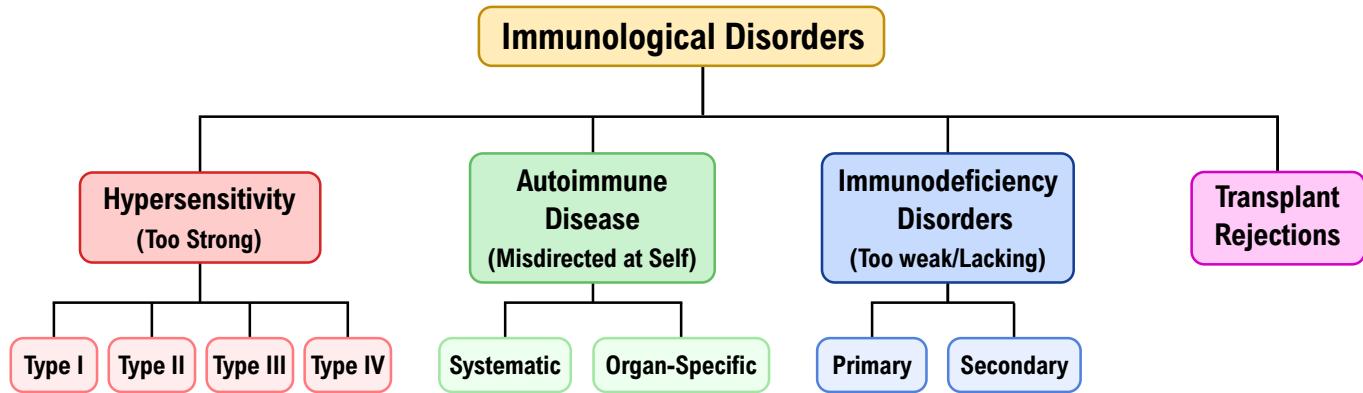


## TOPIC: INTRODUCTION TO HYPERSENSITIVITIES

### Introduction to Immunological Disorders

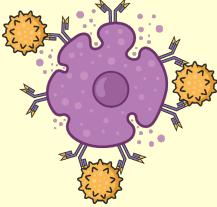
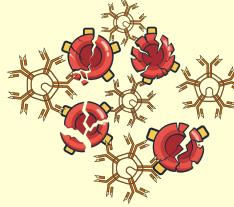
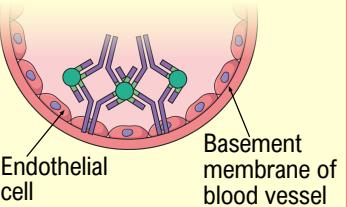
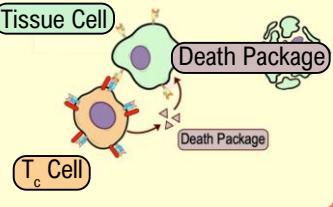
- ◆ **Immunological Disorder:** condition or disease caused by a *dysfunction* of the \_\_\_\_\_ system.
  - Includes hypersensitivities, autoimmune disorders, immunodeficiency disorders, & transplant rejections.



NOTE: Many autoimmune disorders & transplant rejections result from hypersensitivities.

### Overview: Hypersensitivities & Sensitization

- ◆ **Hypersensitivity:** an exaggerated, *harmful*, immune system \_\_\_\_\_ reaction that occurs *AFTER sensitization*.
  - **Sensitization:** immune system's \_\_\_\_\_ exposure to an antigen only preps it to react in *subsequent* exposures.
- ◆ We do \_\_\_\_\_ fully understand why certain individuals develop some hypersensitivities while others do not.

<b>Type I (Allergic Reactions):</b> rapid antibody response to an _____.	<b>Type II (Cytotoxic):</b> antibodies bind antigens on _____-surfaces or in their matrix.	<b>Type III (Immune Complex-Mediated):</b> caused by formation of _____ complexes in the body.	<b>Type IV (Delayed Cell-Mediated):</b> response mediated by _____ cells.
			



Memory Tool: \_\_\_\_\_.

## **TOPIC: INTRODUCTION TO HYPERSENSITIVITIES**

### **PRACTICE**

Of the four types of hypersensitivity reactions, which type is characterized by a delayed immune response triggered by antigen-specific T cells?

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- a) Type I - Allergic reaction hypersensitivity.
- b) Type II - Cytotoxic hypersensitivity.
- c) Type III - Immune-complex mediated hypersensitivity.
- d) Type IV - Cell-mediated hypersensitivity.

### **PRACTICE**

Hannah is allergic to wasp venom. During a picnic with friends, she is stung by a wasp and has an immediate, rapid, life-threatening response. Which type of hypersensitivity is this?

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- a) Type I.
- b) Type II.
- c) Type III.
- d) Type IV.