Stem cells are "master cells". They have the potential to change into many different cell types.

Stem cells are unlocking new potential for testing and treatment.

Regenerative cellular therapies
Stem cells have the potential to rebuild healthy tissues, potentially helping people with heart disease, ALS, diabetes, Alzheimer's disease, cancer, Parkinson's disease, liver disease and more.

Cells as drugs
Stem cells can be used to influence other cells. For example, stem cells can be injected into joints to reduce pain and swelling, or in soft tissue to promote healing.

Blood and bone marrow stem cell treatments/transplants
Healthy stem cells are injected into the body to produce new blood. Stem cells may be from the patient's own body, a donor or from umbilical cord blood.

Testing of new drugs for safety and effectiveness
Quality and safety of investigational drugs could be tested on stem cells that have been transformed into tissue-specific cells. Researchers can monitor for side effects in the cells from the drug before exposing a patient to it.

Connecting patients with the future of regenerative medicine
The Regenerative Medicine Consult Service in the Mayo Clinic Transplant Center and Center for Clinical Regeneration is dedicated to helping patients and providers understand the science behind regenerative medicine and the options available, from research studies to clinical applications.

A leader in the field of regenerative medicine, Mayo Clinic continues to unlock new potential, developing unique cell-based treatments for a wide variety of conditions.

To learn more and request an appointment, visit MayoClinic.org/RegenerativeMedicine.

Source: MayoClinic.org