

## Improving Awareness of Thymic Cancers in the UK



Rare cancers of the thymus (a small organ in the upper part of the chest behind the sternum)

In 2019 there were **329 cases** of cancerous tumour of the thymus, **0.09%** of all cancers registered in the UK that year.

### There are 3 main types of thymic cancer:

#### Thymoma (Most common)

Thymomas are typically slow growing tumours. People diagnosed with thymoma often have autoimmune conditions, most commonly MYASTHENIA GRAVIS, a neuromuscular disease that causes muscle weakness.

#### Thymic Carcinoma (Rarer)

Thymic Carcinomas are faster growing tumours. The cells no longer look like normal thymic cells. The cancer has often spread to other parts of the body when the cancer is found.

#### Thymic Neuroendocrine Cancer (Even rarer)

Thymic Neuroendocrine Tumours are most commonly carcinoid tumours.

### How are Thymic Cancers Discovered?

Around **30% of patients** with thymoma or thymic carcinoma have **no symptoms** when the tumour is diagnosed.

Thymic cancer is usually found by accident while doctors are looking for other things.

#### Some Symptoms Include:

- Persistent coughing
- Chest pain
- Upper airway congestion
- Muscle weakness\*
- Anaemia
- Fatigue\*
- Shortness of breath
- Arm or facial swelling
- Difficulty swallowing\*
- Increased risk of infection

\* these symptoms may be related to myasthenia gravis (meaning severe muscle weakness) which may be the presenting sign of thymoma

### What Causes Thymic Cancers?

Little is known about what causes thymic cancers.

Some identified risk factors include:

- **Age:** The risk of thymic cancer increases with age. In one 2019 study, the incidence was highest in patients aged 65 years and older.
- **Ethnicity:** Thymic cancer is most common in Asians and inhabitants of the Pacific islands and less common in white people.

Thymic cancer can be **linked with the following conditions**, many of which are autoimmune:

- Myasthenia gravis
- Systemic lupus erythematosus (SLE)
- Rheumatoid arthritis
- Pernicious anemia
- Hemolytic anemia
- Agranulocytosis
- Pure red cell aplasia (PRCA)
- Hypogammaglobulinemia
- Cushing syndrome
- Nephrotic syndrome
- Ulcerative colitis
- Sarcoidosis
- Scleroderma
- Polymyositis
- Hypopituitarism

#### Sources:

[https://www.cancerdata.nhs.uk/incidence\\_and\\_mortality](https://www.cancerdata.nhs.uk/incidence_and_mortality)  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6938371/>  
<https://itmig.org/about-thymic-tumors/symptoms/>  
<https://www.medindia.net/patientinfo/thymus-cancer-thymomas.htm>  
<https://www.cancer.org/cancer/thymus-cancer/detection-diagnosis-staging/survival-rates.html>