

## **AEBE, DEBRA SPAIN. SIX MONTHLY REPORT**

- **Members:**

Distrophyc EB: 102

Juntional EB: 2

Simplex EB: 46

The affected members increase in the last 6 months is of 5 people.

- **Professional Health Care:**

Every day more professionals contact with us for questions about EB. We have best relationship with children specialists.

In november, a plastic surgeon from Barcelona had a problem with the private hospital where he operates. At the moment any children less than 10 years o similar weight can be operated in that hospital. Two children wait for a date for the hand plastic surgeon in Barcelona.

There are others pediatrician surgeons in other places of Spain, but we are fighting for this specialist continue with the plastic surgeon in EB children.

We are in negotiations with the social security from january for looking a solution, but is really complicate. We are afraid to have the same problem with the hand surgeon for adults.

- **Research:**

A research program have been started. Report attached.

- **External contacts:**

In february a affected woman was in a tv regional channel talking about her experience with the disease. In march two families were in the tv national channel in a EB report.

We have contact with Lidermed, an enterprise who market and delivery the branches Tubigrip and Tubifast and we collaborated with them to show them to the members. We think it can be the first step for a collaboration in the future.

- **Fundraising and costs:**

Incomes:

- 41 % from estatal fund of 16.181 € for general costs of AEBE and others 500 € for furniture purchase.
- 20%: Membership fees
- 14 %: Donations
- 6%: Christmas Lotery
- 19%: Others

## **Spanish working consortium for Epidermolysis Bullosa Research and Clinical Patient care.**

**Aim:** Construction of a national consortium that will work co-ordinated and in connexion with other European initiatives for the rapid transfer of international knowledge in the management of Epidermolysis Bullosa condition and the future development of novel therapeutic alternatives.

**Initial Agreement:** Several leading Institutions, including hospitals, research centres and patient association, with previous expertise in the several fields involved in the broad project have agreed to form an active consortium to favour the integration of the Spanish patient collectivity in the international arena.

### **Participants:**

- AEBE. The Spanish EB Patient Association.
- Hospital Universitario La Paz. (Madrid).
- Centro Comunitario de Sangre y Tejidos del Principado de Asturias (Oviedo).
- Fundación Inbiomed. (San Sebastián).
- CIEMAT. (Madrid).
- Genetrix S.L. (Madrid).
- Centro Nacional de Biotecnología (Madrid)

### **Goals:**

#### **Co-ordinated by the AEB**

1. Maintain and re-inforce the current active platform for the efficient information of "the state-of the art" in clinical and "in house" management of EB patients.
2. To elaborate a basic and clinical research plan that could finally benefit some of the Spanish patients being included in clinical trials for improving its actual condition.

### **Participants description and pre-established role in the Project.**

#### **1. AEBE. The Spanish EB Patient Association.**

A legal association, recognized by the National Government, registry nº 119.883 and launched in 1993.

AEBE is in connexion with DEBRA (the European association of EB patients), all the associated Spanish families (currently AEBE is maintained by xx associated natural persons) and with the medical services taking care of the individuals affected in their local environment.

Its role will be to maintain and extend the excellent education program it is already carrying out for the everyday care of EB patients and to coordinate the accession of the patients to several phases of the study, trying to transmit and explain exactly to the patients what is expected from each phase. Its role is critical for balancing the information in order to avoid the generation of false expectative.

AEBE will be the representative of the consortium in front of the national or local medical authorities. AEBE will take care of all the bureaucratic authorizations needed for the efficient progression of the program. AEBE in co-ordination with Foundation Inbiomed will manage the distinct proposals, grants, etc. (national and international) for the economical support of the program.

**Represented by: Nieves Montero . AEB President.**

2. Hospital Universitario. La Paz. Madrid.

The Hospital U. La Paz, located in Madrid, is the reference national centre for EB national patients. Most of them are referred to this Institution for periodical medical tests and for the urgent surgical interventions that patients would need during the illness progression or acute episodes.

A prolonged experience in the management of EB patients is accumulated in the teams of minimally invasive surgery, nutrition paediatrics and paediatrics plastic surgery and, from the paediatrics Department, in this area.

The propose role for the H. La Paz will be critical for the continuous follow of the EB patients, being in contact with the Admission Committee for the proposal of a novel patient to be included in the study when his/her conditions will indicate that. In that case samples or biopsies will be taken from the patient and distribute to the corresponding involved partners to complete the diagnostic and pre-clinical plan.

In addition, an specific exploratory program has been also proposed in order to evaluate whether "alogenic epidermic equivalents" – prepared with a novel technology developed by CIEMAT/ Centro Comunitario de Sangre y Tejidos del Principado de Asturias- could be useful for the treatment of acute ulcers in EB patients.

**Represented by: Juan Carlos López. MD. PhD.**

3. Centro Comunitario de Sangre y Tejidos del Principado de Asturias

During the last four/five years CIEMAT and Centro Comunitario de Sangre y Tejidos del Principado de Asturias have developed a joint effort for the generation of a novel platform to obtain "epidermic equivalents" in order to be capable to treat burn patients (autologous) or chronic ulcers (allogenic). Their results could be catalogued as excellent in both areas.

As a fruit of this long-term collaboration the Centro Comunitario de Sangre y Tejidos del Principado de Asturias has accumulate the extremely valuable expertise for the culture and cryopreservation of the corresponding keratinocytes for clinical applications. Centro Comunitario de Sangre y Tejidos del Principado de Asturias possesses in addition, clinical facilities, recognized as human tissue bank, capable to support the posterior expansion and generation of the "epidermic equivalents" for patient treatment.

During the EB program, the Centro Comunitario de Sangre y Tejidos del Principado de Asturias will receive patient samples from H. La Paz in ordered to carry out the initial keratinocyte culture for two purposes: 1) creation a patient specific cell master bank (to be used in case the patient will be selected in the future to be included in a clinical trial), 2) provide keratinocyte culture samples to CIEMAT (research quality) in order to allow the testing of gene therapy patient-specific approach, after the patient genetic characterization.

**Represented by: Alvaro Meana. MD. PhD.**

4. Fundación Inbiomed. San Sebastian.

Inbiomed Foundation is a young basque institution with a firm compromise for help in the crystallization of new forms of diagnosis and Therapy based on the novel biomedical knowledge. Inbiomed is conformed by a young, dynamic and active scientific and medical team that guarantees the effort.

In the EB program will take all the responsibility for the genetical characterization of the patients upon specific samples that will be provided by H. La Paz. In addition, F. Inbiomed will also take care –in coordination with AEBE- of all technical work handed for the presentation of specific grants (national and international) for the continuous funding of the EB program. In the future, Inbiomed will, hopefully, have also available facilities recognized as human tissue bank, to be also included in the program.

**Represented by: Itziar Ochotorena, PhD.**

5. CIEMAT. Madrid

As mentioned earlier CIEMAT has been working in close collaboration with Centro Comunitario de Sangre y Tejidos del Principado de Asturias, designing and developing novel " skin equivalents" to treat both, acute wounds (burn victims) and chronic wounds ( chronic ulcers). One of the epidermal-dermal equivalents developed has been patented and good results are being obtained in clinics.

The research group working in CIEMAT is also an expert in cutaneous gene therapy, where they have worked in collaboration with members of Centro Nacional de Biotecnología (CNB). They have developed an excellent pre-clinical model animal where long-lasting gene expression can be achieved in a humanized context..

In the EB program this group will take the responsibility to direct the cutaneous gene therapy research in conjunction with Genetrix SL.

**Represented by: Jose Luis Jorcano, PhD.**

**Marcela Del Rio, PhD.**

6. Genetrix. SL. Madrid

Genetrix is a biotechnology company born as a spin off of the department of Immunology and Oncology of Centro Nacional de Biotecnología (CNB- CSIC). Genetrix was funded in November 2000 with aim to become an international reference biotechnology company in the area of biomedicine; agglutinating in his personnel experienced researchers and managers. Its facilities are located at Centro Nacional de Biotecnología and Parque Tecnológico de Madrid –Tres Cantos.

In the EB project , Genetrix will offer its experience in the area of vector development, working in close collaboration with CIEMAT in the gene therapy clinical test. Furthermore it will also work in collaboration with Centro Comunitario de Sangre y Tejidos del Principado de Asturias in the expansion of keratinocytes and their cryopreservation.

**Represented by: Cristina Garmendia, PhD.- President**

**Manuel Gonzalez, PhD.**

7. Centro Nacional de Biotecnología- Madrid

The group led by Dr. Antonio Bernad belongs to the Immunology and Oncology Department (DIO) of the National Centre for Biotechnology (CNB). During the last two years Bernad's group has collaborated with CIEMAT for optimisation of the retroviral transduction of primary human keratinocytes with the final goal of the generation of transgenic "epidermic equivalents" that could have therapeutic value in different diseases. CNB has contributed to the project with its large experience in the preparation of optimised retroviral batches and the use of a novel innocuous cell surface selectable marker based on a truncated form of the growth hormone receptor.

In the EB project, CNB could continue contributing in the same way, validating novel constructions or generating new alternative vectors probably related with the use of tissue specific promoters or using lentiviral vectors

**Represented by: Antonio Bernad, PhD.**