



Models used for illustration only

# Cancer-Associated Thrombosis (CAT)

Be clot conscious

Cancer is a disease with many aspects to be considered. These relate to treatment, the disease itself and the implications on your daily lifestyle. One of the most important aspects is the possibility of developing a blood clot. This condition is known as cancer-associated thrombosis (CAT).

Here are three things you need to know about CAT:

1 Cancer can cause potentially fatal blood clots

2 In many cases, CAT is preventable

3 CAT is treatable – provided it is caught on time

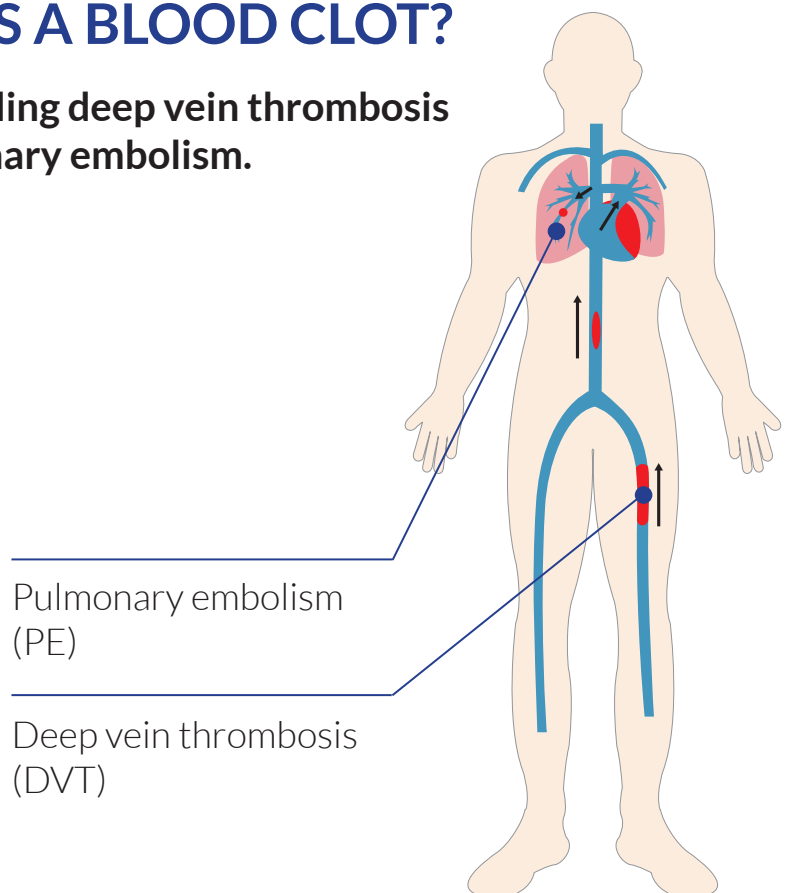


## WHAT IS A BLOOD CLOT?

Understanding deep vein thrombosis and pulmonary embolism.

Clots form when blood cells stick together, blocking blood vessels.

Deep vein thrombosis (DVT) is a clot that forms within a deep vein, usually in the leg. If untreated, part of the clot can break off and travel to the lungs, blocking blood flow. This is called a pulmonary embolism (PE), and can be potentially fatal if not detected and treated early.



Pulmonary embolism (PE)

Deep vein thrombosis (DVT)

# CANCER AND CLOTS

## The risk is real.

People with cancer have a higher than normal risk of developing a venous clot<sup>1</sup>. Indeed, blood clots are the second most common cause of preventable death in cancer patients, after infection<sup>2</sup>. Yet this condition remains under-reported, seldom discussed and often misdiagnosed<sup>3</sup>.

While all people with cancer are at some risk of developing CAT, certain people are at higher risk than others. Your risk profile will depend on:



### Type of cancer

Certain cancers have higher risk of CAT, including cancers of the stomach, pancreas, brain, kidney and ovaries, as well as hematological malignancies<sup>4</sup>.



### Stage of cancer

Cancer that is at an advanced stage can increase the risk of a clot, even in people with cancers that are otherwise considered low-risk<sup>4,5</sup>.



### Cancer treatment

Even though chemotherapy, radiation and other procedures such as surgery are vital to fight the cancer, these treatments can also cause clots<sup>6</sup>.



### Hospitalisation/immobilisation

Being confined to a bed for extended periods of time or otherwise inactive can lead to clots, in people with all types of cancer<sup>7</sup>.



### History of clots

If you've previously had a clot, you are three times more likely to develop CAT than people who have never had a clot<sup>8</sup>.

If you have one or more of these risk factors, you should speak to your doctor about your increased risk of CAT.

Thrombosis is now considered a chronic disease in cancer patients because the risk of recurrence continues for many years after its initial incidence.

**You need to be vigilant.**

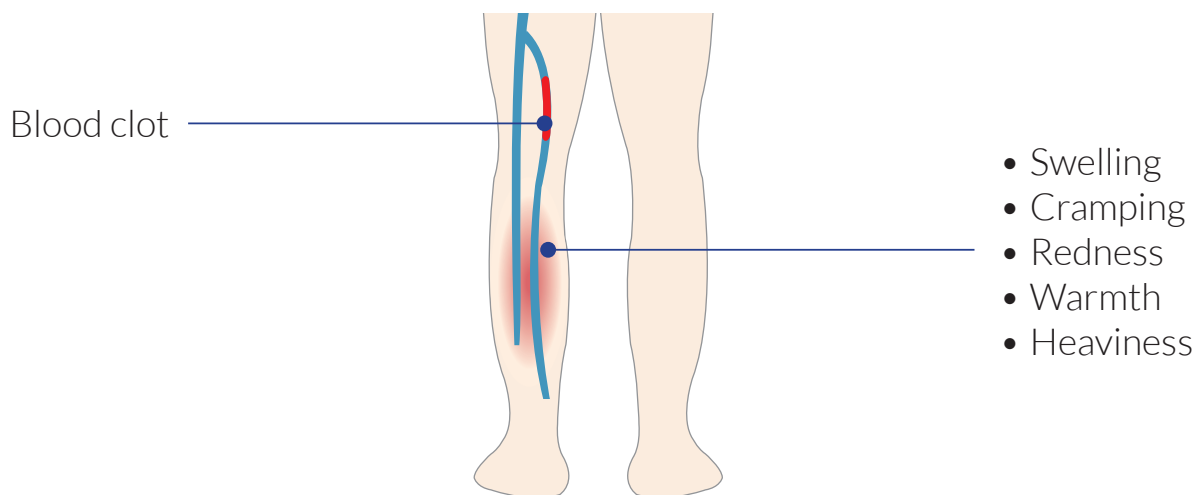
# WHAT TO LOOK FOR

**Recognise symptoms early. Take action fast.**

CAT is not usually a silent stalker. Blood clots typically make themselves known, and can often be stopped before they become life-threatening. But you must know – and be alert to – the signs and symptoms.

**Speak to your doctor or nurse immediately if you experience any of the following symptoms of deep vein thrombosis:**

- Swelling in the foot, ankle, leg or arm (skin may feel stretched), particularly if it appears on only one side
- Pain, cramping or tenderness, often in the calf
- Redness or noticeable discoloration of the leg or arm
- Warm or heavy sensation in the leg



**Contact emergency services immediately if you experience any of the following symptoms of pulmonary embolism:**

- Light-headedness/dizziness
- Unexplained shortness of breath
- Irregular heartbeat
- Chest pain (especially when breathing deeply)
- Coughing up blood

**Always err on the side of caution...**

Some people may mistake CAT symptoms for normal side effects of cancer treatment. However, if you are in any doubt at all, seek medical attention **straight away**.

# TREATING CAT

## Dealing with CAT and preventing recurrence.

Treatment for CAT is effective and relatively simple.

DVT and PE are most often treated with anticoagulants (often referred to as “blood thinners”, though they don’t actually thin the blood, but rather slow the clotting process).

Anticoagulants prevent new clots from developing and stop existing clots from growing. Treatment should continue for at least six months to prevent recurrence.

One of the main side effects of anticoagulant therapy is the risk of bleeding. In most cases, this should not deter you from seeking treatment.

**Treatment prevents clots from getting larger and lowers the chance of new clots forming<sup>9</sup>.**

# PREVENTION

## Minor lifestyle changes can make a difference.

Four easy steps to reduce your risk of CAT:

1. **Keep moving:** stretch your legs, move your feet, take a little walk
2. **Quit smoking:** support is there if you want it
3. **Stay hydrated:** drink plenty of fluids, avoid alcohol and caffeine
4. **Wear prescribed compression socks/stockings**



### Names and affiliations of experts that helped develop this brochure:

Prof. Jacob C. Easaw, Associate Professor in the Division of Medical Oncology at The Tom Baker Cancer Center, Calgary, Alberta; Prof. Ismail Elalamy, Professor of Haematology and Head of the Haematology Department at Tenon University Hospital, Paris, and current President of the French Society of Angiology; Evelyn Knight, Co-Founder and Chief Executive, AntiCoagulation Europe; Sofia Leonardou, member of B.D. K.E.F.I association; Dr. Lydia E Makaroff, European Cancer Patient Coalition; Prof. Manuel Monreal, Clinical Professor of Internal Medicine at the Faculty of Medicine, Universidad Autónoma in Barcelona and Head of Internal Medicine at the Hospital Universitari Germans Trias i Pujol in Barcelona, Spain; Dr. Ana Rosa Rubio, Board Certified Oncology Pharmacist, Complejo Hospitalario de Toledo, Spain; Prof. Annie Young, Professor of Nursing at the University of Warwick, UK.

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# HAVE A CONVERSATION

Three questions to ask your doctor:

1 What is my risk for CAT?

2 What should I look out for?

3 If I'm concerned I have CAT, what should I do?

**Own your health.**

**Be clot conscious.**

**Speak to your healthcare professional today.**

## References:

1. Chew H, et al. Incidence of Venous Thrombembolism and its effect on survival among patients with common cancers. Arch Intern Med. 2006;166:458. 2. Trujillo-Santos J, Martos FM, Font C, Farge-Bancel D, Rosa V, Lorenzo A, Barrón M, Lorente MA, Pedrajas JM, Monreal M. Heliyon. 2017 Jan 16;3(1):e00229. doi: 10.1016/j.heliyon.2016.e00229. eCollection 2017 Jan. 3. Noble S, et al. Patients' Experiences of Living with CANcer-associated thrombosis: the PELICAN study. Patient Prefer Adherence. 2015;9:337-45. 4. Young AM, Chapman O, Connor C, Poole C, Rose P, Kakkar AK. (2012); Thrombosis and Cancer. Nat Rev Clin Oncol. 9(8):437-49. 5. Lyman GH. (2011) Venous thromboembolism in the patient with cancer. Cancer. [online]. 117:1334-1349. 6. Hiller E. Cancer and thrombosis: managing the risks and approaches to thromboprophylaxis - Review sheet. 7. Thrombosis Canada. Cancer-Associated Thrombosis (CAT) - Patient Information Sheet. [http://thrombosiscanada.ca/wp-content/uploads/2016/10/M159-Cancer-Associated-Thrombosis\\_Oct2016.pdf](http://thrombosiscanada.ca/wp-content/uploads/2016/10/M159-Cancer-Associated-Thrombosis_Oct2016.pdf). 8. National Blood Clot Alliance. Cancer and Blood Clots - Fast Facts <https://www.stoptheclot.org/cancer-and-blood-clots-fast-facts.htm> (accessed 29-May-2017). 9. National Blood Clot Alliance. Blood Clot Treatment. [https://www.stoptheclot.org/learn\\_more/blood\\_clot\\_treatment](https://www.stoptheclot.org/learn_more/blood_clot_treatment) (accessed 29-May-2017).