



## Common Prefix Groups in Medical Terms

Not all medical terms contain a prefix, but when a prefix is present, it plays a crucial role in determining the meaning of the term.

For example:

**Hypertension** (high blood pressure) and **hypotension** (low blood pressure) are exact opposites. Confusing the prefixes (hyper-) and (hypo-) can lead to serious misunderstandings.

Another pair of similar-sounding prefixes that may cause confusion is (pre-) and (post-):

- The prefix **(pre-)** means “before,” as in **prenatal** قبل الولادة , which refers to the period before birth.
- The prefix **(post-)** means “after,” as in **postoperative** بعد الجراحة , which refers to the period after surgery.

A similar contrast can be seen with (sub-) and (super-):

- The prefix **(sub-)** means “under” or “below,” as in **subcutaneous**, meaning beneath the skin.
- The prefix **(super-)** means “above” or “excessive,” as in **superinfection**, referring to an additional infection occurring on top of an existing one.

Therefore, accurately distinguishing between prefixes—especially those that sound alike—is essential to avoid errors and to correctly understand medical terminology.

## Example 1:

### Hypoglycemia

Prefix: **hypo-** = low

Word root: **glyc** = blood sugar

Suffix: **-emia** = condition

**Meaning** = Condition of low blood sugar

## Example 2:

### Anticoagulant

Prefix: **anti-** = against

Root: **coagulant** = substance that causes

**Meaning** = blood to clot

Organizing prefixes into functional groups helps make them easier to understand and memorize.

They can be divided into five main categories:

1. Prefixes of negation
2. Prefixes of size or number
3. Prefixes of position
4. Prefixes of direction
5. Prefixes of time or speed

## Prefixes of Time or Speed

Prefixes that indicate time or speed are commonly used in medical terminology to describe when something occurs or how quickly it happens.

For example, time-related prefixes include:

- **(intra-)** meaning “within,” as in **intravenous** (within a vein)
- **(post-)** meaning “after,” as in **postnatal** (after birth)

Prefixes related to speed are frequently used in clinical descriptions, especially when referring to body functions such as heart rate:

- **(tachy-)** means “fast,” as in **tachypnea** (rapid breathing)
- **(brady-)** means “slow,” as in **bradypnea** (slow breathing)

Understanding these prefixes helps in accurately interpreting medical terms and describing the timing or rate of physiological processes.

Examples :

Prefix	Refers to	Example	Meaning
- con-, - sym-, - syn	with, within	- congenital, فطري - sympathetic, تعاطفي - synthetic اصطناعي	- with (or at) birth, - with feeling toward,
contra-	Against	contradiction تناقض	Against the speech or writing.

## 2. Prefixes of Position

Prefixes that indicate position are widely used in medical terminology to describe the **location of structures within the body or their relationship to one another**.

For example:

- The prefix **(sub-)** means “under” or “below,” as in **subcutaneous**, referring to beneath the skin.
- The prefix **(inter-)** means “between,” as in **intercostal**, which refers to the space between the ribs.
- The prefix **(para-)** means “beside” or “near,” as in **parathyroid**, referring to glands located near the thyroid.

Because many of these prefixes are already familiar from everyday language, it becomes easier to understand their meanings in medical contexts. They are especially important in **describing locations during diagnostic procedures and medical treatments**.

Prefix	Refers to	Example	Meaning
ec-, ecto-, ex-, exo-	Outside	extraction	removal to the outside
endo-	Within	endoscopy	visual examination of the inside of some part of the body

## 3 Prefixes of Size or Number

Prefixes that indicate **size, amount, or quantity** are commonly used in medical terminology to **describe conditions, measurements, or the number of structures involved**.

For example:

- **The prefix (hyper-)** means “excessive” or “above normal,” as in **hypertension**, referring to abnormally high blood pressure.
- **The prefix (hypo-)** means “below normal” or “deficient,” as in **hypoglycemia**, which refers to low blood sugar levels.
- **The prefix (macro-)** means “large,” as in **macrocyte**, referring to an abnormally large cell.
- **The prefix (micro-)** means “small,” as in **microscope**, an instrument used to view very small objects.
- **The prefix (mono-)** means “one” or “single,” as in **monocyte**, a type of white blood cell with a single nucleus.
- **The prefix (poly-)** means “many” or “much,” as in **polyuria**, referring to excessive urination.
- **The prefix (oligo-)** means “few” or “scanty,” as in **oliguria**, meaning decreased urine output.

### Prefixes of Negation

Prefixes of negation are used in medical terminology to indicate **absence, lack, or denial** of something. They are essential for describing conditions where a normal function, structure, or substance is missing or not present.

For example:

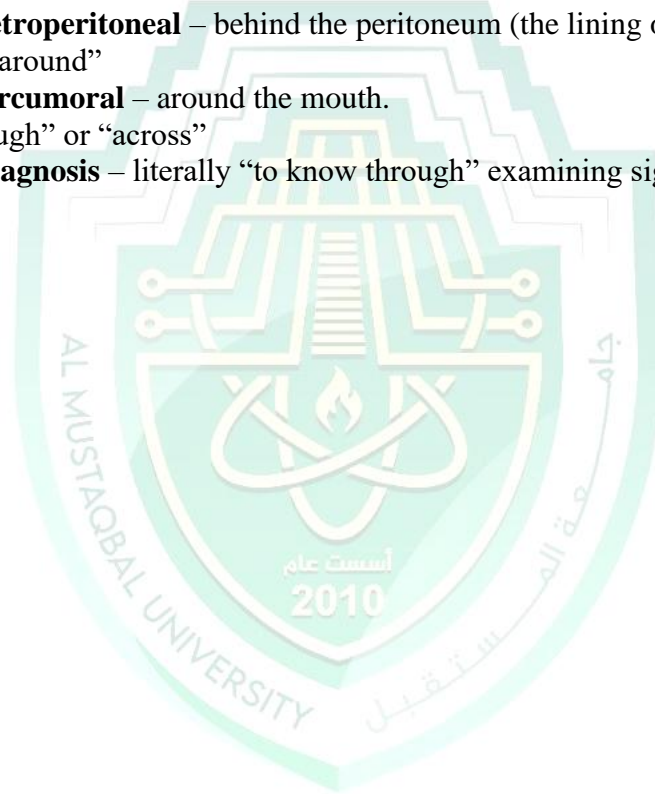
- **The prefix (a-) or (an-)** means “without” or “absence of,” as in **apnea**, referring to the absence of breathing, and **anemia**, meaning a lack of sufficient red blood cells.
- **The prefix (non-)** means “not,” as in **noninvasive**, referring to a procedure that does not require entering the body.
- **The prefix (in-) / (im-) / (il-) / (ir-)** means “not,” as in **incomplete** (not complete), **impossible** (not possible), **illegal** (not legal), and **irregular** (not regular). The form changes depending on the first letter of the word that follows.
- **The prefix (un-)** means “not,” as in **unconscious**, referring to a state where a person is not awake or aware.

### Prefixes of Direction in Medical Terminology

Prefixes that indicate **direction, position, or movement** are commonly used in medical terms to describe the location or movement of structures or substances in the body.

1. **Ab-** – means “away from”
  - Example: **abduction** – movement of a limb away from the midline of the body.
2. **Ad-** – means “toward” or “near”
  - Example: **adduction** – movement of a limb toward the midline of the body.
3. **Epi-** – means “upon” or “above”
  - Example: **epidermis** – the outer layer of skin (above the dermis).
4. **Sub-** – means “under” or “below”

- Example: **subcutaneous** – situated under the skin.
- 5. **Inter-** – means “between”
  - Example: **intercostal** – located between the ribs.
- 6. **Intra-** – means “within” or “inside”
  - Example: **intravenous (IV)** – within a vein.
- 7. **Trans-** – means “across” or “through”
  - Example: **transdermal** – across or through the skin.
- 8. **Retro-** – means “backward” or “behind”
  - Example: **retroperitoneal** – behind the peritoneum (the lining of the abdominal cavity).
- 9. **Circum-** – means “around”
  - Example: **circumoral** – around the mouth.
- 10. **Dia-** – means “through” or “across”
  - Example: **diagnosis** – literally “to know through” examining signs and symptoms.



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