# STEMNET POSITION STATEMENT ABOUT THE USE OF CELL THERAPIES FOR COVID-19 INFECTIONS
## March 16, 2020

**As is the case in any emergency situation, it is necessary to warn against the spread of information that does not correspond to the truth, which can create confusion in the population and give rise to scams against the patients. This has happened in the past particularly in the field of so-called stem cell therapies.**

**The recent release of the International Society for Stem Cell Research (1), according to which there are still no approved stem cell treatments for the prevention and treatment of COVID-19 infection should be read in this perspective. This intervention represents an important note of caution against the risk of improper emphasis and premature commercialization of cellul therapies not based on rigorous clinical studies.**

**In Italy, the pulmonary complications of a large number of patients infected with Covid-19 have created a serious emergency due to the lack of proven effective therapies.**

**This has given rise to the use of so-called "off label" drugs, that is, drugs that can be used in diseases other than those for which they have been authorized. In the case of Covid-19 pneumonia, this is established on the basis of valid assumptions of their possible effectiveness in counteracting viral activity or severe inflammatory pulmonary symptoms. This is the case of some antivirals and some anti-cytokine biological drugs (such as anti-interleukin 6 and anti-TNF), recently authorized on these patients.**

**In this situation, a serious consideration should be given to clinical reports recently published in a scientific journal regarding the possible therapeutic efficacy of mesenchymal stromal / stem cells (acronym MSC) (2). However, the limited number of treated patients and the insufficient knowledge of the mechanisms underlying the observed effects do not allow to draw firm conclusions about the validity of this therapeutic approach, which might be attributable to the well-known anti-inflammatory and tissue-protective activities by these cells.**

**Given the considerable safety of the clinical use of MSCs, as proven by a thousand clinical trials carried out worldwide for various diseases, it is desirable that, in the face of such a severe health emergency as the one we are witnessing, their use can be assessed in seriously compromised patients at the risk of life, following the current regulations of the phase I / II clinical trials and / or for compassionate use.**

(1) ISSCR Statement Regarding the Marketing of Unproven Stem Cell Treatments for COVID-19. (2020). Available at: https://www.isscr.org/news-publicationsss/isscr-news-articles/article-listing/2020/03/06/isscr-statement-regarding-the-marketing-of-unproven-stem-cell-treatments-for-covid-19. (Accessed: 15th March 2020)
(2) Leng, Z. et al. Transplantation of ACE2- Mesenchymal Stem Cells Improves the Outcome of Patients with COVID-19 Pneumonia. Aging Dis. 11, 216 (2020).