# Spain prepares a new global clinical trial to eradicate HIV

## Using cord blood

Madrid, 22.10.2015, 12:59 Time

**USPA NEWS** - Public banks of umbilical cord blood and the National Transplant Organization (ONT its Spanish acronym) in Spain have identified 157 units of cord blood with Delta2 CCR5 gene variant, that appears to confer a natural resistance to the AIDS virus.

In collaboration with the Spanish regions they have made the typing of more than 25,000 high cell quality laces, of the 60,000 that are stored in the Spanish public banks. This is a preliminary step which will soon begin the first clinical trial in the world to eradicate HIV through a blood transplant umbilical cord with this genetic mutation in patients oncohematologic.

The data released by the director of the ONT, Rafael Matesanz, at a press conference held during the 57th National Congress of the Spanish Society of Hematology being held in Valencia, which was accompanied by the president of the Spanish Society of Hematology and Hemotherapy, Jose Maria Moraleda, and Rafael Duarte, hematologist at Hospital Puerta de Hierro-Majadahonda and principal investigator of the project.

According Matesanz, the results of the study by the ONT confirm the low prevalence of this genetic mutation of the blood stem cells among Spanish citizens. "CCR5 Delta32 cords are a rarity. Experts estimated that only 1% of the population in the world presents this genetic variant, but we have seen that in our country the prevalence is 0.6%. Its scarcity and its therapeutic potential in these units make a valuable therapeutic element."

The ONT and the banks involved have established a protocol to release these cords CCR5 Delta32. "These cords will remain available to all patients, whether or not HIV," said Matesanz, although in the case of compatibility with a patient without HIV infection possible alternatives before release and shipment to the applicant institution will be searched.

#### First clinical trial in the world

With this identification, started the first clinical trial in the world to test the efficacy of cord blood transplantation CCR5 Delta32 in the eradication of HIV virus in patients who have developed a blood cancer. According to Rafael Duarte, the strategy of this trial, which opens new avenues in addressing AIDS, is based on the elimination of HIV in a patient with lymphoma in 2013 in Barcelona by a cord blood transplant with the gene variant CCR5 Delta32. It was the first time ever that this method was used successfully.

There is another history with conclusive evidence of healing. This is a patient with acute myeloid leukemia and HIV infection, he received in Berlin in 2008, a bone marrow transplant from unrelated donor, whose blood stem cells also had the gene variant CCR5 Delta32. To date, the 'Berlin patient' remains free of HIV infection. According to experts, this data confirms the validity of this long-term strategy. "The purpose of this test is to validate the preliminary experience of 'patient Barcelona' in a controlled and secure, understand the key factors that determine the healing of HIV infection and generate the first scientific evidence on the therapeutic use of blood cord CCR5 Delta 32," said Duarte.

The researchers hope to begin treatment with the first patient in December and January next in Majadahonda Puerta de Hierro Hospital in Madrid. Matesanz stressed the importance of this study and the advantages of having a large sample of units of umbilical cord blood already identified CCR5 Delta32. "It is a trial of extraordinary importance, which may open new avenues for the treatment of AIDS," said the director of the ONT, recalling the efforts made by Spain in recent years to achieve significant assets in units of cord blood umbilical.

Spain, through the ONT and the autonomous communities, launched the National Plan for Umbilical Cord Blood in 2008, aiming to reach 60,000 units within a maximum period of five years. Thanks to this plan, Spain has become a world hematologic power: today is the second country in the world in number of cords stored, only behind the United States and home to 11% of all Units of Cord Blood registered the world. On the other hand, the high quality of the stored units, as a requirement of the National Plan, is widely recognized

by national and international teams. To this is added as a third qualitative factor, the fact of a large sample of cords with CCR5 Delta 32 gene variant already identified.

#### Article online:

https://www.uspa24.com/bericht-5877/spain-prepares-a-new-global-clinical-trial-to-eradicate-hiv.html

## Editorial office and responsibility:

V.i.S.d.P. & Sect. 6 MDStV (German Interstate Media Services Agreement): Jose A. Martin

### **Exemption from liability:**

The publisher shall assume no liability for the accuracy or completeness of the published report and is merely providing space for the submission of and access to third-party content. Liability for the content of a report lies solely with the author of such report. Jose A. Martin

# **Editorial program service of General News Agency:**

United Press Association, Inc. 3651 Lindell Road, Suite D168 Las Vegas, NV 89103, USA (702) 943.0321 Local (702) 943.0233 Facsimile info@unitedpressassociation.org info@gna24.com www.gna24.com