

STEM CELL THERAPY DECREASES COVID DEATHS

Several clinical studies report increased patient survival following the intravenous infusion of mesenchymal stem cells (MSCs) during the past year. MSCs block the cytokine storm in the lungs and also regenerate cells and tissues damaged by the COVID-19 virus. MSCs are not vaccines and work differently in the treatment of COVID-19. Thus, MSC therapy of COVID-19 is not dependent on a specific sequence and we expect it to be effective in treatment of the emerging COVID variants resulting from mutations.

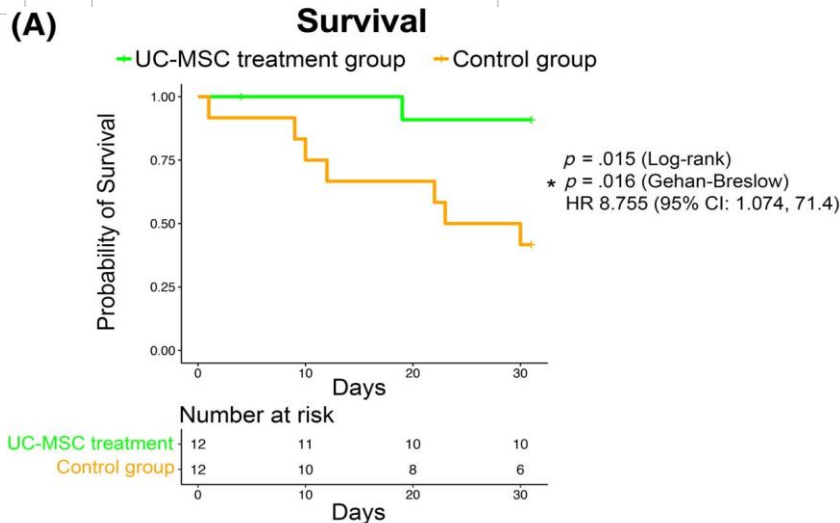
The following table summarize the results of clinical trials published in peer reviewed journals.

PUBLISHED TRIALS OF MSC THERAPY OF MODERATE TO SEVERE COVID-19 PATIENTS					
<i>N</i> *	<i>MSC Source</i>	<i>Design</i>	<i>Dose</i> [^]	<i>Results</i>	<i>Link</i>
7	Umbilical cord	Phase I	1	Symptom resolution, anti-inflammation, CRP decreased, immunomodulation	https://doi.org/10.14336/AD.2020.0228
13	Adipose tissue	Phase I	1 x 1-3	No adverse events, clinical improvements in 70% of patients: Decreased: CRP, IL-6, ferritin, LDH & D-dimer	https://doi.org/10.1016/j.eclinm.2020.100454
24	Umbilical cord	Phase 2a	1 x 2	No adverse events, SD increase in patient survival: 91% with treatment, 42% without.	https://stemcells.journals.onlinelibrary.wiley.com/doi/10.1002/sctm.20-0472
100	Umbilical cord	Phase 2	0.6 x 3	No adverse event, SD reduction whole lung lesion volume, SD reduction solid component lung lesion, SD increase in six-minute walk test	https://doi.org/10.1038/s41392-021-00488-5

* N is the number of patients in the study including treated and untreated

[^] Dose is in millions of cells/kg body weight times the number of successive infusions

SD is statistical difference



From: Lanzoni, G, et al. Stem Cells Transl. Med. 2021, 1-14

Other groups have provided corroborating evidence although these studies have not yet been published in peer reviewed journals. Giostar, Inc a partner of Vitro Biopharma, Inc received FDA compassionate use eIND authorization (IND# 22262), for treatment of a COVID-19 patient with AlloRx Stem Cells® manufactured by Vitro Biopharma, Inc.

Following the [treatment with AlloRx Stem Cells®](#), the patient experienced resolution of multiple organ failure, recovery from coma, and restoration of neurological, pulmonary, liver and renal function. Dr. Soni, Chief Medical Officer, Giostar, Inc. stated that “It is highly likely that the patient would have died without stem cell therapy, because the combination of organ failure and comorbidities yielded a very poor prognosis. We are pleased to partner with Vitro Biopharma and look forward to providing this therapeutic option for slowing the pandemic on a global scale.”

Similar results have been seen in three other COVID-19 patients treated with AlloRx Stem Cells®. Our eIND patients have shown the necessity of clearly defining the treated patient population since some advanced severe COVID-19 patients are not treatable. Our pending IND Phase I study of AlloRx Stem Cells® for COVID-19 patients has clearly defined exclusion & inclusion criteria resulting in a more homogeneous patient study population.

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By Jim Musick, PhD, Vitro Biopharma CSO, Tiana States, MS, Vitro Biopharma CMO, and Jack Zamora, MD, Vitro Biopharma, CEO