



## Thymic epithelial tumours (thymoma & thymic carcinoma) A guide for patients and their carers



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## The Christie website

For more information about The Christie and our services, please visit **www.christie.nhs.uk** or visit the cancer information centres at Withington, Oldham, Salford or Macclesfield.

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## Introduction

This booklet is to give you, your family and friends some information about this type of cancer

## The Christie thymic team

Dr Yvonne Summers – Consultant medical oncologist

Dr Maggie Harris - Consultant clinical oncologist

Dr Anna Moss - Clinical research fellow

Sister Marie Eaton – Cancer specialist nurse

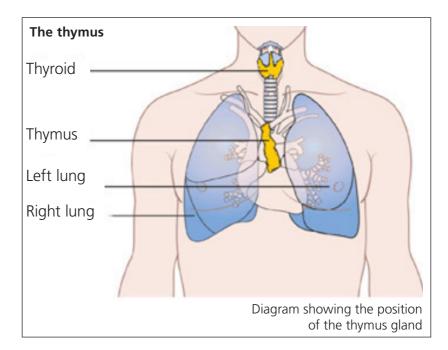
This team is supported by consultants from surgery, pathology, radiology, neurology, immunology and respiratory departments.

#### Please note:

Mobile phones can interfere with the treatment equipment. Please look out for signs letting you know if it is safe to use your mobile phone. If you do have one with you, you may need to turn it off.

## What is the thymus?

The thymus is a gland in the chest, behind the breastbone (sternum). It is part of the immune system; making the white blood cells (lymphocytes) needed to help fight infection. It is usually at its largest size in adolescence then shrinks during adulthood, being replaced with fatty tissue.



## What are thymic epithelial tumours?

Thymic epithelial tumours are rare and the cause is unknown. They occur when cancer (malignant) cells form on the outside surface of the thymus.

There are two types:

#### Thymoma

The tumour cells in a thymoma look similar to the normal cells of the thymus, grow slowly, and rarely spread beyond

the thymus. However, they can vary in how they behave and grow more quickly, sometimes spreading to the lungs or the lining of the lungs (pleura). It is very unusual to spread anywhere else in the body.

#### **Thymic carcinoma**

The tumour cells in a thymic carcinoma look very different from the normal cells of the thymus. They tend to grow more quickly and have usually spread to other areas of the body before the cancer is found.

# What are the signs and symptoms of a thymic epithelial tumour?

Thymoma and thymic carcinoma may not cause early signs or symptoms. They may be found by accident, for example, when having a chest X-ray or scan for something else.

If you do have symptoms, they might include:

- Chest pain
- A cough that doesn't go away
- Shortness of breath
- Difficulty swallowing
- Hoarse voice
- Swelling of the neck / face

Some symptoms may not be due to the cancer itself. They could be caused by an autoimmune disease related to the thymic gland cancer. An autoimmune disease happens when the immune system attacks healthy tissue and organs.

Autoimmune diseases are more commonly linked with thymomas than thymic carcinomas. One of the most common autoimmune diseases associated with thymic epithelial tumours is Myasthenia Gravis. The main symptoms of this is that muscles become tired and easily weakened. You or someone else may notice that your eyelids are drooping.

## What tests will I need?

Physical examination and history taking

- Blood tests
- Thymus gland cancers are quite often found by accident when having a chest X-ray. If the chest X-ray appears abnormal you will be sent for more detailed imaging. These may include:
  - A computerised tomography (CT/CAT) scan: uses X-rays and a computer to create detailed pictures of the inside of the body. A dye may be used to help the organs or tissues show up more clearly.
  - Magnetic resonance (MRI) scan: uses a magnet, radio waves and a computer to make a series of detailed pictures of inside the body.
  - Positron emission tomography (PET) scan: uses a small amount of radioactive glucose (sugar) that can be detected in tumour cells as the scanner rotates around the body. Malignant tumour cells appear brighter then normal cells.
- Doctors may need to take tissue samples (biopsy) from your thymus gland. This is to help with diagnosis and guide management. A biopsy can be taken in different ways. It may be taken before or during surgery.

Thymic gland tumours are usually diagnosed, staged and treated during surgery.

The tissue sample will be viewed by a pathologist under a microscope to classify the type of cancer and help to stage the thymic tumour.

Thymomas are further subdivided into different types (A, AB, B1, B2, B3 and rare others). This is based on what the cells look like under microscope.

## Has my cancer spread?

Staging is a way of describing the size of a cancer and if it has spread. When doctors first diagnose a cancer, they carry out tests (imaging, blood tests and biopsies) to check how big the cancer is and whether it has spread into surrounding tissues.

**Stage 1:** Called a non-invasive thymoma. This means it has not spread beyond the thymus.

**Stage 2:** The thymoma invades beyond the capsule (outer boundary of the thymus) and into the nearby fatty tissue or to the pleura (outer covering of the lung).

**Stage 3:** The thymoma extends into the neighbouring tissues or organs of the lower neck or upper chest area, including the pericardium (covering of the heart), the lungs, or the main blood vessels leading into or exiting from the heart.

**Stage 4A:** The thymoma has spread widely throughout the pleura and/or pericardium.

Stage 4B: The thymoma has spread to distant organs.

Because thymic carcinomas are so rare, no universal staging system has been developed for them. Some doctors use the Masaoka staging system for thymic carcinoma as well as for thymomas.

## Can I have treatment?

Your treatment will depend on the type of thymic epithelial tumour, its stage (how far it has spread) and as well as your general health. We strongly advise you to stop smoking as we know that patients with thymic epithelial tumours are at increased risk of other cancers. Please ask us or your GP for advice or contact our smoking cessation team at The Christie on **0161 956 1215** or **07392 278408**.

#### Surgery

Aims to remove all or as much of the cancer as possible. If the cancer has spread outside of the thymus gland the surgeon may also need to remove nearby areas of tissue and lymph nodes (small, bean-shaped organs which produce and store blood cells that help fight disease and infection). The way the surgeon removes the cancer will depend on the size and stage of disease.

#### Chemotherapy

Uses anti-cancer (cytoxic) drugs to destroy cancers cells throughout the body. It is given through a vein (IV/ intravenously).

It may be used to shrink the tumour before you have surgery. It may be the main treatment that you receive if surgery is not an option.

#### Radiotherapy

Uses high energy X-rays to destroy cancer cells, while doing as little harm as possible to healthy cells. It may be given after surgery to reduce the risk of the cancer coming back. Radiotherapy may be the main treatment if surgery is not an option and this can be with or without chemotherapy. It is given in small daily doses (called fractions) usually over 5-6 weeks (Monday to Friday, not weekends).

### **Trials**

You may be invited to take part in a clinincal trial to help identify new treatments . However, this type of cancer is rare and there is not always a suitable trial available.

## What is my prognosis?

Prognosis is a doctor's judgement of the expected development of a disease or the chances of getting better.

The prognosis depends on a number of different factors:

- The stage of the cancer
- The type of cancer
- Whether the tumour can be removed completely with surgery
- A patient's general health

Thymomas and thymic carcinomas generally have a very good prognosis, particularly if the tumour can be completely removed by surgery. Your doctor or nurse will talk this through with you.

We recognise that a diagnosis of cancer can be a life changing event but would encourage you to continue with your usual day to day routine. We want you to feel supported both mentally and physically, and welcome you to contact us with any problems during your treatment and follow up.

## What happens after treatment?

Thymomas have a small risk of late recurrence (the cancer coming back) which can still respond well to treatments. Patients with thymic epithelial tumours are also at an increased risk of other cancers and immunological conditions.

Once your treatment has finished, you will be followed up regularly at the hospital for up to 10 years. This follow up is likely to involve physical examination and history taking, blood tests and imaging e.g. chest X-ray or CT scan.

If you do have any problems or notice any new symptoms before your next follow up appointment, please let your doctor or nurse know as soon as possible.

## Helpful contacts

The Christie Hotline (for unwell patients on treatment): 0161 446 3658 (24 hours)

Sister Marie Eaton, cancer specialist nurse 0161 918 2595

Dr Summers' secretary 0161 446 8016

Dr Harris' secretary 0161 446 3302

Smoking Cessation at The Christie **0161 956 1215** or **07392 278408** 

## Further information

#### Macmillan cancer support helpline:

Call free on **0808 808 0000** (Monday–Friday, 9am–8pm). Staffed by trained experts, offers people with cancer and their loved ones practical, clinical, financial and emotional support.

#### www.macmillan.org.uk

### Foundation for thymic cancer research:

### www.thymic.org

### Maggie's centres

The centres provides a full programme of free practical and emotional support, including psychological support, benefits advice, nutrition and head care workshops, relaxation and stress management.

Maggie's Manchester: Tel: 0161 641 4848 or email manchester@maggies.org

The Robert Parfett Building, The Christie NHS Foundation Trust,15 Kinnaird Road, Manchester M20 4QL

Maggie's Oldham: Tel: 0161 989 0550 or email oldham@maggies.org

The Sir Norman Stoller Building, The Royal Oldham Hospital, Rochdale Road, Oldham OL2 2JH

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

The Christie is committed to producing high quality, evidence based information for patients. Our patient information adheres to the principles and quality statements of the Information Standard.

If you would like to have details about the sources used please contact the-christie.patient.information@nhs.net

# Contact The Christie Hotline for urgent support and specialist advice

## The Christie Hotline: 0161 446 3658

Open 24 hours a day, 7 days a week

#### Visit the Cancer Information Centre

The Christie at Withington **0161 446 8100** The Christie at Oldham **0161 918 7745** The Christie at Salford **0161 918 7804** The Christie at Macclesfield **0161 956 1704** 

Open Monday to Friday, 10am – 4pm.

Opening times can vary, please ring to check before making a special journey.

#### The Christie NHS Foundation Trust

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0161 446 3000 www.christie.nhs.uk



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