

# Having surgery to aid healing of a complex wound by using an artificial skin product

Burns and Plastics Treatment Centre

Information for Patients

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## What is biodegradable temporising matrix (BTM)?

BTM is a synthetic skin substitute (artificial skin). It can be used in wounds where there has been a loss of the deeper layers of the skin (the dermis). BTM is used to help new tissue grow. The BTM supports the blood vessels and new skin tissue to grow.

There are often 2 stages to using BTM to repair a wound. When BTM has achieved its goal of becoming part of the wound, we may do another operation to remove the top layer of the BTM. We will then apply a skin graft on top. Please ask your nurse or doctor for the leaflet 478: 'Care for your skin graft and donor site', for information about this. In some cases the surgeon may feel that your wound will heal on it's own with dressings after the use of BTM. They will talk to you about this.

## What type of wounds is it used on?

BTM is used on deep wounds which have broken all layers of skin. This could be where the bone or tendons are maybe exposed (full thickness wounds). This wound may have been caused by trauma or surgery. It can be used on a variety of places on the body.

## What is it made from?

BTM is made from a biodegradable polyurethane foam. It is covered by a non-biodegradable layer on top. BTM contains no products from animals.

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## How is the BTM attached to the wound?

You will have an operation under an anaesthetic to place the BTM.

The surgeon will talk to you about how this will be done. They will see if it is best to do the surgery under a local or general anaesthetic. A number of factors will be used to decide this.

If you are having a general anaesthetic (GA), information will be given to you to tell you about fasting. Please ask your nurse or doctor for leaflet 870 or search: 'Having a general anaesthetic - instructions to follow before and after your operation'.

The length of time the operation takes is different for each person.

We will use either stitches or staples to fix the BTM to your wound. This decision depends on where it is being used on the body.

## How long will I be in hospital?

Whether you can go home the same day or need to stay in the hospital depends on where and how big your BTM is. It also depends on how you feel after the anaesthetic. If you feel sick, are in a lot of pain, or have trouble eating, drinking, or peeing, you might need to stay longer.

## How do I take care of the wound?

Where your BTM is on your body will affect how you move. For example, if on the foot or arm you may need to be in a cast until there are signs that the BTM has started to become part of your wound. If you do have a cast on ask your nurse/doctor for leaflet 860: 'Looking after your cast after a skin graft or plastic surgery'.

In some cases, a VAC (vacuum assisted closure) machine may be used to help the integration of the BTM. Instructions will be given on how to look after your dressing and the machine attached will be given before your discharge.

We advise you to raise areas such as arms and legs to stop any swelling from happening.

You must keep your dressings clean and dry to stop the risk of infection. You may need to think about your daily hygiene routine and adapt around the dressing.

## How long is it left in place?

We will leave the outer layer of the BTM on your wound for anywhere between 3 to 8 weeks. This is before removing it. How long it takes will depend on how quick the deep foam (matrix) part joins to your wound. Your nurse or doctor will update you about the progress of this throughout your hospital visits.

## **Your follow-up appointments**

We may ask you to come for weekly visits to our Burns and Plastics Treatment Centre (BPTC). We will check overall how the BTM is progressing. We will check for any complications. This can be any signs of infection or fluid collection, which can reduce the effectiveness of the BTM. To stop this from happening, we will put special dressings that have antimicrobials on top of the BTM. The dressing will need changing regularly. If you are not coming to BPTC then this will need to be done by either your practice nurse (county patients) or district nurses (city patients). District nurses can be contacted on the Single Point of Access line: 0300 300 7777.

You may also need to see a physiotherapist about moving the area or occupational therapist about scar therapy. On visiting BPTC your nurse will talk about this with you and if you need referrals to these services.

## **Are there any side effects or risks?**

With any operation where there is a wound involved there is a chance of infection. This is why we use a special antimicrobial dressings to help keep the area clean. See page 4 for signs of infection.

There is a chance that a fluid or blood collection can happen under the BTM. We lower the chance of this happening by putting small cuts in the top of the BTM. This lets fluid to come out from underneath.

There is a small chance of having an allergic reaction in the area the BTM was placed. If this happens, the surgeons would need to remove it right away.

## **Is there any other treatment that could be used?**

There are other skin products that can be used. But BTM is the chosen product at this trust and other local trusts. Please talk with your surgeon if you wish to know about other treatments.

## **What are the benefits of using this product?**

Research shows that patients with BTM have a better results when moving and with the way it looks and feel as a scar. This is compared to normal skin grafting or healing just by dressings.

BTM helps to heal complex wounds at a faster pace than just with normal dressing regimes. This means there is less chance of the skin becoming tight which affects movement (scar contractures).

BTM can be used by those with different cultural beliefs or food preferences as no animal product is used.

## Signs of an infection after surgery

When you have your dressing changed, the nurse will look out for any signs of an infection. These symptoms are:

- redness around the area
- swelling
- warm to the touch
- pus coming from the area
- greater pain in that area
- feeling feverish / having a temperature

## Contact details

Burns and Plastics Treatment Centre:	0116 258 5328
Ward 9:	0116 258 5375
Kinmonth Unit:	0116 258 5327

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