# MESENCHYMAL WHARTONS JELLY **STENCELLS**

Experience the pinnacle of regenerative medicine to treat various autoimmune diseases, neurodegenerative disorders, and tissue injuries.

# ORIGINATION

WJ-MSCs are multipotent progenitor cells found in the gelatinous tissue of the umbilical cord. Since they are collected from umbilical cords after birth, they are an ethical and noninvasive source for stem cell therapies. As multipotent progenitor cells, WJ-MSCs can differentiate into various tissue types, support healing, and regulate the immune system.

# CHARACTERISTICS

WJ-MSCs are among regenerative medicine's most potent and versatile stem cell types. Unlike adult stem cells from bone marrow or adipose tissue, they exhibit higher proliferation rates, stronger immunomodulatory properties, and secrete bioactive molecules making them ideal for therapeutic applications.



#### AUTOIMMUNE DISEASES

MSCs modulate the immune system, reduce inflammation, and prevent the immune system from attacking the body's own tissues by secreting bioactive molecules that suppress overactive immune responses.



## **TISSUE INJURIES**

MSCs have the ability to differentiate into various cell types, replacing damaged or lost cells, while secreting bioactive molecules that enhance the body's natural healing processes.



### NEURODEGENERATIVE DISORDERS

MSCs aid in healing neurodegenerative disorders by secreting neuroprotective factors that reduce inflammation, promote neuron survival, and stimulate the regeneration of damaged nerve cells.

## **CELL DIFFERENTIATION**

Cell differentiation guides the stem cells to develop into specific cell types needed for repair and regeneration. When WJ-MSCs are introduced into the body, they respond to signals from damaged tissues, releasing growth factors and bioactive molecules that promote healing. These signals also direct the stem cells to differentiate into specialized cells, such as neurons for neurodegenerative diseases, cartilage for joint repair, or muscle for remodulating the immune system.



#### HIGH PROLIFERATION RATE

Once introduced into the body, WJ-MSCs quickly generate more cells, increasing their ability to repair damaged tissues, reduce inflammation, and modulate the immune system. This fast replication allows for efficient healing.



## ANTI-AGING/ WELLNESS

WJ-MSCs secrete growth factors that stimulate angiogenesis (new blood vessel growth), improve blood flow, and support the regeneration of damaged heart/lung cells. Their antiinflammatory and immunomodulatory properties also help protect the cells from further damage.