

# IN BRIEF A Summary of the Evidence

# Imiquimod for the Treatment of Anogenital Warts: A Review

### **Key Messages**

- For the treatment of anogenital warts (AGWs), imiquimod may be more effective than placebo for clearing lesions, but may cause adverse effects (based on limited evidence).
- There appears to be no difference in the effectiveness or in the risk of adverse effects between imiquimod, podophyllin, podophyllotoxin, cryotherapy, and the Mycobacterium w vaccine (based on limited evidence).
- The cost-effectiveness of imiquimod in the management of AGWs is unclear.

#### Context

Anogenital warts (AGWs) are lesions of the skin or mucous membrane caused by certain types of the human papilloma virus (HPV). More than 100 subtypes of HPV have been identified and, of these, about 30 subtypes infect the genital area. AGWs may occur as a single lesion or as multiple lesions. Most often there are five to 15 lesions of 1 mm to 10 mm in diameter. The growth rates and spread of genital warts are variable; however, they may grow faster in pregnant or immunosuppressed individuals. AGWs can cause discomfort and distress and may negatively impact quality of life.

## **Technology**

Several surgical and non-surgical treatment options are available for the management of AGWs. Surgical treatments include excision, electrosurgery, cryotherapy, and laser surgery. Non-surgical treatments include various topical agents as well as an immunotherapeutic treatment. Imiquimod and cidofovir cream, which have anti-viral properties; podophyllotoxin, a solution that inhibits the multiplication of AGW cells; and fluorouracil cream, which stops the growth of abnormal cells, can be applied by the patient. Podophyllin, a resin that contains podophyllotoxin; trichloroacetic acid, a chemical used to burn off the warts; and the *Mycobacterium w* vaccine are treatments that are delivered by a health care provider.

#### Issue

A review of the clinical and cost-effectiveness of imiquimod compared with other treatments for AGWs will help inform treatment decisions for patients with this condition.

#### Methods

A limited literature search was conducted of key resources, and titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria (population, intervention, comparator, outcomes, and study designs).

#### Results

The literature search identified 204 citations, with no additional articles identified from other sources. Of these, five publications met the criteria for inclusion in this review — one health technology assessment, three systematic reviews, and one randomized controlled trial.

# Read more about CADTH and its review of imiquimod for the treatment of anogenital warts at:



cadth.ca/imiquimod-treatment-genital-warts-reviewclinical-effectiveness-and-cost-effectiveness



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