STAGE 3 MELANOMA

What are the aims of this leaflet?

This leaflet provides some general information on melanoma skin cancer and the melanoma staging system. In particular, it tells you what stage 3 melanoma is and what will be the investigations/treatments. Details on where to find out more information are also provided at the end of the leaflet.

What is melanoma?

Melanoma is a type of skin cancer, which arises from the pigment cells (melanocytes) in the skin. In a melanoma skin cancer the melanocytes become malignant and multiply excessively. One of the most important causes of melanoma is exposure to too much ultraviolet light in sunlight. The use of artificial sources of ultraviolet light, such as sunbeds, also increases the risk of getting a melanoma.

Melanocytes make a brown/black pigment (known as melanin), and often the first sign of a melanoma developing is a previous mole changing in colour or a new brown/black lesion developing. Most frequently there is darkening in colour but occasionally there is loss of pigmentation with pale areas or red areas developing. This melanoma on the skin is known as the primary melanoma.

Melanoma is considered to be the most serious type of skin cancer because it is more likely to spread (metastasise) from the skin to other parts of the body than other types of skin cancer. If melanoma has spread to other parts of the body, those deposits are known as secondary melanoma (secondaries/metastases).
What is stage 3 melanoma?

Doctors use a staging system for melanoma to indicate both the outcome and the best treatment. The system used in the UK stages melanoma from 1 to 4. Stage 1 is the earliest melanoma and stage 4 is the most advanced. The staging system takes into account if there has been any spread of melanoma from the skin to other parts of the body. Stage 3 melanoma is a form of secondary melanoma, which is described in more detail below.

In around 20% of patients diagnosed with melanoma, the melanoma spreads to the lymph nodes. This is classed as stage 3 melanoma.

Lymph nodes, or lymph glands, are found in our lymphatic system which is part of the body’s immune system. The (skin) lymphatics are tiny channels in the skin, which move lymph fluid around the body to the lymph nodes in the groin, under the arms (arm pits) and in the neck. As part of the immune system, the lymph fluid can carry bacteria and even cancer cells with it. Once contained within the lymph nodes, the immune system attempts to destroy them. If the immune system fails to destroy such cancer cells they can grow within the lymph nodes creating a lump. However, the lymph nodes can also swell for other reasons such as infection (e.g. when we have a sore throat there may be swollen glands in the neck). Diagram 1 (below) shows the lymphatic system in the body.

![Diagram 1: The lymphatic system in the human body](image)

In some patients, a procedure called a sentinel lymph node biopsy is used to detect small numbers of microscopic cancer cells in the nodes, which cannot
be felt (please see Patient Information Leaflet on stage 2 melanoma for further details on this procedure). If you have a positive sentinel node, you will be diagnosed as having a stage 3A or 3B melanoma. If secondary melanoma appears as a lump that can be felt, then you will have been diagnosed with stage 3B or 3C melanoma. If you wish to know the details about your specific melanoma stage then you can discuss this with a member of your own hospital melanoma team.

Spread to lymph nodes from the skin means a greater chance that the cancer will come back later somewhere else in the body (stage 4 melanoma). However, this is by no means inevitable. In roughly 50% of cases there is no further spread of the melanoma. So, developing stage 3 melanoma is a cause for concern but it is still potentially curable. The chances of developing stage 4 melanoma can be predicted based on the lymph nodes involved; the more nodes involved, the higher the chance of recurrence.

**There are several types of stage 3 melanoma**

Stage 3 melanoma is usually diagnosed when the melanoma has spread to the nearest lymph nodes. However, it can also be diagnosed in the following ways:

- Where there are tiny (microscopic) deposits of melanoma in the skin surrounding the primary melanoma (microsatellites), which cannot be seen with the eye but are found by the pathologist when the melanoma is removed from the skin.
- Where there are deposits of melanoma which may look like a small lump, or lumps, in the skin near the primary melanoma (called in-transit secondaries or satellites). These deposits are considered to be ‘in-transit’ between the primary melanoma and the local lymph nodes. These deposits can be skin coloured or black/blue. They can sometimes be felt just under the skin and are sometimes associated with bruising.

Occasionally a primary melanoma is detected purely as a result of someone developing enlarged lymph nodes.

**What tests are performed when stage 3 melanoma is suspected?**

*Fine needle biopsy*

This is one of the most common tests, and it sometimes termed a fine needle aspiration. A sample is taken from a suspicious lump using a small needle. The pathologist then examines the sample under the microscope to look for
melanoma cells. In terms of discomfort, this test is similar to a regular blood test and typically takes place in the clinic. When the lump is deeper in the tissues, a radiologist (the X-ray doctor) will use a scan to determine where to place the needle. This can be an ultrasound scan or a CT (computerised tomography) scan.

**CT (computerised tomography) scan**
A CT scan may be used to provide more information about a possible lump or, to see if there is any spread of melanoma inside the body. A CT scanner takes a series of X-rays in order to build up a picture of the inside of your body. The CT scan involves lying on a flat firm bed, which passes through an X-ray machine shaped like a doughnut. Sometimes an injection of contrast medium (liquid which acts as a dye) may be necessary to improve the accuracy of the scan.

**MRI (magnetic resonance imaging) scan**
An MRI scan is similar to a CT scan but uses magnets rather than X-rays to produce an image of the body. Some patients do feel more shut in or claustrophobic with the MRI machine. MRI scans cannot be used when patients have particular types of metallic implant or a pacemaker.

**PET (positron emission tomography) scan**
A PET scan measures the take up of radioactive glucose (a type of sugar) in your body’s tissues. The take up is usually higher in cancer cells.

The particular scans and other investigations that are undertaken will depend on individual circumstances. For example, sometimes a scan is required as part of a clinical trial. Each type of scan has its own advantages and your doctor will explain why a particular type of scan has been chosen.

Regular scanning is not recommended in the absence of symptoms, as there is no evidence to suggest that it is beneficial. CT scans and other types of X-ray involve exposure to small amounts of radiation and should only be carried out when necessary.

**What is the treatment for stage 3 melanoma?**

A team of experts (including dermatologists, surgeons, pathologists, a doctor specialising in cancer treatment and specialist nurses) will meet to discuss the best treatment option(s) for you. A member of the team will explain those options to you and you may also meet a melanoma/skin cancer clinical nurse specialist (CNS) who will be your “key worker”. S/he will be a good point of contact for you and a source of help. Not all hospitals have a skin cancer
CNS, and it may be that a patient will only meet a skin cancer CNS when they are referred to an oncologist.

Treatment options will be discussed in detail with you and they may include some of the following:

1. **Surgery**
   - **In-transit secondaries**
     Surgery can be used to remove the in-transit or satellite lumps of melanoma in the skin near your primary melanoma scar, usually under a local anaesthetic (via an injection to numb the skin). This might not be possible when there are many deposits and so other treatments may be discussed with you, such as laser treatment, isolated limb infusion, or isolated limb perfusion or electro-chemotherapy (ECT). Further information on isolated limb infusion/perfusion can be found on the Macmillan Cancer Support website (http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Melanoma/Treatingrecurrentmelanoma/ILP.aspx).

   **Lymph node secondaries**
   If you have spread of melanoma to your lymph nodes, then all the lymph nodes in that area are typically removed (lymphadenectomy or lymph node dissection). This surgery takes place while you are under a general anaesthetic and will involve a stay in hospital. Following surgery, there is sometimes a fluid collection under the wound known as a seroma, which usually resolves over time. However one of the possible permanent side effects of a lymph node dissection is swelling of the limb known as lymphoedema. This can be mild but may be more troublesome especially in the leg after surgery to the groin but even then is usually manageable with the use of compression bandaging/stockings. Depending on the site of the lymph node, you may have to have some adjacent tissue removed. You will have physiotherapy to help you regain movement. It will help your recovery if you persevere with this.

2. **Adjuvant treatments/Clinical trials**
   Adjuvant therapy refers to any additional treatment that is given after a cancer is surgically removed. The aim of adjuvant treatments is to stop or slow the growth of any potentially remaining cancer cells.

   There is no standard adjuvant treatment for reducing the risk of melanoma relapse and at the moment adjuvant treatments are usually given as part of a clinical trial.
A clinical trial is a careful controlled way of researching the effectiveness of a new treatment. There may well be clinical trials at your hospital. Before entering a trial you will be given written information about the trial and the possible side effects of each treatment option. You will need to discuss these options with your medical team so that you understand the options; patients often find it helpful to have a family member or friend with them at this time. You can change your mind about taking part in a trial at any point.

Sometimes adjuvant radiotherapy is offered to patients. Typically this is because there is some doubt as to whether all the melanoma has been cleared by surgery. However the risks and benefits of having this treatment are less clear cut than those of surgery.

What is the follow up for patients with stage 3 melanoma?

Patients with stage 3 melanoma will be followed up regularly in the outpatient clinic. In the UK, after a diagnosis of stage 3 melanoma, patients are generally seen about every 3 months, for 3 years, then every 6 months to 5 years and then yearly to 10 years. At your clinic appointment, you will be examined by either a doctor or a CNS for any further spread of melanoma. Some patients find it helpful to examine their own bodies in between their clinic appointments but you may find this makes you too anxious. It is not unusual for your follow up to be shared between the different doctors, and/or a CNS, involved in your care.

Certainly it is important to be aware and familiar with your body so that you can recognise a new lump (or lesion) if one appears. If in doubt call your specialist nurse.

Self care (What can I do?)

Top sun safety tips:

- Protect your skin with clothing, and don’t forget to wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Spend time in the shade between 11am and 3pm when it’s sunny. Step out of the sun before your skin has a chance to redden or burn.
- When choosing a sunscreen look for a high protection SPF (SPF 30 or more) to protect against UVB, and the UVA circle logo and/or 4 or 5 UVA stars to protect against UVA. Apply plenty of sunscreen 15 to 30
minutes before going out in the sun, and reapply every two hours and straight after swimming and towel-drying.

- Keep babies and young children out of direct sunlight.
- The British Association of Dermatologists recommends that you tell your doctor about any changes to a mole or patch of skin. If your GP is concerned about your skin, make sure you see a Consultant Dermatologist – an expert in diagnosing skin cancer. Your doctor can refer you for free through the NHS.
- Sunscreens should not be used as an alternative to clothing and shade, rather they offer additional protection. No sunscreen will provide 100% protection.
- It may be worth taking Vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce Vitamin D levels.

### Vitamin D advice

The evidence relating to the health effects of serum Vitamin D levels, sunlight exposure and Vitamin D intake remains inconclusive. Avoiding all sunlight exposure if you suffer from light sensitivity, or to reduce the risk of melanoma and other skin cancers, may be associated with Vitamin D deficiency.

Individuals avoiding all sun exposure should consider having their serum Vitamin D measured. If levels are reduced or deficient they may wish to consider taking supplementary vitamin D3, 10-25 micrograms per day, and increasing their intake of foods high in Vitamin D such as oily fish, eggs, meat, fortified margarines and cereals. Vitamin D3 supplements are widely available from health food shops.

Having had a melanoma may impact on future applications for life or health insurance, particularly for the first five years after diagnosis. If you have particular concerns about this, you should seek financial advice.

### Where can I get more advice, support & information about melanoma?

When you have been diagnosed with melanoma you might experience a range of emotions from being concerned and confused, worried, or even feeling unable to cope. It will probably help if you discuss and share your thoughts and feelings with someone close. This might be a family member or friend. It could also be your doctor, specialist nurse or another member of the team looking after you.
When you are diagnosed with melanoma, you will be given a lot of information. This is called an ‘Information Prescription’, which is specific to you and your disease. All this information at once can be hard to take in. If you are not clear about anything during your treatment, please don’t be afraid to ask.

Web links to detailed leaflets:

**British Association of Dermatologists**
- Information on early detection and prevention of melanoma  
  [www.bad.org.uk/site/1260/default.aspx](http://www.bad.org.uk/site/1260/default.aspx)
- Information on sun-safety  
  [http://www.bad.org.uk/sunawareness](http://www.bad.org.uk/sunawareness)
  [http://www.bad.org.uk/sunawareness/factsheet](http://www.bad.org.uk/sunawareness/factsheet)
- Information on Vitamin D  
  [http://www.bad.org.uk/vitaminD](http://www.bad.org.uk/vitaminD)

**Cancer Research UK (CRUK)**
- Information on melanoma staging  

**GenoMEL: The Melanoma Genetics Consortium**
- Information on Vitamin D  

**Macmillan Cancer Support**
- [http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Melanoma/Melanoma.aspx](http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Melanoma/Melanoma.aspx)

**National Cancer Action Team (NCAT)/ NHS Choices**
- Create your own personalised information  
  [www.nhs.uk/ips](http://www.nhs.uk/ips)

Links to patient support groups:

**Melanoma Action and Support Scotland (MASScot)**
17 Cairnhill Road  
Bearsden  
East Dunbartonshire  
Glasgow, G61 1AU  
Tel: 0773 823 1260
For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists’ Patient Information Lay Review Panel

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