

## **Testicular cancer - Methodological quality of clinical guidelines and systematic reviews**

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**Background:** Testicular cancer refers to a malignant disease that originates from the germ cells of the male testis. It represents 1% of male cancers and 5% of urological tumors. Nevertheless, its incidence in industrialized countries has been increasing during the last decades. This study forms part of our clinical guidelines development program.

**Objectives:** The aim of this study is to identify and evaluate the current evidence on diagnosis, therapy and follow-up of patients with testicular cancer.

**Methods:** We conducted systematic literature searches to identify systematic reviews, meta-analyses and clinical guidelines using Medline, Embase, Cochrane Library and the websites of GIN, NGC, NICE, SIGN, CCO, Oncoline, EAU, AUA (including the years 2010 to 2016). The quality of the retrieved information was assessed by two reviewers independently using AMSTAR for reviews (11 questions, 0-11 points) and AGREE II for guidelines (6 domains, 0-161 points).

**Results:** We retrieved 439 citations and included 59 systematic reviews and 13 clinical guidelines. None of the systematic reviews achieved a good rating (9-11 points). 38 reviews were rated as bad (0-4 points) and 21 as of moderate quality (5-8 points). The content of the moderate rated reviews is diverse and covers risk factors (N = 10), screening/prevention (N = 3), diagnosis (N = 2), therapy (N = 3) and toxicity (N = 3). According to Oxford, the level of evidence was 1a-3a. The guidelines were developed in the United States (N = 5), Canada and Europe (each N = 3), Scotland and Belgium (each N = 1). 8/13 reached at least 50% of the total possible scores, only 1 reached more than 80%. Applicability was the domain worst rated (8/13 of the guidelines <20% of the scores).

**Conclusions:** Our study showed that aggregated evidence from systematic reviews and clinical guidelines for testicular cancer is limited and of moderate to poor quality. Guidelines lack most notably on clear hands-on recommendations on how to put the content into clinical practice as well as naming indicators for implementation evaluation. They may therefore only contribute little to quality improvement in clinical care.

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