUESTION 2

Bolla M, de Reijke TM, Van Tienhoven G, Van den Bergh AC, Oddens J, Poortmans PM, Gez E, Kil P, Akdas A, Soete G, Kariakine O, van der Steen-Banasik EM, Musat E, Piérart M, Mauer ME, Collette L; EORTC Radiation Oncology Group and Genito-Urinary Tract Cancer Group. Duration of androgen suppression in the treatment of prostate cancer. *N Engl J Med.* 2009 Jun 11;360(24):2516-27. PMID: 19516032.

QUESTION 3

What can be said about dose escalation for prostate cancer?

- A. Higher doses of external beam radiotherapy reduce biochemical failure
- B. Higher doses of external beam radiotherapy improve overall survival
- C. Higher doses of external beam radiotherapy are associated with more side effects
- D. A and C

DISCUSSION RE: ANSWER OPTIONS

Correct answer is D.

Higher doses of external beam generally show a reduction in the risk of biochemical relapse, but have not been shown to improve overall survival. Modest increases in radiation related side effects have been observed in most studies.

REFERENCE FOR QUESTION 3

Peeters ST, Heemsbergen WD, Koper PC, van Putten WL, Slot A, Dielwart MF, Bonfrer JM, Incrocci L, Lebesque JV. Dose-response in radiotherapy for localized prostate cancer: results of the Dutch multicenter randomized phase III trial comparing 68 Gy of radiotherapy with 78 Gy. *J Clin Oncol.* 2006 May 1;24(13):1990-6. PMID: 16648499.

PRESENTATION 2: CURRENT TREATMENT OF PROSTATE CANCER IN THE POST-OPERATIVE SETTING

QUESTION 4

Which subset of patients is best served by adjuvant radiotherapy after radical prostatectomy?

- A. Positive surgical margins
- B. Seminal vesicle invasion
- C. Extracapsular extension
- D. All subsets benefit

DISCUSSION RE: ANSWER OPTIONS

Correct answer is D. All subsets benefit. The randomized trials including the SWOG study could not identify a subset of eligible patients who did not benefit from adjuvant radiotherapy.

ANSWER KEY

REFERENCES FOR QUESTION 4

Collette L, van Poppel H, Bolla M, van Cangh P, Vekemans K, Da Pozzo L, deReijke TM, Verbaeys A, Bosset JF, Piérart M; European Organisation for Research and Treatment of Cancer (EORTC) Radiotherapy and Genito-urinary Groups. Patients at high risk of progression after radical prostatectomy: do they all benefit from immediate post-operative irradiation? (EORTC trial 22911). *Eur J Cancer*. 2005 Nov;41(17):2662-72. PubMed PMID: 16223581.

QUESTION 5

The magnitude of the reduction of biochemical failure with the use of adjuvant radiotherapy in the SWOG randomized trial is:
 A. 5% B. 25% C. 50% D. 75% E. 95%

DISCUSSION RE: ANSWER OPTIONS

Correct answer is C. Adjuvant radiotherapy reduced the risk of biochemical failure from 60% at 5 years to 30% at 5 years, HR 0.43.

REFERENCE FOR QUESTION 5

Thompson IM Jr, Tangen CM, Paradelo J, Lucia MS, Miller G, Troyer D, Messing E, Forman J, Chin J, Swanson G, Canby-Hagino E, Crawford ED. Adjuvant radiotherapy for pathologically advanced prostate cancer: a randomized clinical trial. *JAMA*. 2006 Nov 15;296(19):2329-35. PubMed PMID: 17105795.

QUESTION 6

Of the two large randomized adjuvant radiotherapy trials (SWOG and EORTC), which of the following is true:
 A. Both showed a survival benefit to adjuvant radiotherapy.
 B. Neither showed a survival benefit to adjuvant radiotherapy.
 C. EORTC showed a benefit, but SWOG did not.
 D. SWOG showed a benefit, but EORTC did not.

DISCUSSION RE: ANSWER OPTIONS

Correct answer is D. Despite similar eligibility criteria and despite relatively synchronous accrual periods, the SWOG study showed a significant survival benefit, but EORTC did not.

REFERENCE FOR QUESTION 6

Thompson IM Jr, Tangen CM, Paradelo J, Lucia MS, Miller G, Troyer D, Messing E, Forman J, Chin J, Swanson G, Canby-Hagino E, Crawford ED. Adjuvant radiotherapy for pathologically advanced prostate cancer: a randomized clinical trial. *JAMA*. 2006 Nov 15;296(19):2329-35. PubMed PMID: 17105795.

Bolla M, van Poppel H, Tombal B, Vekemans K, Da Pozzo L, de Reijke TM, Verbaeys A, Bosset JF, van Velthoven R, Colombel M, van de Beek C, Verhagen P, van den Bergh A, Sternberg C, Gasser T, van Tienhoven G, Scalliet P, Haustermans K, Collette L; European Organisation for Research and Treatment of Cancer, Radiation Oncology and Genito-Urinary Groups. Postoperative radiotherapy after radical prostatectomy for high-risk prostate cancer: long-term results of a randomised controlled trial (EORTC trial 22911). *Lancet*. 2012 Dec 8;380(9858):2018-27. PubMed PMID: 23084481.

QUESTION 7

4. Long term biochemical control can be achieved when salvage radiotherapy is given for biochemical failure following radical prostatectomy. For patients with a postoperative PSA between 1.0 and 1.5 ng/ml, the 6-year biochemical control is:
 A. 10% B. 30% C. 50% D. 70%

DISCUSSION RE: ANSWER OPTIONS

Correct answer is B. Approximately 30% of patients can be expected to be without recurrence if radiotherapy is given when the PSA has risen as high as 1-1.5 ng/ml.

REFERENCE FOR QUESTION 7

Stephenson AJ, Scardino PT, Kattan MW, Pisansky TM, Slawin KM, Klein EA, Anscher MS, Michalski JM, Sandler HM, Lin DW, Forman JD, Zelefsky MJ, Kestin LL, Roehrborn CG, Catton CN, DeWeese TL, Liauw SL, Valicenti RK, Kuban DA, Pollack A. Predicting the outcome of salvage radiation therapy for recurrent prostate cancer after radical prostatectomy. *J Clin Oncol*. 2007 May 20;25(15):2035-41. Erratum in: *J Clin Oncol*. 2007 Sep 10;25(26):4153. PubMed PMID: 17513807; PubMed Central PMCID: PMC2670394.