

## **Prostatectomie**

### **Key question**

*Is er een voordeel in overleving - van pN+M0 patiënten met prostaatkanker - bij behandeling door prostatectomie (met of zonder hormonale therapie) in vergelijking met hormonale therapie alleen?*

P: prostate cancer, N+M0, primary treatment

I: radical prostatectomy +/- hormonal therapy

C: hormonal therapy

O: primary: survival (all types); secondary: toxicity, quality of life

### **Search strategy**

Searches were run on May 24 2012 (Pubmed) and May 25 (Embase and Cochrane) for systematic reviews (SRs), randomised controlled trials (RCTs) and observational studies. Pubmed Medline, OVID Embase and the Cochrane Database of Systematic Reviews (CDSR) were searched. Detailed search strings are given below. Studies published in Dutch or English, and including 500 lymph node + patients or more were included.

### **Search results**

#### **Systematic reviews and meta-analyses**

The Medline search yielded 30 hits, while the Embase search yielded 41 hits. The search in the CDSR yielded 6 Cochrane reviews.

#### **Full-text evaluation**

After merging the 3 search files into 1 file and removal of the duplicates, 52 records were screened on title and abstract. Of these 28 were excluded. The most important reasons for exclusion were that studies had a different focus; were on different populations, interventions or comparisons.

Of the remaining 24 studies the full-text was retrieved, mainly for the purpose of reference tracking (all studies were used for reference tracking). Table 4 provides an overview of the evaluation of these studies.

Table 5. Overview of reviews evaluated full-text

	<b>Reference</b>	<b>In- /Excluded</b>	<b>Reason(s)</b>
1	Antonarakis, E. S., A. L. Blackford, et al. (2007). "Survival in men with nonmetastatic prostate cancer treated with hormone therapy: a quantitative systematic review." <i>J Clin Oncol</i> <b>25</b> (31): 4998-5008.	Ex	Other comparison
	Bastian, P. J., S. A. Boorjian, et al. (2012). "High-risk prostate cancer: From definition to contemporary management." <i>European Urology</i> <b>61</b> (6): 1096-1106.	Ex	Other population
	Briganti, A., M. L. Blute, et al. (2009). "Pelvic lymph node dissection in prostate cancer." <i>Eur Urol</i> <b>55</b> (6): 1251-1265.	Ex	Other intervention
	Chodak, G. W., T. Keane, et al. (2002). "Critical evaluation of hormonal therapy for carcinoma of the prostate." <i>Urology</i> <b>60</b> (2): 201-208.	Ex	Narrative review based on a systematic search
5	Harnden, P., M. D. Shelley, et al. (2007). "Should the Gleason grading system for prostate cancer be modified to account for high-grade tertiary components? A systematic review and meta-analysis." <i>Lancet Oncol</i> <b>8</b> (5): 411-419.	Ex	On a Gleason grading system
	Harnden, P., M. D. Shelley, et al. (2008). "Does the extent of carcinoma in prostatic biopsies predict prostate-specific antigen recurrence? A systematic review." <i>Eur Urol</i> <b>54</b> (4): 728-739.	Ex	On the length of biopsy
	Hegarty, J., P. V. Beirne, et al. (2010). "Radical prostatectomy versus watchful waiting for prostate cancer." <i>Cochrane Database Syst Rev</i> (11): CD006590.	Ex	Other population
	Horwich, A. (2004). "Prostate cancer management." <i>Annals of Oncology</i>	Ex	Narrative review

	Reference	In- /Excluded	Reason(s)
	15(SUPPL. 4): iv307-iv312.		
	Hutterer, G. C., A. Briganti, et al. (2007). "The Evolution of Staging of Lymph Node Metastases in Clinically Localized Prostate Cancer." EAU-EBU Update Series 5(4): 153-162.		
10	Karazanashvili, G. and S. Muller (2007). "Is radical prostatectomy an option in high-risk prostate cancer patients?" <i>Georgian Med News</i> (143): 21-26.	Ex	Narrative review
	Katz, M. S., J. A. Efsthathiou, et al. (2010). "The 'CaP Calculator': an online decision support tool for clinically localized prostate cancer." <i>BJU Int</i> <b>105</b> (10): 1417-1422.	Ex	On a decision support tool
	Kumar, S., M. Shelley, et al. (2009). "Neo-adjuvant and adjuvant hormone therapy for localised and locally advanced prostate cancer." <i>Cochrane Database of Systematic Reviews</i> (4)(CD006019).	Ex	Other comparison
	Morgan, S. C., C. Walker-Dilks, et al. (2010). "Does the benefit of adjuvant radiotherapy following radical prostatectomy for pathologic T3 or margin-positive prostate cancer extend to all pathologic subgroups? A meta-analysis of the randomized trials." <i>International Journal of Radiation Oncology Biology Physics</i> <b>1</b> ): S29-S30.	Ex	Other intervention
	Mottet, N., J. Bellmunt, et al. (2011). "EAU guidelines on prostate cancer. Part II: Treatment of advanced, relapsing, and castration-resistant prostate cancer." <i>European Urology</i> <b>59</b> (4): 572-583.	Ex	Part of the EUA guidelines. The full guideline (Heidenreich 2012) was used for reference tracking
15	Ng, J., A. Mahmud, et al. (2010). "Prognostic significance of lymphovascular invasion in radical prostatectomy specimens." <i>Radiotherapy and Oncology</i> <b>96</b> : S50.	Ex	On the prognostic value of lymphatic invasion
	Ng, J., A. Mahmud, et al. (2012). "Prognostic significance of lymphovascular invasion in radical prostatectomy specimens." <i>BJU Int</i> .	Ex	On the prognostic value of lymphatic invasion
	Nilsson, S., B. J. Norlen, et al. (2004). "A systematic overview of radiation therapy effects in prostate cancer." <i>Acta Oncologica</i> <b>43</b> (4): 316-381.	Ex	Other patient groups or no control group
	Peinemann, F., U. Grouven, et al. (2011). "Low-dose rate brachytherapy for men with localized prostate cancer." <i>Cochrane Database Syst Rev</i> (7): CD008871.	Ex	Other population
	Schroder, F. H. (2007). "Early versus delayed endocrine therapy for prostate cancer." <i>Endocrine-Related Cancer</i> <b>14</b> (1): 1-11.	Ex	Narrative review
20	Shelley, M., T. J. Wilt, et al. (2007). "Cryotherapy for localised prostate cancer." <i>Cochrane Database Syst Rev</i> (3): CD005010.	Ex	Other comparison
	Smith, J. (2009). "Commentary on Pelvic Lymph Node Dissection in Prostate Cancer. Briganti A, Blute ML, Eastham JH, Graefen M, Heidenreich A, Karnes JR, Montorsi F, Studer UE, Department of Urology, Vita-Salute University, Milan, Italy." <i>Urologic Oncology: Seminars and Original Investigations</i> <b>27</b> (6): 695.	Ex	Commentary
	Van Poppel, H. and S. Joniau (2008). "An analysis of radical prostatectomy in advanced stage and high-grade prostate cancer." <i>Eur Urol</i> <b>53</b> (2): 253-259.	Ex	Narrative review
	Verhagen, P. C., F. H. Schroder, et al. (2010). "Does local treatment of the prostate in advanced and/or lymph node metastatic disease improve efficacy of androgen-deprivation therapy? A systematic review." <i>Eur Urol</i> <b>58</b> (2): 261-269.	Ex	Narrative review based on a systematic search
24	Yossepowitch, O. and J. A. Eastham (2008). "Radical prostatectomy for high-risk prostate cancer." <i>World J Urol</i> <b>26</b> (3): 219-224.	Ex	Narrative review

### Randomized controlled trials

The Medline search yielded 610 hits, while the Embase search yielded 354 hits.

## Full-text evaluation

After merging the 2 search files into 1 file and removal of the duplicates, 857 hits were screened on title and abstract. Of these, 833 were excluded. The most important reasons for exclusion were that studies had a different focus (concerned with e.g. on DNA or molecular aspects of prostate carcinoma, anesthesia, screening, diagnosis); were on a different intervention, had no control group or a different control group or involved other patients.

Of the remaining 24 studies, the full-text was retrieved, mainly for the reason of reference tracking (all studies were used for reference tracking). Table 6 provides an overview of the evaluation of these studies.

Table 6. Overview of full-text evaluated RCTs

	Reference	In-/Excluded	Reason(s)
1	Alibhai, S. M. H. and S. Gogov (2005). "Radical prostatectomy for early prostate cancer improves long term survival." <i>Cancer Treatment Reviews</i> 31(8): 640-643.	Ex	Other population
	Aus, G., D. Robinson, et al. (2005). "Survival in prostate carcinoma - Outcomes from a prospective, population-based cohort of 8887 men with up to 15 years of follow-up: Results from three counties in the population-based national prostate cancer registry of Sweden." <i>Cancer</i> 103(5): 943-951.	Ex	No separate analysis for lymph node + patients
	Berglund, R. K., J. S. Jones, et al. (2006). "Radical prostatectomy as primary treatment modality for locally advanced prostate cancer: A prospective analysis." <i>Urology</i> 67(6): 1253-1256.	Ex	No control group
	Bill-Axelsson, A., L. Holmberg, et al. (2008). "Radical prostatectomy versus watchful waiting in localized prostate cancer: the Scandinavian prostate cancer group-4 randomized trial." <i>J Natl Cancer Inst</i> 100(16): 1144-1154.	Ex	Other population
5	Bill-Axelsson, A., L. Holmberg, et al. (2011). "Radical prostatectomy versus watchful waiting in early prostate cancer." <i>N Engl J Med</i> 364(18): 1708-1717.	Ex	Other population
	Cooperberg, M. R., A. J. Vickers, et al. (2010). "Comparative risk-adjusted mortality outcomes after primary surgery, radiotherapy, or androgen-deprivation therapy for localized prostate cancer." <i>Cancer</i> 116(22): 5226-5234.	Ex	Other population
	Davis, J. W., M. E. Shaves, et al. (2004). "Contemporary management of prostate cancer with lethal potential." <i>Oncology (Williston Park)</i> 18(7): 811-820; discussion 820-814, 829-832.	Ex	Narrative review
	Dirix, P., K. Haustermans, et al. (2006). "The role of whole pelvic radiotherapy in locally advanced prostate cancer." <i>Radiotherapy and Oncology</i> 79(1): 1-14.	Ex	Narrative review
	Grimm, M. O., S. Kamphausen, et al. (2002). "Clinical outcome of patients with lymph node positive prostate cancer after radical prostatectomy versus androgen deprivation." <i>Eur Urol</i> 41(6): 628-634; discussion 634.	Ex	82 patients
10	Grubb, R. L. and A. S. Kibel (2010). "High-risk localized prostate cancer: role of radical prostatectomy." <i>Curr Opin Urol</i> 20(3): 204-210.	Ex	Narrative review
	Halabi, S., N. J. Vogelzang, et al. (2007). "The impact of prior radical prostatectomy in men with metastatic castration recurrent prostate cancer: a pooled analysis of 9 Cancer and Leukemia Group B Trials." <i>J Urol</i> 177(2): 531-534.	Ex	No separate analysis for lymph node + patients
	Hellman, S. and R. R. Weichselbaum (2005). "Importance of local control in an era of systematic therapy." <i>Nature Clinical Practice Oncology</i> 2(2): 60-61.	Ex	Narrative review
	Hurwitz, M. D., D. Schultz, et al. (2006). "Radical prostatectomy for high-grade prostate cancer." <i>Urology</i> 68(2): 367-370.	Ex	No control group
	Iversen, P., M. P. Wirth, et al. (2004). "Is the efficacy of hormonal therapy affected by lymph node status? data from the bicalutamide (Casodex) Early Prostate Cancer program." <i>Urology</i> 63(5): 928-933.	Ex	Other comparison
15	Johansson, E., G. Steineck, et al. (2011). "Long-term quality-of-life outcomes after radical prostatectomy or watchful waiting: the Scandinavian Prostate Cancer Group-4 randomised trial." <i>Lancet Oncol</i> 12(9): 891-899.	Ex	Other population
	Johnstone, P. A., K. C. Ward, et al. (2006). "Radical prostatectomy for clinical T4 prostate cancer." <i>Cancer</i> 106(12): 2603-2609.	Ex	77 patients
	Kawakami, J., J. E. Cowan, et al. (2006). "Androgen-deprivation therapy as primary treatment for localized prostate cancer: data from Cancer of the Prostate Strategic Urologic Research Endeavor (CaPSURE)." <i>Cancer</i> 106(8): 1708-1714.	Ex	Other population
	Lin, D. W., M. Porter, et al. (2009). "Treatment and survival outcomes in young men diagnosed with prostate cancer: a Population-based Cohort Study." <i>Cancer</i> 115(13): 2863-2871.	Ex	No separate analysis for lymph node + patients
	Rogers, C. (2003). "Re: Disease progression and survival of patients with positive	Ex	Letter

	Reference	In-/Excluded	Reason(s)
	lymph nodes after radical prostatectomy. Is there a chance of cure?" <i>J Urol</i> 170(5): 1955; author reply 1955-1956.		
20	Soloway, M. and M. Roach, 3rd (2005). "Prostate cancer progression after therapy of primary curative intent: a review of data from prostate-specific antigen era." <i>Cancer</i> 104(11): 2310-2322.	Ex	Other comparison
	Swanson, G., I. Thompson, et al. (2006). "Metastatic Prostate Cancer-Does Treatment of the Primary Tumor Matter?" <i>Journal of Urology</i> 176(4): 1292-1298.	Ex	Narrative review
	Thurairaja, R., J. Osborn, et al. (2006). "Radical prostatectomy with positive surgical margins: How are patients managed?" <i>BJU International</i> 97(3): 445-450.	Ex	Narrative review
	Wiegand, L. R., M. Hernandez, et al. (2011). "Surgical management of lymph-node-positive prostate cancer: improves symptomatic control." <i>BJU Int</i> 107(8): 1238-1242.	Ex	192 patients
24	Yossepowitch, O. and J. A. Eastham (2008). "Role of radical prostatectomy in the treatment of high-risk prostate cancer." <i>Curr Urol Rep</i> 9(3): 203-210.	Ex	Narrative review

## Observational studies

### Full-text evaluation

The Medline search yielded 2115 hits, while the Embase search yielded 2661 hits. After merging the 2 search files into 1 file and removal of the duplicates, 3664 hits were screened on title and abstract. Of these, 3619 were excluded. The most important reasons for exclusion were that studies were on other interventions or comparisons or in other populations.

Of the remaining 45 studies the full text was retrieved, mainly for the purpose of reference tracking (all studies were used for reference tracking) (table 7).

Table 7. Overview of observational studies, evaluated full-text

	Reference	In-/Excluded	Reason(s)
1	Adams, J. and L. Cheng (2011). "Lymph node-positive prostate cancer: current issues, emerging technology and impact on clinical outcome." <i>Expert Rev Anticancer Ther</i> 11(9): 1457-1469.	Ex	Narrative review
	Aus, G., K. Nordenskjold, et al. (2003). "Prognostic factors and survival in node-positive (N1) prostate cancer - A prospective study based on data from a Swedish population-based cohort." <i>European Urology</i> 43(6): 627-631.	Ex	181 patients
	Bastian, P. J., A. Buchner, et al. (2009). "Improved survival in prostate cancer patients with positive lymph nodes during radical prostatectomy - The advantage of completed surgery." <i>Journal of Urology</i> 1): 573.	In	
	Bastian, P. J., J. Engel, et al. (2009). "Survival in prostate cancer patients with positive lymph nodes during radical prostatectomy-the advantage of completed surgery." <i>European Urology, Supplements</i> 8 (4): 250.	In	
5	Brunk, D. (2011). "Radiotherapy aids survival in clinically staged, node+ prostate Ca." <i>Oncology Report</i> (JANUARY): 25.	Ex	Interview with Dr. Tward (Tward 2010)
	Dorin, R., S. Daneshmand, et al. (2011). "Outcomes of patients with lymph node positive disease following open radical retropubic prostatectomy for clinically localized prostate cancer." <i>Journal of Urology</i> 1): e259.	Ex	No control group
	Engel, J., P. J. Bastian, et al. (2010). "Survival benefit of radical prostatectomy in lymph node-positive patients with prostate cancer." <i>Eur Urol</i> 57(5): 754-761.	In	See also editorial Studer 2010
	Engel, J., D. Holzels, et al. (2010). "Reply to XiaoJian Qin and DingWei Ye's letter to the editor re: Jutta Engel, Patrick J. Bastian, Helmut Baur, et al. Survival benefit of radical prostatectomy in lymph node-positive patients with prostate cancer. <i>Eur Urol</i> 2010;57:754-61." <i>European Urology</i> 58(4): e44.	Ex	Letter
	Fleischmann, A., S. Schobinger, et al. (2008). "Prognostic factors in lymph node metastases of prostatic cancer patients: the size of the metastases but not extranodal extension independently predicts survival." <i>Histopathology</i> 53(4): 468-475.	Ex	No control group
10	Froehner, M., R. Koch, et al. (2012). "Lymph node positive prostate cancer: Which factors predict survival?" <i>Journal of Urology</i> 1): e312.	Ex	Other comparison
	Gallina, A., A. Briganti, et al. (2012). "A single positive lymph node has no detrimental effect on survival of patients with prostate cancer treated with extended pelvic lymph node dissection. Results of a matched controlled analysis." <i>Journal of Urology</i> 1): e314-e315.	Ex	No control group
	Gnanapragasam, V. J., M. D. Mason, et al. (2012). "The role of surgery in high-risk	Ex	Narrative review

	Reference	In- /Excluded	Reason(s)
	localised prostate cancer." <i>BJU International</i> <b>109</b> (5): 648-658.		
	Gomella, L. G. (2010). "Re: Survival benefit of radical prostatectomy in lymph node-positive patients with prostate cancer." <i>Eur Urol</i> <b>57</b> (5): 915-916.	Ex	Commentary
	Hadley, J., K. R. Yabroff, et al. (2010). "Comparative effectiveness of prostate cancer treatments: evaluating statistical adjustments for confounding in observational data." <i>J Natl Cancer Inst</i> <b>102</b> (23): 1780-1793.	Ex	No separate analysis of lymph node + patients
15	Hakenberg, O. W., M. Frohner, et al. (2006). "Treatment of locally advanced prostate cancer--the case for radical prostatectomy." <i>Urol Int</i> <b>77</b> (3): 193-199.	Ex	Narrative review
	Hamstra, D. A., J. M. Michalski, et al. (2010). "Do not count out external-beam radiation therapy for high-risk prostate cancer." <i>Journal of Clinical Oncology</i> <b>28</b> (28): e518-e519.	Ex	Other comparison
	Heidenreich, A. (2011). "Role of radical prostatectomy in locally advanced prostate cancer." <i>Critical Reviews in Oncology/Hematology</i> <b>78</b> : S11-S14.	Ex	Narrative review
	Higuchi, T., R. Breau, et al. (2011). "Outcomes of patients with pathologic lymph node metastases treated with radical prostatectomy; the prognostic value of preoperative radiographic lymphadenopathy." <i>Journal of Urology</i> <b>1</b> : e357-e358.	Ex	Other comparison
	Higuchi, T. T., R. H. Breau, et al. (2011). "Outcomes of patients with clinical lymphadenopathy treated with radical prostatectomy." <i>Journal of Clinical Oncology, Conference</i> <b>29</b> (7 SUPPL. 1).	Ex	Other comparison
20	Hofer, M. D., R. Kuefer, et al. (2006). "Prognostic factors in lymph node-positive prostate cancer." <i>Urology</i> <b>67</b> (5): 1016-1021.	Ex	No control group
	Johnstone, P. A. S., R. H. Riffenburgh, et al. (2007). "Applying Population Dynamics Modeling to Patients With Lymph Node Positive Prostate Cancer." <i>Journal of Urology</i> <b>178</b> (5): 1952-1956.	Ex	Other outcome
	Jonsson, E., H. P. Sigbjarnarson, et al. (2006). "Adenocarcinoma of the prostate in Iceland: a population-based study of stage, Gleason grade, treatment and long-term survival in males diagnosed between 1983 and 1987." <i>Scand J Urol Nephrol</i> <b>40</b> (4): 265-271.	Ex	Other patient groups
	Khurana, K., A. Stephenson, et al. (2011). "Overall survival (OS) and prostate cancer-specific mortality (PCSM) among contemporary men with screen-detected, localized prostate cancer managed by active surveillance (AS) versus definitive local therapy." <i>Journal of Urology</i> <b>1</b> : e585.	Ex	Other patient group
	Lowrance, W. T., E. B. Elkin, et al. (2012). "Locally advanced prostate cancer: a population-based study of treatment patterns." <i>BJU Int</i> <b>109</b> (9): 1309-1314.	Ex	Other patient group
25	Nishimura, K., Y. Kobayashi, et al. (2008). "Comparison of health related quality of life between hormone therapy and radical prostatectomy for clinically localized and locally advanced prostate cancer in Japanese males." <i>Current Urology</i> <b>2</b> (3): 150-156.	Ex	Other patient group
	Oderda, M., S. Joniau, et al. (2012). "Debulking surgery in the setting of very high-risk prostate cancer scenarios." <i>BJU Int</i> .	Ex	Narrative review
	Pollack, A., E. M. Horwitz, et al. (2003). "Treatment of prostate cancer with regional lymph node (N1) metastasis." <i>Semin Radiat Oncol</i> <b>13</b> (2): 121-129.	Ex	Narrative review
	Qin, X. and D. Ye (2010). "Re: Jutta Engel, Patrick J. Bastian, Helmut Baur, et al. Survival benefit of radical prostatectomy in lymph node-positive patients with prostate cancer. <i>Eur Urol</i> 2010;57:754-61." <i>Eur Urol</i> <b>58</b> (4): e43; author reply e44.	Ex	Comment
	Schmitges, J., Q. D. Trinh, et al. (2011). "Surgery for high-risk localized prostate cancer." <i>Therapeutic Advances in Urology</i> <b>3</b> (4): 173-182.	Ex	Narrative review
30	Schulman, C. C., J. Irani, et al. (2010). "Androgen-deprivation therapy in prostate cancer: A European expert panel review." <i>European Urology, Supplements</i> <b>9</b> (7): 675-691.	Ex	Expert panel review
	Steuber, T., F. Beier, et al. (2010). "More evidence that local treatment matters: An updated survival analysis of radical prostatectomy and pelvic lymphadenectomy (PLND) (PT2-4) versus plnd alone (PTX) in men with lymph node positive disease." <i>European Urology, Supplements</i> <b>9</b> (2): 74.	Ex	158 patients
	Steuber, T., L. Budaus, et al. (2011). "Radical prostatectomy improves progression-free and cancer-specific survival in men with lymph node positive prostate cancer in the prostate-specific antigen era: a confirmatory study." <i>BJU Int</i> <b>107</b> (11): 1755-1761.	Ex	158 patients
	Studer, U. E., L. Collette, et al. (2010). "Can radical prostatectomy benefit patients despite the presence of regional metastases?" <i>Eur Urol</i> <b>57</b> (5): 762-763; author reply 763-765.	Ex	Narrative review
	Swanson, G. P., M. W. Riggs, et al. (2008). "Long-term outcome for lymph node-positive prostate cancer." <i>Prostate Cancer Prostatic Dis</i> <b>11</b> (2): 198-202.	Ex	86 patients
35	Swanson, G. P., I. M. Thompson, et al. (2006). "Current status of lymph node-positive prostate cancer: Incidence and predictors of outcome." <i>Cancer</i> <b>107</b> (3): 439-450.	Ex	Narrative review
	Swanson, G. P., I. M. Thompson, et al. (2006). "Treatment options in lymph node-positive prostate cancer." <i>Cancer</i> <b>106</b> (12): 2531-2539.	Ex	Narrative review

	Reference	In- /Excluded	Reason(s)
	Tai, P. and M. Crichlow (2003). "Practical aspects of surgical treatment for prostate cancer." <i>Nowotwory</i> <b>53</b> (4): 377-388.	Ex	Narrative review
	Thalman, G. N. (2009). "Positive Lymph Nodes at Lymphadenectomy for Prostate Cancer: Where Do We Set the Tiller?" <i>European Urology</i> <b>55</b> (2): 271-272.	Ex	Comment
	Tward, J. D. and D. C. Shrieve (2010). "Radiotherapy is correlated with superior survival in clinically node positive prostate cancer." <i>International Journal of Radiation Oncology Biology Physics</i> <b>1</b> : S31.	In	For question 2b
40	Tward, J. D. and D. C. Shrieve (2011). "Correlation of radiotherapy with cause-specific and overall survival in clinically node-positive prostate cancer." <i>Journal of Clinical Oncology. Conference</i> <b>29</b> (7 SUPPL. 1).	In	For question 2b
	Van Andel, G. and K. H. Kurth (2003). "The impact of androgen deprivation therapy on health related quality of life in asymptomatic men with lymph node positive prostate cancer." <i>European Urology</i> <b>44</b> (2): 209-214.	Ex	Other comparison
	Van Poppel, H., S. Joniau, et al. (2007). "Surgery alone for advanced prostate cancer?" <i>European Journal of Cancer, Supplement</i> <b>5</b> (5): 157-169.	Ex	Narrative review
	Warde, N. (2010). "Prostate cancer: Should radical prostatectomy be abandoned in patients with lymph-node-positive prostate cancer?" <i>Nat Rev Urol</i> <b>7</b> (6): 301.	Ex	Comment
	Wirth, M. P., O. W. Hakenberg, et al. (2007). "Optimal treatment of locally advanced prostate cancer." <i>World J Urol</i> <b>25</b> (2): 169-176.	Ex	Narrative review
45	Zhou, E. H., R. J. Ellis, et al. (2009). "Radiotherapy and survival in prostate cancer patients: a population-based study." <i>Int J Radiat Oncol Biol Phys</i> <b>73</b> (1): 15-23.	Ex	Not specified per lymph node + patients

### Included studies

One study, described in three reports, was included for quality appraisal and data extraction. One study, described in two reports, was retained for the key question considering EBRT.