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## Stem cell therapy for amyotrophic lateral sclerosis follow-up for 84 patients

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Amyotrophic lateral sclerosis (ALS) is a rapidly progressive and fatal disease characterized by a progressive degeneration of lower and upper motor-neurons. Survival ranges reported are less than 3 years and the population-based study for long survival estimates a cumulative time-dependent survival at 1, 5 and 10 years from diagnosis with 76.2%, 23.4% and 11.8%. Today there is not treatment that change or intensively slow the futile end of ALS. There are several scientific evidence that stem cells produce a beneficial effect in neurodegeneration of ALS in animal models, there are also some ongoing clinical trials, with positive results in Phase I and II. Several trials around the world are now ongoing to elucidate which cell type is better and the characteristics of the population that will benefit more from these treatments. We analyzed 84 patients going under autologous mesenchymal stem cell transplantation with a point-of-care fashion and follow them for outcome. Survival modeling was performed using Kaplan-Meier analysis.

**Results:** Taking time 0 as the moment of the transplantation the patients have 44% of survival at 11 months. When we take point 0 as the time of diagnosis the survival at 12, 24, 36 and 60 months was 89.2%, 81.4%, 64.5% and 58.7% since the diagnosis. Comparing to previous reports patients treated have 13% increased survival in the first year (survival of 89.2%) and a 35.3% increased in a 5-year period (survival of 58.7%). This study set sufficient information to future research in clinical trials.

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