

# IMMUNO-ONCOLOGY OVERVIEW

## HOW IMMUNOTHERAPY HELPS THE BODY ATTACK CANCER

### TYPES OF CANCER TREATMENT<sup>1</sup>



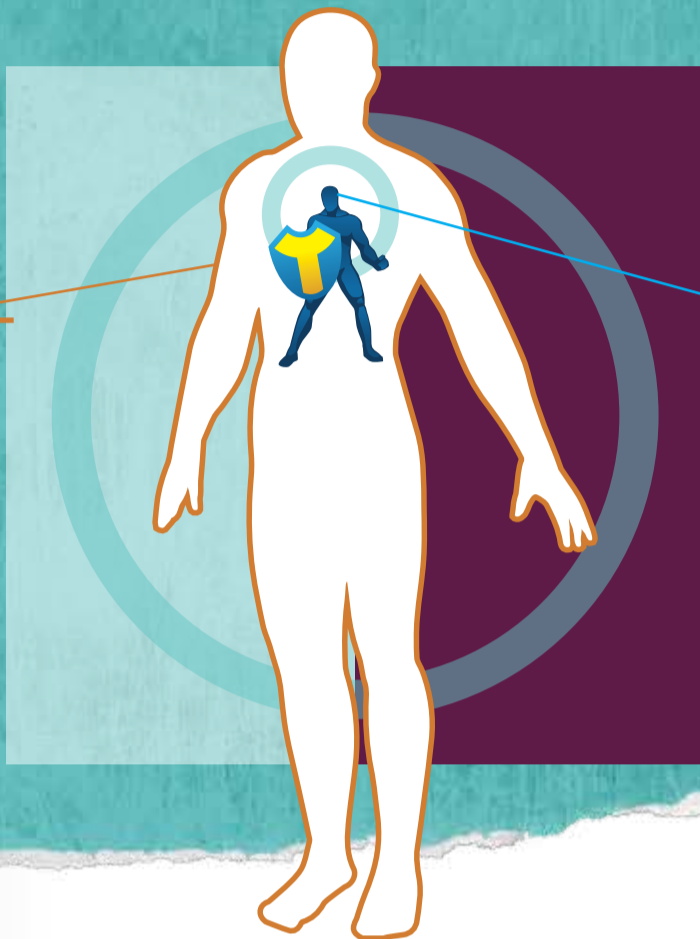
### THE ROLE OF THE IMMUNE SYSTEM<sup>2</sup>

The immune system is the body's natural defence against infection and disease. It is made up of cells and organs that work together to respond to infections, abnormal cells and foreign invaders, as well as transplanted tissues. **When the body detects something foreign, several kinds of cells and substances go into action to protect us.**

#### THE FIRST LINE OF DEFENSE<sup>2</sup>

##### The innate immune system:

Provides first line of defense against infection and includes barriers like the skin.



#### THE SECOND LINE OF DEFENSE<sup>2</sup>

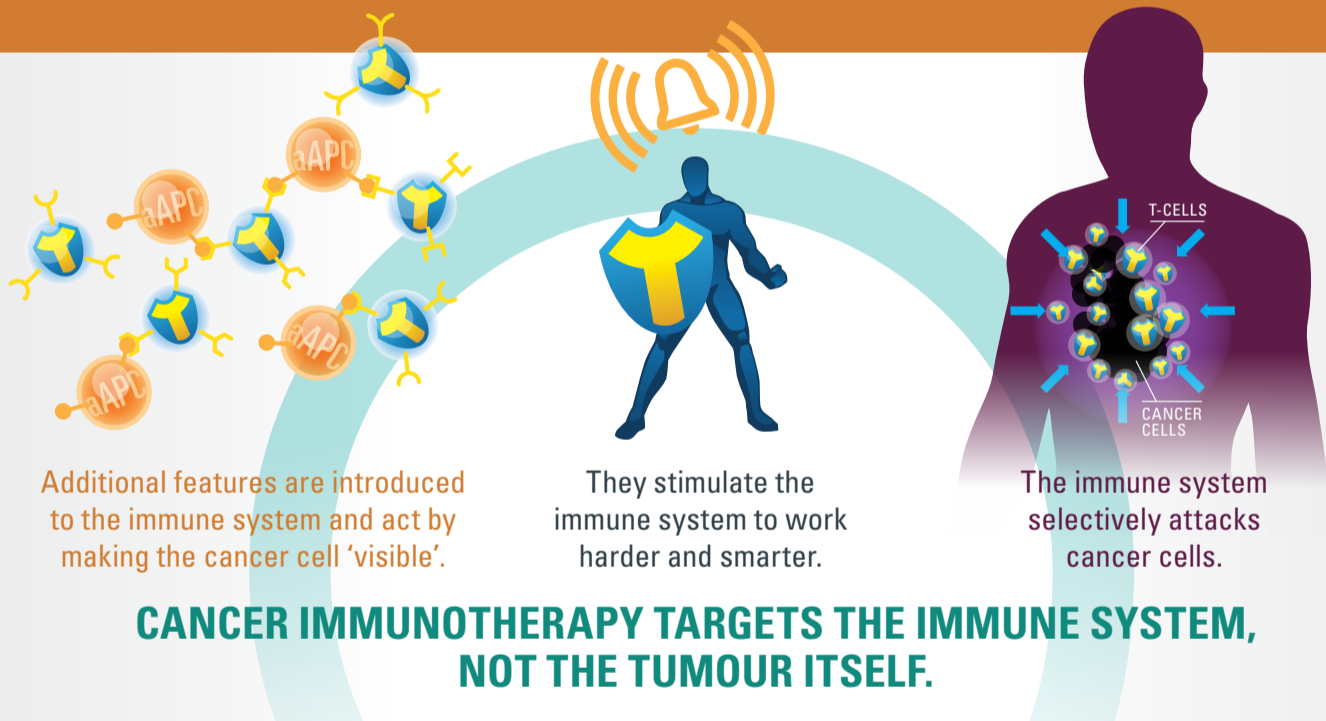
##### The acquired immune system:

Remembers that it has encountered an invading organism and reacts more rapidly next time.

### THE IMMUNE SYSTEM AND ITS CONNECTION TO CANCER<sup>2,3</sup>

Substances that trigger the immune system to attack are called antigens. Cancer cells often appear similar to normal cells, so some cancers avoid detection and destruction as an antigen.

### HOW IMMUNO-ONCOLOGY THERAPIES WORK<sup>4,5</sup>



Additional features are introduced to the immune system and act by making the cancer cell 'visible'.

They stimulate the immune system to work harder and smarter.

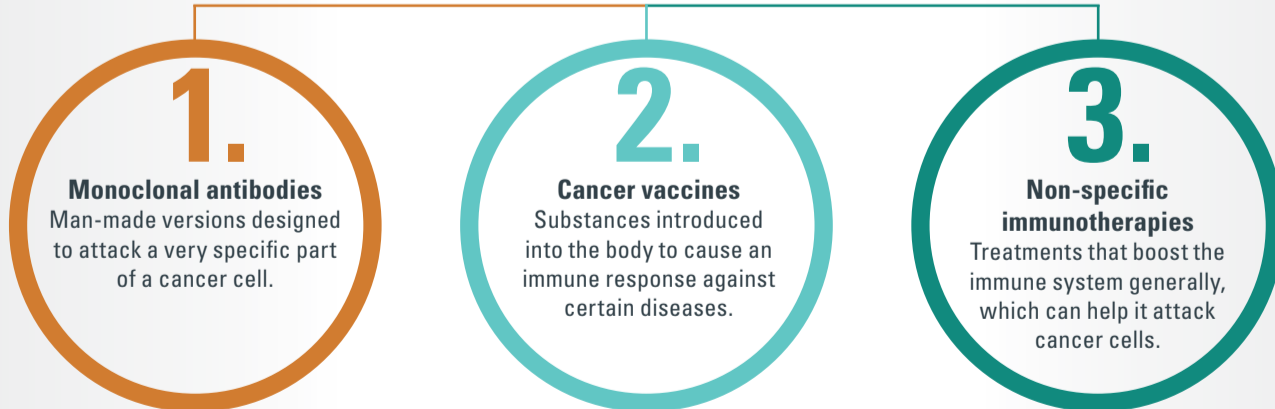
The immune system selectively attacks cancer cells.

#### CANCER IMMUNOTHERAPY TARGETS THE IMMUNE SYSTEM, NOT THE TUMOUR ITSELF.

**THEN** For over 100 years, researchers have studied the role of the immune system in cancer.<sup>6</sup>

**NOW** Today, over 900 clinical trials are evaluating immunotherapies in various cancers<sup>7</sup>, including the 10 most common.<sup>8</sup>

### IMMUNO-ONCOLOGY APPROACHES<sup>5</sup>



1.

**Monoclonal antibodies**  
Man-made versions designed to attack a very specific part of a cancer cell.

2.

**Cancer vaccines**  
Substances introduced into the body to cause an immune response against certain diseases.

3.

**Non-specific immunotherapies**  
Treatments that boost the immune system generally, which can help it attack cancer cells.

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