Imiquimod

**Product:**
IMIQUIMOD (Aldara®) 5% cream, 250mg single use packet

**Class of drugs:**
Immune response modifier

**Indication:**
Second-line treatment for superficial basal cell carcinoma in adults

**Manufacturer:**
3M Pharmaceuticals – Division of 3M Canada Company

### CED Recommendation

The CED recommended that imiquimod (Aldara) cream for the treatment of superficial basal cell carcinoma be considered for funding through the Exceptional Access Program according to specific criteria. The CED noted that although imiquimod (Aldara) cream has been shown to be effective in clearing lesions, surgery remains the standard of care and no comparative data are available comparing imiquimod (Aldara) cream directly to surgery.

### Executive Officer Decision

Based on the CED’s recommendation, the Executive Officer has decided to fund imiquimod (Aldara) cream for the treatment of superficial basal cell carcinoma through the Exceptional Access Program according to specific criteria.

### Background:

Superficial basal cell carcinoma (sBCC) is a type of skin cancer that affects about 12,000 Canadians every year. It is not life threatening in the vast majority of cases. The most common complication is that the tumour will continue to grow or locally progress and become incurable, if left untreated.

The standard treatment for sBCC is curettage and electrodesiccation, and less commonly with excision. These surgical techniques have the highest cure rate but also involve risks of bleeding, infection and scarring. Other options include cryotherapy (i.e. applying nitrogen to the tumour to “freeze” it), phototherapy and drug therapy with 5-fluorouracil topical cream.

Imiquimod is an immune response modifier and works by stimulating the immune system to produce chemical mediators called cytokines which have anti-tumour and anti-viral effects. Imiquimod cream is indicated for the treatment of biopsy confirmed primary superficial basal cell carcinoma with a maximum tumour diameter of 2cm, located on the trunk, neck or extremities that is otherwise amenable to simple surgical excision, in adults who choose not to have surgery and are willing to undergo regular follow-up.

### Highlights of Recommendation:

- Surgery is the standard treatment for superficial basal cell carcinoma (sBCC) and cure rates are reported to be approximately 90%. The Committee noted lesions located in certain areas may be difficult to surgically remove.
- Imiquimod is a topical cream used to treat sBCC in adult patients as an alternative to surgery. Complete clearance of the lesions are achieved in approximately 80% of the patients using imiquimod five times per week for 12 weeks.
- There are no direct comparison trials between imiquimod cream and surgery.
- The Committee noted the potential for use in non-approved indications and inappropriate use to avoid surgery for convenience factors.
- **Overall, the Committee noted that imiquimod cream appears to be a safe and effective treatment alternative to surgery.** However, there is potential for broad use for patients who wish to avoid surgery which is more effective.
- Therefore, the Committee recommended imiquimod cream be funded through the EAP according to specific criteria.

### Status

Funding is available through the Ontario Public Drug Programs via the Exceptional Access Program (EAP).
Detailed Discussion:

- For the treatment of sBCC, imiquimod cream is recommended to be applied for 8 hours, 5 times a week for 6 weeks. The amount of cream used will depend on the size of the tumour.
- One study (Geisse JK et al. 2002) has demonstrated that clearance rates (the number of lesions removed) for sBCC with imiquimod cream are approximately 80%.
- The manufacturer has asked the ministry to fund imiquimod cream through the Exceptional Access Program (EAP) as second-line treatment for adults with sBCC who either choose not to have surgery or are unwilling to undergo regular follow-up. However, there were no clinical studies comparing imiquimod cream to surgery which is the standard of care and has higher clearance rates.
- Although clearance rates with imiquimod cream are less than that reported with surgery, a follow up study suggests that recurrence rates are low when patients have been followed for three years.
- The Committee noted that sBCC lesions located in certain areas may be difficult to surgically excise and imiquimod cream is an appropriate second line treatment for sBCC lesions located on the trunk, neck and extremities.
- The Committee also noted that topical 5-FU does not work as well and the recurrence rate with cryotherapy is high.
- Some patients experience mild to moderate side effects including itching, pain or burning at the site of application of imiquimod cream. These side effects typically resolve within 12 weeks of discontinuing treatment.
- The cost of imiquimod cream would be approximately $350 per course of therapy; this is higher than cryotherapy or curettage. The exact cost of imiquimod cream is difficult to assess because of the way it is packaged (available as single-use packets in boxes of 12 packets) and how it would be dispensed.
- It is anticipated that there could be broader use of imiquimod cream as it will be perceived to be more convenient or less unpleasant than cryotherapy or surgery.

The Committee expressed concern that patients may choose not to have surgery, despite the higher cure rate, because of the convenience of imiquimod cream.

Overall, the Committee noted that imiquimod cream may be a safe and effective drug treatment option for the treatment of sBCC in patients who have medical contraindications to surgery. The CED recommended consideration for funding through the EAP according to specific criteria.

EAP Criteria:
The CED recommended that funding for imiquimod (Aldara) cream be considered through the Exceptional Access Program (EAP) according to the following clinical criteria:

For treatment of biopsy-confirmed primary superficial basal cell carcinoma:

1. with a tumour diameter of ≤ 2 cm
2. located on the trunk, neck or extremities (excluding hands and feet)
3. where surgery or irradiation therapy is not medically indicated
   a) Recurrent lesions in previously irradiated area OR
   b) Multiple lesions, too numerous to irradiate or remove surgically.

Approval Period: 6 weeks

CEDAC Recommendation:

The Canadian Expert Drug Advisory Committee (CEDAC) did not review imiquimod (Aldara) cream.

For more information, please contact:

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