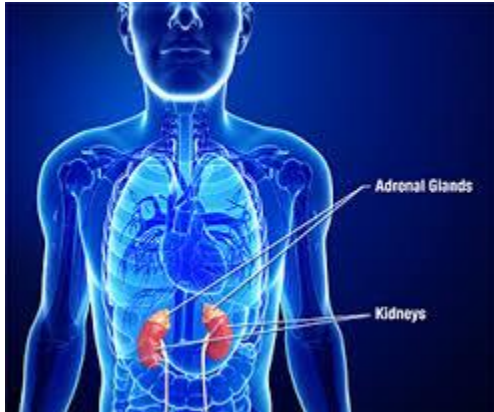


# Catecholamines

What is a catecholamine?

A catecholamine is a hormone made by your adrenal glands



Your adrenal glands sit on top of your kidneys and make important hormones:

- **Dopamine** (reward behavior hormone)
- **Epinephrine** (adrenaline)
- **Norepinephrine** (noradrenaline)

The adrenal glands are important in your body's "fight or flight" response. When you are physically or emotionally stressed, your adrenal glands send catecholamines into your blood. Catecholamines prepare the body for fight or flight.

Some common physical symptoms from the release of catecholamines include:

- High blood pressure
- Fast heart rate (sending more blood to organs)
- Increase in respiration (breathing)
- Muscle tension

Some foods and drinks that increase catecholamine levels are:

- Coffee
- Tea
- Bananas
- Chocolate/Cocoa
- Citrus fruits
- Vanilla



## Catecholamines and cancer

There is evidence that suggests that more catecholamines in the body is related to tumor growth. For example, the adrenal glands and brain are catecholamine rich organs, and are common sites for cancers. Catecholamines have also been shown to make tumor cells resistant to chemotherapeutic drugs.

## How to test for catecholamines

Catecholamine levels can be tested with a urine or blood test. We use a blood test.

### Instructions

A Data Bank and Biorepository Recruitment Coordinator will contact you for consent to the catecholamine study. If you consent, the first blood samples will be drawn before you are admitted. We will call you before your first blood draw to your review appointment time and the instructions.

The day before your blood sample **after midnight**:

- Do not eat.
- Do not drink anything other than water - especially do not drink coffee!
- Do not take any medications. Bring them with you to take after your blood is drawn.

After the first blood sample, there are additional blood samples to follow.

- **Allogeneic patients** will have blood drawn on Day 0, Day+7, Day+14, and Day +21
- **Cellular therapy** patients will have blood drawn on Day 0 (at 7:00 a.m. and at 3:00 p.m.), Day +7, and Day +14
  - Days with a negative sign (-) refer to days **before** your cellular infusion.
  - Day 0 refers to the day you have your cellular infusion.
  - Days with a positive (+) sign refer to days **after** your cellular infusion.

Your blood samples will be analyzed for the catecholamines level in your blood and used to help in future treatment and care of our patients.

On behalf of the Transplant and Cellular Therapy Program, thank you for your participation.