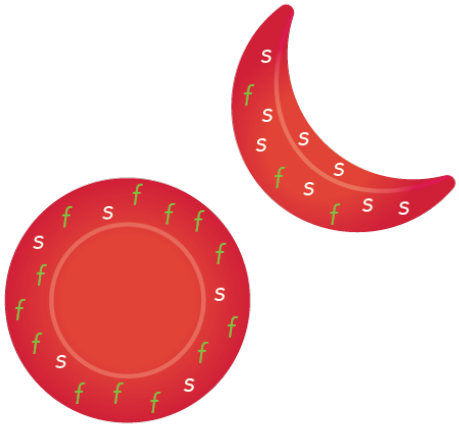
Hydroxyurea

What is hydroxyurea?

Hydroxyurea is a very important and effective medication for sickle cell disease, recommended for all children with HbSS or HbS/Beta-Zero Thalassemia starting as early as 6 months of age. **Hydroxyurea reduces the unhealthy type of hemoglobin (HbS)** made in sickle cell disease and increases a type of hemoglobin that your child had as a fetus and young infant (fetal hemoglobin or HbF).



S Unhealthy Hemoglobin (HbS)

F Healthy Hemoglobin (HbF)

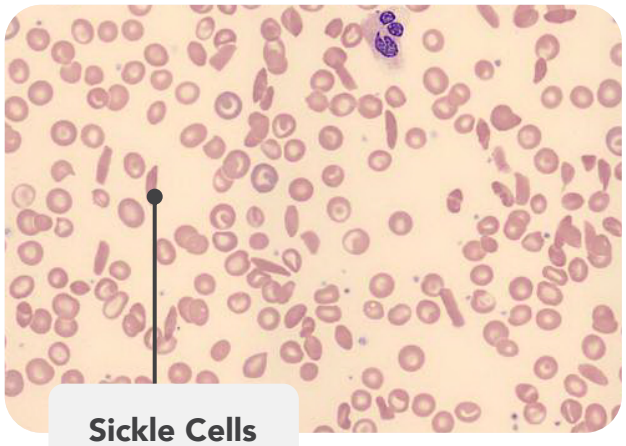
Hydroxyurea improves laboratory results and helps reduce and prevent most short-term and long-term complications of sickle cell disease.

What to know:

- Short-term improvements include reducing pain and the need for hospitalization.
- Long term improvements overall include healthier organs and an improved quality of life.
- Hydroxyurea is taken one time per day and is available as a liquid, tablet, or capsule.
- Due to the early and consistent use of hydroxyurea, **many children are able to live with minimal complications of sickle cell disease.**

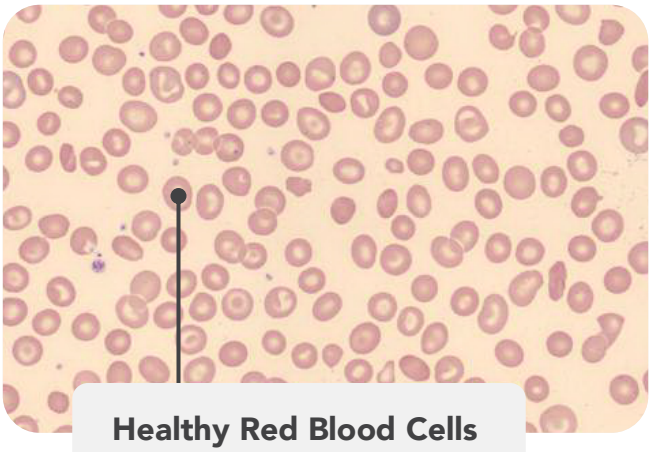
Hydroxyurea and Labs

Before Hydroxyurea



Sickle Cells

After Hydroxyurea



Healthy Red Blood Cells

What to know:

Taking hydroxyurea improves laboratory results.

These labs should go up:

- **Hemoglobin (HB)** which is the number of healthy red blood cells
- **Mean Cell Volume (MCV)** which is how big the cells are
- **Fetal Hemoglobin (HbF)** which protect against sickle cell

These labs should go down:

- **Neutrophil Count (ANC)** which is a type of white blood cell
- **Retic Count (ARC)** which are "new" red blood cells