

## IMIQUIMOD - SAFE PRESCRIBING - A BURNING ISSUE

- ▶ BE AWARE THAT THE DOSING REGIME IS UNIQUE
- ▶ INFORM PATIENTS THAT SPECIAL CARE IS REQUIRED; INCORRECT USE CAN BE HARMFUL
- ▶ REVIEW PATIENTS REGULARLY

Imiquimod cream is unlike most other topical treatments. Special care is required for it to be used safely<sup>1</sup> because there is potential for harm even when it is used correctly.<sup>2</sup> There have been reports of significant adverse effects both at the application site, and systemically.<sup>3</sup>

Imiquimod works by stimulating the immune system to release cytokines. It is mainly used to treat genital warts, for actinic keratosis, and for superficial basal cell carcinomas<sup>4</sup> where surgical excision is not possible, or not acceptable to the patient.<sup>5</sup>

### BE AWARE THAT THE DOSING REGIME IS UNIQUE

Problems with imiquimod may arise because it has a different dosing regimen compared to most other topical medicines; it is not used every day.<sup>1</sup> Its frequency of use depends on the indication for which it is being prescribed.

Condition	Frequency of use
Actinic keratoses	Apply 3 times weekly for 4 weeks <sup>2</sup> <b>OR</b> twice weekly for 6 weeks <sup>4</sup> Repeat if necessary after a break of 4 weeks (maximum 2 courses) <sup>2</sup>
Superficial basal cell carcinoma	Apply to lesion (and 1cm beyond it) on 5 days each week for 6 weeks <sup>6</sup> Review by week 3 and adjust frequency if necessary Can repeat for another 6 weeks if response incomplete <sup>7</sup> Review 6-12 weeks after the end of treatment <sup>7</sup>
External genital warts	Apply thinly 3 times a week on alternate days then have a 2-day treatment-free interval (eg apply Mon-Wed-Fri) until lesions resolve (up to 16 weeks) <sup>6</sup>

Imiquimod therapy requires patients to persevere with a 4-16 week course,<sup>4</sup> often through a degree of treatment-related discomfort. Occasionally, the extent of local reactions may necessitate a 'rest period'.<sup>2</sup>

### INFORM PATIENTS THAT SPECIAL CARE IS REQUIRED; INCORRECT USE CAN BE HARMFUL

Make sure patients understand the dosing regimen, and they are able to follow the course of therapy.

Toxicity from incorrect imiquimod use may be prevented by:

- Only choosing imiquimod for patients who you know will use it correctly<sup>1</sup>
- Carefully checking the frequency when prescribing and dispensing
- Warning patients about the expected adverse reactions - and how to deal with them<sup>1,4</sup>

Imiquimod commonly causes local inflammation, which varies from person to person, and can include itching, burning, redness, ulceration (sores), scabbing, flaking and pain. These reactions indicate that the cream is likely to be effective - if there is no inflammation, imiquimod is unlikely to clear the lesions. An exaggerated response may clear the skin lesion sooner than expected - sometimes after as few as 3 or 4 applications. In some patients, surrounding untreated areas also become inflamed but this will settle when treatment is discontinued.

More than 50% of patients experience strong local inflammation,<sup>1</sup> and may require a break in therapy for a few days until the reaction subsides.<sup>8</sup> If a rest is taken, it is not necessary to make up missed doses or prolong therapy.<sup>1,8</sup> Most local skin reactions are mild to moderate and resolve within 2 weeks of discontinuing imiquimod.<sup>2</sup>

Advise patients to report severe reactions such as black scabs and ulceration, and if they occur, to stop applying the cream and seek a review as soon as possible.<sup>4</sup>

Although only a small amount of topical imiquimod is absorbed into the circulation, systemic adverse effects such as fatigue, headache, and flu-like illnesses have been reported.<sup>2,3</sup> If systemic adverse effects become troublesome, advise patients to stop using the cream, and to ask for advice. These effects should resolve within a few days.

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### REVIEW PATIENTS REGULARLY

Schedule regular reviews for patients prescribed on-going treatment with imiquimod to promote adherence, treat side-effects, and manage treatment 'rest periods' or adjust dosing intervals.<sup>1</sup>

Treatment should be carefully monitored because the cream may need to be applied more or less frequently than originally planned or for a shorter or longer course, depending on response.<sup>4</sup> If the reaction is excessive, advise patients to apply the imiquimod less often; if no reaction occurs, advise to apply more often. Assess the success of treatment 12 weeks following course completion, and then at 12 and 24 months.<sup>1</sup> Cases of hyper- and hypo-pigmentation at the site of application have been reported; some of these skin colour changes can be permanent.<sup>2</sup> In a trial using imiquimod 3 times a week for up to 12 weeks, 31% of patients had pigment changes that persisted at 6 months after treatment.<sup>10</sup>

**Note:** Imiquimod may also cause generalised exacerbations of pre-existing eczema and psoriasis.

### How to use imiquimod cream<sup>4</sup>

- Wash hands, then cut the top off the sachet and squeeze out a tiny amount of cream onto your fingertip. Apply this to the affected areas, rub in and wash hands well.
- Avoid normal or broken skin and open wounds. Do not apply in or near the hairline, eyes, nostrils or lips.
- Keep the cream on for either 6-10 hours for warts, or 8 hours for skin cancer or pre-cancer. Then wash off with mild soap and water.
- Wash off before sexual contact; imiquimod may damage latex condoms and diaphragms.
- Imiquimod may be used at any time of year, but take care to protect the affected area from the sun with clothing and sunscreen.
- Dispose of the sachet thoughtfully; make sure the sachets are not accessible to children.

### ACKNOWLEDGEMENTS

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