CONTRAINDICATIONS AND USE OF MEDICATIONS

ABSOLUTE CONTRAINDICATIONS

These conditions **must exclude** a patient from IV stem cell therapy:

1. Active Malignancy or Recent Cancer History

o Risk of tumor promotion by growth factors secreted by stem cells.

2. Ongoing Systemic Infection

o Bacteremia, sepsis, tuberculosis, HIV with high viral load, etc.

3. Pregnancy or Breastfeeding

o No safety data; fetal effects unknown.

4. Uncontrolled Autoimmune Diseases

 Exacerbation risk due to immunomodulatory effects (e.g., active lupus, MS flare, rheumatoid arthritis in active stage).

5. Severe Organ Failure

o Uncompensated heart failure (NYHA IV), liver cirrhosis (Child-Pugh C), or end-stage renal disease without dialysis.

6. Known Allergy to Cell Preparation Components

o Such as DMSO (used in cryopreservation), albumin, or carrier medium.

7. History of Anaphylaxis or Severe Infusion Reactions

8. Uncontrolled Hypertension or Cardiac Instability

o Risk of cardiovascular events during infusion.

9. Ongoing Anticoagulation with High Bleeding Risk

o Especially if stem cells are infused in high volume or with vascular puncture.

RELATIVE CONTRAINDICATIONS (USE WITH CAUTION / CASE-BY-CASE)

These require clinical judgment and risk-benefit analysis:

- 1. Previous Thromboembolic Events
 - o Some reports suggest a theoretical risk of emboli, especially with poorly prepared cell products.
- 2. Chronic Immunosuppression or Organ Transplant Patients
 - o Altered immune profile may affect response or rejection risk.
- 3. History of Stroke or Intracranial Hemorrhage
 - o Infusion-related blood pressure variations may increase risk.
- 4. Severe Allergies / Mast Cell Disorders
 - o May predispose to unpredictable immune responses.
- 5. Unstable Psychiatric Conditions
 - o Especially if the patient is unable to provide consistent consent or follow-up.

SPECIAL CAUTION WITH ALLOGENEIC CELLS

- Allogeneic IV therapy should always be done with:
 - o Full infectious screening
 - o HLA testing if indicated
 - o GMP-certified manufacturing
 - o Ethical and legal approval

CLINICAL BEST PRACTICE:

- Always perform a **thorough medical history**, **physical exam**, and **lab screening** before IV stem cell infusion.
- Document **informed consent** clearly, noting off-label use (if applicable).

Restriction Why Avoid It Duration

Strenuous physical activity / heavy exercise	To avoid systemic inflammation and support cell homing	At least 7–10 days
Alcohol consumption	Alcohol is inflammatory and may impair cellular repair	7–14 days
Smoking	Nicotine and toxins impair vascular health and healing	Ideally permanently, but minimum 2 weeks
NSAIDs (e.g., ibuprofen, diclofenac)	These may suppress the inflammatory signals needed for cell activation	7–14 days (unless medically necessary)
Steroids (unless prescribed)	Immunosuppressive effect may interfere with MSC activity	As advised by physician
Vaccinations	Risk of immune system interference	2 weeks before and after infusion (consult physician)
High-stress environments	Cortisol dampens regenerative processes	7–14 days
Travel (especially long flights)	Risk of fatigue, clotting, or exposure to illness	3–5 days (or until stable)
Infections or sick contacts	Patient may be temporarily immunomodulated	At least 7 days
Unprotected sun exposure (for skin-related protocols)	May counteract regenerative effects (if aesthetic purpose)	7–10 days

Medication (Avoid)	Alternative (Use Instead)	
NSAIDs (ibuprofen, diclofenac, naproxen)	Paracetamol (acetaminophen)	
Systemic corticosteroids (prednisone, dexamethasone)	Avoid if possible; use lowest effective dose if necessary	
Immunosuppressants (tacrolimus, methotrexate)	Only under strict medical guidance	
Chemotherapy agents	Not recommended unless prescribed by oncologist	
TNF inhibitors (infliximab, etanercept)	Evaluate risk-benefit individually	
Live vaccines	Delay 2 weeks before and after therapy	
Certain antibiotics (high-dose ciprofloxacin, tetracycline)	Use narrow-spectrum antibiotics if needed	
Alcohol or recreational drugs	Avoid completely for 7–14 days	
Anticoagulants (warfarin, rivaroxaban)	May continue with monitoring , if needed	