



**INFORME DE BÚSQUEDA SISTEMÁTICA DE EVIDENCIA DE LOS EFECTOS  
DESEABLES E INDESEABLES**

Guía de Práctica Clínica Cáncer de testículos en personas de  
15 años y más - 2017

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## TABLA RESUMEN

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|--|---|
| <b>Problema de salud</b>                 | Cáncer de testículos en personas de 15 años y más   |
| <b>ICD10</b>                             | C62   |
| <b>Fecha de entrega</b>                  | 08/10/2017  |
| <b>Investigador responsable</b>          | Gabriel Rada Giacaman   |
| <b>Número de revisiones sistemáticas</b> | 81  |
| <b>Número de preguntas</b>               | 69  |
| <b>L-OVE</b>                             | Testicular cancer   |
| <b>L-OVE URL</b>                         | <a href="https://love.epistemonikos.org/#/diseases/germ_cell_tumor/about">https://love.epistemonikos.org/#/diseases/germ_cell_tumor/about</a> |

## ESTRATEGIA DE BÚSQUEDA

Se realizaron búsquedas en Epistemonikos, una base de datos exhaustiva de revisiones sistemáticas relevantes para la toma de decisiones en salud. No se aplican restricciones en base al idioma o estado de publicación. La búsqueda de evidencia fue realizada en las siguientes bases de datos<sup>1</sup> con las estrategias descritas en el Apéndice 1.

1. Cochrane database of systematic reviews (CDSR)
2. Database of Abstracts of Reviews of Effectiveness (DARE)
3. HTA Database
4. PubMed
5. LILACS
6. CINAHL.
7. PsychINFO.
8. EMBASE.
9. EPPI-Centre Evidence Library
10. 3ie Systematic Reviews and Policy Briefs Campbell Library
11. Clinical Evidence.
12. SUPPORT Summaries
13. WHO Institutional Repository for Information Sharing
14. NICE public health guidelines and systematic reviews
15. ACP Journal Club.
16. Evidencias en Pediatría
17. The JBI Database of Systematic Reviews and Implementation Reports

## CRITERIOS DE INCLUSIÓN

Consideramos todas las revisiones sistemáticas que están sintetizando estudios primarios (tanto experimentales como observacionales) de acuerdo a la definición empleada por la Colaboración Cochrane y la declaración PRISMA<sup>2</sup>.

Una revisión elegible debe cumplir con los siguientes criterios operacionales:

1. Reporta una búsqueda en al menos una base de datos electrónica.
2. Reporta al menos uno de los siguientes criterios inclusión de los estudios:
  - **Tipo de participantes:** Se incluyen todas las revisiones sistemáticas que resuman estudios que respondan la pregunta acerca de intervenciones para el alivio del dolor por cáncer avanzado y cuidados paliativos en humanos.

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<sup>1</sup> La actualización se realiza de manera semanal. Se encuentra disponible en la plataforma digital un sistema de alerta que permite informar a través de correo electrónico la publicación de nuevos estudios que dan respuesta a las preguntas definidas, de manera de mantener continuamente actualizada la evidencia.

<sup>2</sup> “Una revisión sistemática intenta recopilar toda la evidencia empírica para responder a una pregunta de investigación específica, que cumple con criterios previamente definidos. Utiliza métodos explícitos y sistemáticos, que se eligen con miras a minimizar el sesgo, de manera de entregar hallazgos confiables que permitan sacar conclusiones y tomar decisiones”.

- **Tipo de desenlaces:** Se incluyen revisiones que presentan una síntesis (cuantitativa o cualitativa) de al menos un desenlace importante para el paciente u otra información relevante para tomar decisiones poblacionales o individuales acerca de intervenciones para el alivio del dolor por cáncer avanzado y cuidados paliativos en humanos.

## RECOLECCIÓN, ANÁLISIS Y SÍNTESIS DE DATOS

### SELECCIÓN DE LAS REVISIONES

Al menos dos revisores, de manera independiente, realizaron el cribado de los títulos y resúmenes para identificar los artículos relevantes. El texto completo de las revisiones potencialmente elegibles fue recuperado y evaluado, de manera independiente, para su inclusión final. Un tercer investigador resolvió cualquier discrepancia que pudiera haberse provocado entre los distintos revisores.

### MAPEO DE LA EVIDENCIA

Con el objetivo de generar un listado exhaustivo de todas las posibles preguntas relacionadas con el tópico del L-OVE: *Testicular cancer*<sup>3</sup>, se realiza la agrupación de las revisiones resultantes en formato PICO, es decir: población, intervención, comparación y desenlace [*outcome*]) utilizamos las siguientes fuentes:

1. Guías y documentos
2. Criterios de inclusión de las revisiones sistemáticas identificadas
3. Consulta con expertos
4. Retroalimentación de los usuarios

Como resultado final la plataforma incluye toda la evidencia disponible en revisiones sistemáticas y sus estudios primarios incluidos, segregada por nodos de evidencia que representan cada una de las preguntas priorizadas para actualización de la guía (Ver “Diagrama de flujo PRISMA” en Apéndice 2 y “Referencia Seleccionada” en Apéndice 3).

### ACTUALIZACIÓN – “LIVING”

Todas las búsquedas a través de esta plataforma se mantienen continuamente actualizada gracias a la tecnología implementada en el buscador de Epistemonikos y sus distintos colaboradores. Por lo cual, tanto la cantidad de revisiones, preguntas, entre otros datos cambian continuamente. Los datos presentados en este informe son los correspondientes a la fecha de entrega.

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<sup>3</sup>Ver resultados de la búsqueda en: [https://love.epistemonikos.org/#/diseases/germ\\_cell\\_tumor/about](https://love.epistemonikos.org/#/diseases/germ_cell_tumor/about)

## APÉNDICE 1. ESTRATEGIAS DE BÚSQUEDA

### Cochrane Library - Cochrane database of systematic reviews (CDSR)

<http://www.thecochranelibrary.com>

((cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*)) , in Title, Abstract, Keywords: Cochrane Reviews (Reviews NOT protocols)

### Medline/PubMed - US National Library of Medicine

<http://www.ncbi.nlm.nih.gov/pubmed/>

((cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*)) AND (MEDLINE[Title/Abstract] OR (systematic[Title/Abstract] AND review[Title/Abstract]) OR meta analysis[Publication Type])

### EMBASE (Excerpta Medica dataBASE)

<http://www.embase.com>

Frequency of search: weekly  
((cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*)) AND meta-analysis.tw. OR systematic review.tw

### CINAHL (Cumulative Index to Nursing and Allied Health Literature)

<https://www.ebscohost.com/nursing/products/cinahl-databases/the-cinahl-database>

((cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*)) AND ((TI meta analys\* or AB meta analys\*) or (TI systematic review or AB systematic review))

### PsycINFO

<http://www.apa.org/pubs/databases/psycinfo>

((cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*)) AND (meta-analysis OR search\*)

### LILACS (Literatura Latinoamericana y del Caribe en Ciencias de la Salud)

<http://lilacs.bvsalud.org/en/>

((cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*)) AND (tw:"revision sistematica" or tw:"revisao sistematica" or tw:"systematic review") or ((MH:"Literatura de Revision como asunto" OR MH:"Metanalisis como asunto" OR PT:Revision OR PT:Metanalisis) and (TW:Metaanal\$ OR TW:"Meta-analysis" OR TW:"Meta-analise" OR TW:"Meta-analysis" OR TI:overview\$ or TW:"estudio sistematico" OR TW:"systematic study" OR TW:"estudo sistematico" OR TI:review OR TI:revisao OR TI:revision))

### DARE (Database of Abstracts of Reviews of Effectiveness) - Centre for Reviews and Dissemination, University of York

<http://www.crd.york.ac.uk/CRDWeb/>

(cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*) , in Any field: CRD assessed review (bibliographic)/ CRD assessed review (full abstract)

### HTA Database

<http://www.crd.york.ac.uk/CRDWeb/>

(cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*) , in Any field

### The Campbell Collaboration Online Library

<https://www.campbellcollaboration.org/library.html>

(cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*) , in Title:  
Review

### JBI Database of Systematic Reviews and Implementation Reports

<http://journals.lww.com/jbisrir/pages>

((cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*)) AND  
(review OR meta\*), in All fields

### EPPI-Centre Evidence Library

<http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=56>

(cancer OR neopl\* OR tumor OR maligna\*) AND (testis OR testicul\* OR semino\* OR germ\*) All records  
in chronological list (<http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=62>)

## APÉNDICE 2. DIAGRAMA DE FLUJO PRISMA





### APÉNDICE 3. REFERENCIAS SELECCIONADAS

1. Bell D, Morash C, Dranitsaris G, Izawa J, Short T, Klotz LH, Fleshner N, Canadian surgical wait times (SWAT) initiative. Does prolonging the time to testicular cancer surgery impact long-term cancer control: a systematic review of the literature. *The Canadian journal of urology*. 2006;13 Suppl 3:30-6.
2. Giannarini G, Mogorovich A, Bardelli I, Manassero F, Selli C. Testis-sparing surgery for benign and malignant tumors: A critical analysis of the literature. *Indian journal of urology : IJU : journal of the Urological Society of India*. 2008;24(4):467-74.
3. Giannarini G, Dieckmann KP, Albers P, Heidenreich A, Pizzocaro G. Organ-sparing surgery for adult testicular tumours: a systematic review of the literature. *European urology*. 2010;57(5):780-90.
4. Risk MC, Masterson TA. Intratubular germ cell neoplasms of the testis and bilateral testicular tumors: clinical significance and management options. *Indian journal of urology : IJU : journal of the Urological Society of India*. 2010;26(1):64-71.
5. Rovito MJ, Cavayero C, Leone JE, Harlin S. Interventions Promoting Testicular Self-Examination (TSE) Performance: A Systematic Review. *American journal of men's health*. 2014;9(6):506-18.
6. Austoker J, Bankhead C, Forbes LJ, Atkins L, Martin F, Robb K, Wardle J, Ramirez AJ. Interventions to promote cancer awareness and early presentation: systematic review. *British journal of cancer*. 2009;101 Suppl 2(SUPPL. 2):S31-9.
7. Saab MM, Landers M, Hegarty J. Promoting Testicular Cancer Awareness and Screening: A Systematic Review of Interventions. *Cancer nursing*. 2016;39(6):473-487.
8. Tan IB, Ang KK, Ching BC, Mohan C, Toh CK, Tan MH. Testicular microlithiasis predicts concurrent testicular germ cell tumors and intratubular germ cell neoplasia of unclassified type in adults: a meta-analysis and systematic review. *Cancer*. 2010;116(19):4520-32.
9. Giannatempo P., Greco T., Tana S., Nicolai N., Raggi D., Fare E., Avuzzi B., Marongiu M., Piva L., Catanzaro M., BIASONI D., Torelli T., Stagni S., Maffezzini M., Gianni A., Salvioni R., Mariani L., Necchi A.. Radiotherapy or chemotherapy for clinical stage IIA and IIB seminoma: A systematic review and meta-analysis of patient outcomes. *European Urology, Supplements*. 2014;13(5):165-166.
10. Hillner BE, Smith TJ, Desch CE. Hospital and physician volume or specialization and outcomes in cancer treatment: importance in quality of cancer care. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. 2000;18(11):2327-40.
11. Martin JM, Panzarella T, Zwahlen DR, Chung P, Warde P. Evidence-based guidelines for following stage 1 seminoma. *Cancer*. 2007;109(11):2248-56.
12. Neale RE, Carrière P, Murphy MF, Baade PD. Testicular cancer in twins: a meta-analysis. *British journal of cancer*. 2008;98(1):171-3.
13. Henna MR, Del Nero RG, Sampaio CZ, Atallah AN, Schettini ST, Castro AA, Soares BG. Hormonal cryptorchidism therapy: systematic review with metanalysis of randomized clinical trials. *Pediatric surgery international*. 2004;20(5):357-9.
14. de Boer AG, Taskila T, Ojajärvi A, van Dijk FJ, Verbeek JH. Cancer survivors and unemployment: a meta-analysis and meta-regression. *JAMA*. 2009;301(7):753-62.
15. Gurney J, Shaw C, Stanley J, Signal V, Sarfati D. Cannabis exposure and risk of testicular cancer: a systematic review and meta-analysis. *BMC cancer*. 2015;15(1):897.
16. van Dijk MR, Steyerberg EW, Habbema JD. Survival of non-seminomatous germ cell cancer patients according to the IGCC classification: An update based on meta-analysis. *European journal of cancer (Oxford, England : 1990)*. 2006;42(7):820-6.
17. Zengerling F, Kunath F, Jensen K, Ruf C, Schmidt S, Spek A. Prognostic factors for tumor recurrence in patients with clinical stage I seminoma undergoing surveillance-A systematic review. *Urologic oncology*. 2017;
18. Zequi Sde C, da Costa WH, Santana TB, Favaretto RL, Sacomani CA, Guimaraes GC. Bilateral testicular germ cell tumours: a systematic review. *BJU international*. 2012;110(8):1102-9.
19. Simnett SJ, Stewart LA, Sweetenham J, Morgan G, Johnson PW. Autologous stem cell transplantation for malignancy: a systematic review of the literature. *Clinical and laboratory haematology*. 2000;22(2):61-72.
20. Winquist EW, Bauman GS, Balogh J. Nontraumatic osteonecrosis after chemotherapy for testicular cancer: a systematic review. *American journal of clinical oncology*. 2001;24(6):603-6.
21. Müller J, Schrader AJ, Jentzmik F, Schrader M. [Assessment of residual tumours after systemic treatment of metastatic seminoma: <sup>18</sup>F-2-fluoro-2-deoxy-D-glucose positron emission tomography - meta-analysis of diagnostic value]. *Der Urologe. Aug. A*. 2011;50(3):322-7.

22. Hillelsohn JH, Duty BD, Okhunov Z, Kavoussi LR. Laparoscopic retroperitoneal lymph node dissection for testicular cancer. *Arab journal of urology*. 2012;10(1):66-73.
23. Martin RM, Gunnell D, Owen CG, Smith GD. Breast-feeding and childhood cancer: A systematic review with metaanalysis. *International journal of cancer. Journal international du cancer*. 2005;117(6):1020-31.
24. Zengerling F., Kunath F., Jensen K., Ruf C., Schmidt S., Spek A.. Prognostic factors for tumor relapse in seminoma stage I patients: A systematic review. *Journal of Clinical Oncology*. 2016;
25. Siracusano S, Diminutto A, Porcaro AB, Cerruto MA, Artibani W. Use of AUC7 adjuvant carboplatin in patients with stage I seminoma: systematic review of the literature. *Tumori*. 2016;:0.
26. Thune I, Furberg AS. Physical activity and cancer risk: dose-response and cancer, all sites and site-specific. *Medicine and science in sports and exercise*. 2001;33(6 Suppl):S530-50; discussion S609-10.
27. Oing C, Alsdorf WH, von Amsberg G, Oechsle K, Bokemeyer C. Platinum-refractory germ cell tumors: an update on current treatment options and developments. *World journal of urology*. 2016;35(8):1167-1175.
28. Petrelli F, Coinu A, Cabiddu M, Ghilardi M, Borgonovo K, Lonati V, Barni S. Surveillance or Adjuvant Treatment With Chemotherapy or Radiotherapy in Stage I Seminoma: A Systematic Review and Meta-Analysis of 13 Studies. *Clinical genitourinary cancer*. 2015;13(5):428-34.
29. Hotte SJ, Mayhew LA, Jewett M, Chin J, Winquist E, Genitourinary Cancer Disease Site Group of the Cancer Care Ontario Program in Evidence-based Care. Management of stage I non-seminomatous testicular cancer: a systematic review and meta-analysis. *Clinical oncology (Royal College of Radiologists (Great Britain))*. 2010;22(1):17-26.
30. Shim K, MacKenzie MJ, Winquist E. Chemotherapy-associated osteonecrosis in cancer patients with solid tumours: a systematic review. *Drug safety*. 2008;31(5):359-71.
31. Vergouwe Y, Steyerberg EW, Eijkemans MJ, Albers P, Habbema JD. Predictors of occult metastasis in clinical stage I nonseminoma: a systematic review. *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*. 2003;21(22):4092-9.
32. Petrelli F, Coinu A, Rosti G, Pedrazzoli P, Barni S. Salvage treatment for testicular cancer with standard- or high-dose chemotherapy: a systematic review of 59 studies. *Medical oncology (Northwood, London, England)*. 2017;34(8):133.
33. Yousif L, Blettner M, Hammer GP, Zeeb H. Testicular cancer risk associated with occupational radiation exposure: a systematic literature review. *Journal of radiological protection : official journal of the Society for Radiological Protection*. 2010;30(3):389-406.
34. Dieckmann KP, Pichlmeier U. Clinical epidemiology of testicular germ cell tumors. *World journal of urology*. 2004;22(1):2-14.
35. Djaladat H, Burner E, Parikh PM, Beroukhim Kay D, Hays K. The Association Between Testis Cancer and Semen Abnormalities Before Orchiectomy: A Systematic Review. *Journal of adolescent and young adult oncology*. 2014;3(4):153-159.
36. Lagorio S, Grande E, Martina L. [Review of epidemiological studies of cancer risk among Gulf War and Balkans veterans]. *Epidemiologia e prevenzione*. 2008;32(3):145-55.
37. Wang T, Liu L, Luo J, Liu T, Wei A. A Meta-Analysis of the Relationship between Testicular Microlithiasis and Incidence of Testicular Cancer. *Urology journal*. 2015;12(2):2057-64.
38. Giusti RM, Iwamoto K, Hatch EE. Diethylstilbestrol revisited: a review of the long-term health effects. *Annals of internal medicine*. 1995;122(10):778-88.
39. Bozcuk H, Ozdogan M. The predictors of the efficacy of high-dose chemotherapy and stem cell support in the management of metastatic germ cell cancer. *Bratislavské lekárske listy*. 2011;112(5):296-304.
40. Joudi FN, Konety BR. The impact of provider volume on outcomes from urological cancer therapy. *The Journal of urology*. 2005;174(2):432-8.
41. Zhao JY, Ma XL, Li YY, Zhang BL, Li MM, Ma XL, Liu L. Diagnostic accuracy of 18F-FDG-PET in patients with testicular cancer: a meta-analysis. *Asian Pacific journal of cancer prevention : APJCP*. 2014;15(8):3525-31.
42. LeMasters GK, Genaidy AM, Succop P, Deddens J, Sobeih T, Barriera-Viruet H, Dunning K, Lockey J. Cancer risk among firefighters: a review and meta-analysis of 32 studies. *Journal of occupational and environmental medicine / American College of Occupational and Environmental Medicine*. 2006;48(11):1189-202.
43. Trabert B, Graubard BI, Erickson RL, McGlynn KA. Childhood infections, orchitis and testicular germ cell tumours: a report from the STEED study and a meta-analysis of existing data. *British journal of cancer*. 2012;106(7):1331-4.

44. Shelley MD, Burgon K, Mason MD. Treatment of testicular germ-cell cancer: a cochrane evidence-based systematic review. *Cancer treatment reviews*. 2002;28(5):237-53.
45. Lin K, Sharangpani R. Screening for testicular cancer: an evidence review for the U.S. Preventive Services Task Force. *Annals of internal medicine*. 2010;153(6):396-9.
46. Tuomisto J, Holl K, Rantakokko P, Koskela P, Hallmans G, Wadell G, Stattin P, Dillner J, Ogmundsdottir HM, Vartiainen T, Lehtinen M, Pukkala E. Maternal smoking during pregnancy and testicular cancer in the sons: a nested case-control study and a meta-analysis. *European journal of cancer (Oxford, England : 1990)*. 2009;45(9):1640-8.
47. Cook MB, Akre O, Forman D, Madigan MP, Richiardi L, McGlynn KA. A systematic review and meta-analysis of perinatal variables in relation to the risk of testicular cancer--experiences of the mother. *International journal of epidemiology*. 2009;38(6):1532-42.
48. Castejón Casado J, Jiménez Alvarez C, Alaminos Mingorance M, Valladares Mendías JC, Fernández Valadés R. [Cancer-cryptorchism meta-analysis]. *Cirugía pediátrica : organo oficial de la Sociedad Española de Cirugía Pediátrica*. 2000;13(3):92-6.
49. Soejima T, Kamibeppu K. Are cancer survivors well-performing workers? A systematic review. *Asia-Pacific journal of clinical oncology*. 2016;12(4):e383-e397.
50. Huang Y.-H.J., Zhang Z.-F., Tashkin D.P., Feng B., Straif K., Hashibe M.. An epidemiologic review of marijuana and cancer: An update. *Cancer Epidemiology Biomarkers and Prevention*. 2015;24(1):15-31.
51. Huyghe E, Matsuda T, Thonneau P. Increasing incidence of testicular cancer worldwide: a review. *The Journal of urology*. 2003;170(1):5-11.
52. Shaikh F, Nathan PC, Hale J, Uleryk E, Frazier L. Is there a role for carboplatin in the treatment of malignant germ cell tumors? A systematic review of adult and pediatric trials. *Pediatric blood & cancer*. 2013;60(4):587-92.
53. Capelouto CC, Clark PE, Ransil BJ, Loughlin KR. A review of scrotal violation in testicular cancer: is adjuvant local therapy necessary?. *The Journal of urology*. 1995;153(3 Pt 2):981-5.
54. Classen J, Souchon R, Hehr T, Hartmann M, Hartmann JT, Bamberg M. Posttreatment surveillance after paraaortic radiotherapy for stage I seminoma: a systematic analysis. *Journal of cancer research and clinical oncology*. 2010;136(2):227-32.
55. Neal RD, Tharmanathan P, France B, Din NU, Cotton S, Fallon-Ferguson J, Hamilton W, Hendry A, Hendry M, Lewis R, Macleod U, Mitchell ED, Pickett M, Rai T, Shaw K, Stuart N, Tørring ML, Wilkinson C, Williams B, Williams N, Emery J. Is increased time to diagnosis and treatment in symptomatic cancer associated with poorer outcomes? Systematic review. *British journal of cancer*. 2015;112 Suppl 1((Neal R.D.) North Wales Centre for Primary Care Research, Bangor University, Bangor LL13 7YP, UK):S92-107.
56. Groll RJ, Warde P, Jewett MA. A comprehensive systematic review of testicular germ cell tumor surveillance. *Critical reviews in oncology/hematology*. 2007;64(3):182-97.
57. Alam SS, Cantwell MM, Cardwell CR, Cook MB, Murray LJ. Maternal body mass index and risk of testicular cancer in male offspring: a systematic review and meta-analysis. *Cancer epidemiology*. 2010;34(5):509-15.
58. Cook MB, Akre O, Forman D, Madigan MP, Richiardi L, McGlynn KA. A systematic review and meta-analysis of perinatal variables in relation to the risk of testicular cancer--experiences of the son. *International journal of epidemiology*. 2010;39(6):1605-18.
59. Bergholz R, Wenke K. Polyorchidism: a meta-analysis. *The Journal of urology*. 2009;182(5):2422-7.
60. Bandak M, Jørgensen N, Juul A, Vogelius IR, Lauritsen J, Kier MG, Mortensen MS, Glovinski P, Daugaard G. Testosterone deficiency in testicular cancer survivors - a systematic review and meta-analysis. *Andrology*. 2016;4(3):382-8.
61. Jiang W., Zhang J., Zhou Q., Liu S., Ni M., Zhu P., Wu Q., Li W., Zhang M., Xia X.. Predictive value of GGN and CAG repeat polymorphisms of androgen receptors in testicular cancer: A meta-analysis. *Oncotarget*. 2016;7(12):13754-13764.
62. Chung P, Mayhew LA, Warde P, Winqvist E, Lukka H, Genitourinary Cancer Disease Site Group of Cancer Care Ontario's Program in Evidence-based Care. Management of stage I seminomatous testicular cancer: a systematic review. *Clinical oncology (Royal College of Radiologists (Great Britain))*. 2010;22(1):6-16.
63. Walsh TJ, Dall'Era MA, Croughan MS, Carroll PR, Turek PJ. Prepubertal orchiopexy for cryptorchidism may be associated with lower risk of testicular cancer. *The Journal of urology*. 2007;178(4 Pt 1):1440-6; discussion 1446.

64. Hoffman H, Toshkezi G, Fullmer JM, Hall W, Chin LS. Pitfalls in diagnosis and management of testicular choriocarcinoma metastatic to the brain: Report of two cases and review of literature. *World neurosurgery*. 2017;106:536-542.
65. Hansen J, Jurik AG. Diagnostic value of multislice computed tomography and magnetic resonance imaging in the diagnosis of retroperitoneal spread of testicular cancer: a literature review. *Acta radiologica (Stockholm, Sweden : 1987)*. 2009;50(9):1064-70.
66. Treglia G, Sadeghi R, Annunziata S, Caldarella C, Bertagna F, Giovanella L. Diagnostic performance of fluorine-18-fluorodeoxyglucose positron emission tomography in the postchemotherapy management of patients with seminoma: systematic review and meta-analysis. *BioMed research international*. 2014;2014(no pagination):852681.
67. Ravi P, Gray KP, O'Donnell EK, Sweeney CJ. A meta-analysis of patient outcomes with subcentimeter disease after chemotherapy for metastatic non-seminomatous germ cell tumor. *Annals of oncology : official journal of the European Society for Medical Oncology / ESMO*. 2014;25(2):331-8.
68. Ilic D, Misso ML. Screening for testicular cancer. *Cochrane Database of Systematic Reviews*. 2011;(2):CD007853.
69. Jonker-Pool G, Van de Wiel HB, Hoekstra HJ, Sleijfer DT, Van Driel MF, Van Basten JP, Schraffordt Koops HS. Sexual functioning after treatment for testicular cancer--review and meta-analysis of 36 empirical studies between 1975-2000. *Archives of sexual behavior*. 2001;30(1):55-74.
70. Mukherjee S, Ibrahim S, John S, Adnan MM, Scordino T, Khalil MO, Cherry M. Non-seminomatous mediastinal germ cell tumor and acute megakaryoblastic leukemia. *Annals of hematology*. 2017;96(9):1435-1439.
71. Saab MM, Landers M, Hegarty J. Testicular Cancer Awareness and Screening Practices: A Systematic Review. *Oncology nursing forum*. 2016;43(1):E8-E23.
72. Giannatempo P, Greco T, Mariani L, Nicolai N, Tana S, Farè E, Raggi D, Piva L, Catanzaro M, Biasoni D, Torelli T, Stagni S, Avuzzi B, Maffezzini M, Landoni G, De Braud F, Gianni AM, Sonpavde G, Salvioni R, Necchi A. Radiotherapy or chemotherapy for clinical stage IIA and IIB seminoma: a systematic review and meta-analysis of patient outcomes†. *Annals of oncology : official journal of the European Society for Medical Oncology / ESMO*. 2014;26(4):657-68.
73. Akre O, Pettersson A, Richiardi L. Risk of contralateral testicular cancer among men with unilaterally undescended testis: a meta analysis. *International journal of cancer*. 2009;124(3):687-9.
74. Lerro CC, McGlynn KA, Cook MB. A systematic review and meta-analysis of the relationship between body size and testicular cancer. *British journal of cancer*. 2010;103(9):1467-74.
75. Franzius C, Schober O. Assessment of therapy response by FDG PET in pediatric patients. *The quarterly journal of nuclear medicine : official publication of the Italian Association of Nuclear Medicine (AIMN) [and] the International Association of Radiopharmacology (IAR)*. 2003;47(1):41-5.
76. Guzmán Martínez-Valls PL, Hita Villaplana G, Fernández Aparicio T, Miñana López B, Martínez Díaz F, Sánchez Gascon F. [Significance and management of testicular microlithiasis]. *Archivos españoles de urología*. 2003;56(5):472-7.
77. Balise VD, Meng CX, Cornelius-Green JN, Kassotis CD, Kennedy R, Nagel SC. Systematic review of the association between oil and natural gas extraction processes and human reproduction. *Fertility and sterility*. 2016;106(4):795-819.
78. Calabrò F, Albers P, Bokemeyer C, Martin C, Einhorn LH, Horwich A, Krege S, Schmoll HJ, Sternberg CN, Daugaard G. The contemporary role of chemotherapy for advanced testis cancer: a systematic review of the literature. *European urology*. 2012;61(6):1212-21.
79. Thornton CP. Best Practice in Teaching Male Adolescents and Young Men to Perform Testicular Self-Examinations: A Review. *Journal of pediatric health care : official publication of National Association of Pediatric Nurse Associates & Practitioners*. 2016;30(6):518-527.
80. O'Donnell E., Gray K.P., Ravi P., Sweeney C.. A meta-analysis of patient outcomes with subcentimeter disease after chemotherapy for metastatic nonseminomatous germ cell tumor (NSGCT). *Journal of Clinical Oncology*. 2013;
81. Robertson LM, Douglas F, Ludbrook A, Reid G, van Teijlingen E. What works with men? A systematic review of health promoting interventions targeting men. *BMC health services research*. 2008;8(no pagination):141.