

FGF FIBROBLAST GROWTH FACTOR

Main areas of application:

- > MUSCULOSKELETAL
- > BLOOD VESSELS
- > MUCOSA

IMMUNE FUNCTIONS:

- Stimulates new growth of blood vessels (wall integrity)
- Stimulates angiogenesis
- Chemotactic for macrophages, fibroblasts, endothelial cells
- Stimulates fibroblasts and endothelial cells

CLINICAL APPLICATIONS:

- Anti-inflammatory (for musculoskeletal, mucosa, intestine)
- Metabolic syndrome/insulin resistance
- Cholesterol/ hyperlipidemia
- joints/cartilage inflammation and repair
- Arthroses: osteoarthritis
- Hyperlipidemia
- cardiovascular diseases

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FGF

EGF EPIDERMAL GROWTH FACTOR

Main areas of application:

- > AESTHETIC: skin rejuvenation
- > REPAIR OF CONNECTIVE TISSUE INJURY (to stimulate blood flow)

IMMUNE FUNCTIONS:

- ⊙ stimulates epithelial cells, endothelial cells and fibroblasts
- ⊙ induces angiogenesis (*so contraindicated in neoplasm*)
- ⊙ Stimulates blood flow so may prevent fibrosis

CLINICAL APPLICATIONS:

- ESTHETIC APPLICATIONS to rejuvenate skin, repair sun damage
- Wound repair esp. lacerations, burns
- Ophthalmic conditions including optic nerve
- Regeneration of skin
- Blood flow and circulation esp in wounds and associated conditions
- helps prevent proud flesh and scarring

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EGF

IGF INSULIN-LIKE GROWTH FACTOR

I N S U L I N - L I K E G R O W T H F A C T O R

Main areas of application:

- LIVER/SPLEEN AXIS
- FAT
- MUSCLE
- NEUROPATHY ESP. DIABETIC

IMMUNE FUNCTIONS:

- Synthesized by fibroblasts, muscles and liver
- Stimulates DNA with serum factors

Contraindicated in prostate cancer

CLINICAL APPLICATIONS:

- Diabetic neuropathy (numbness)
- Obesity; fat mass, hypercholesterolemia
- liver steatosis (fatty liver)
- Steatitis
- Enlarged spleen
- Anti-age
- Aesthetics (UV protection)

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IGF

TGF TRANSFORMING GROWTH FACTOR

T R A N S F O R M I N G G R O W T H F A C T O R

Main areas of application:

- MUSCULOSKELETAL REPAIR: inflammation and pain
- CONNECTIVE TISSUE REPAIR
- NERVE PAIN ASSOCIATED WITH MUSCULOSKELETAL CONDITIONS

IMMUNE FUNCTIONS:

- ⊙ stimulates macrophages to secrete other growth factors
- ⊙ Stimulates fibroblast proliferation
- ⊙ Involved in different stages of healing (depending on mix)
- ⊙ Chemotactic for macrophages and fibroblasts
- ⊙ Stimulates angiogenesis esp. in repair of connective tissue

CLINICAL APPLICATIONS:

- Musculoskeletal repair
- Neuropathy of musculoskeletal like radiculitis
- Connective tissue regeneration;
- Tendon
- Ligament
- Muscle

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TGF

<p>BDNF BRAIN DERIVED NEUROTROPHIC FACTOR</p>		<p>B R A I N D E R I V E D N E U R O T R O P H I C F A C T O R</p>
<p>Main areas of application:</p> <ul style="list-style-type: none"> ➤ Cognitive disorders ➤ Mood, stress, depression 		
<p><u>IMMUNE FUNCTIONS:</u></p> <ul style="list-style-type: none"> ➤ astrocyte immunoreactivity ➤ Hippocampal neural plasticity ➤ Regulates neuronal plasticity 	<p><u>CLINICAL APPLICATIONS:</u></p> <ul style="list-style-type: none"> ➤ Addiction/alcoholism ➤ Stress-related disorders ➤ Depression ➤ Neurodegenerative diseases : ➤ Huntington's disease ➤ Alzheimer's ➤ Parkinson's ➤ Dementia ➤ Aging brain ➤ Learning and memory ➤ Behavioural disorders like ADHD ➤ Stress ➤ Mood disorders 	
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BDNF

<p>G-CST GRANULOCYTE COLONY STIMULATING FACTOR</p>		<p>G R A N U L O C Y T E C O L O N Y S T I M U L A T I N G</p>
<p>MAIN AREAS OF APPLICATION:</p> <ul style="list-style-type: none"> ➤ IMMUNOTHERAPY 		
<p><u>IMMUNE FUNCTIONS:</u></p> <ul style="list-style-type: none"> - Stimulates neutrophils in bone marrow - Stimulates granulocytes - Mobilizes mature neutrophils - Stimulates and mobilizes hematopoietic stem cells 	<p><u>CLINICAL APPLICATION:</u></p> <ul style="list-style-type: none"> - Adjuvant in chemotherapy - Adjuvant for transplant patients - Supportive treatment in leukemia - adjuvant in IVF (in vitro fertilization) - Fever - Prophylactic for infection - Treats and prevents neutropenia esp. post chemo 	
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G-CSF