

A repurposing of Afatinib as a treatment for head and neck squamous cell carcinoma (HNSCC) in patients with Fanconi anemia (FA) – currently the main cause of death in adulthood for this population

A multidisciplinary group from CIBER, IRB Sant Pau and UB have identified a repurposed compound as a potential treatment for head and neck squamous cell-carcinoma

The Need

Fanconi anemia is the most frequently reported of the rare inherited bone marrow failure syndromes. HNSCCs are the most common solid tumor among individuals with FA.

FA patients cannot be treated with most of the chemotherapeutic drugs currently used due to their high toxicity. The standard treatment for FA patients with HNSCC is surgery; however, outcomes tend to be poor.

Thus, FA patients have a low survival prognosis. The life expectancy once the tumor has appeared is of about 1-2 years.

The Solution

The inventors have identified the repurposed drug Afatinib as a possible treatment of HNSCC in FA patients.

Innovative Aspects of the New Treatment

- ✓ **Comparable activity without toxicity:** it does not induce hemo-toxicity in mouse models with FA while showing comparable or improved activity with standard chemotherapeutic drugs.
- ✓ **Limited competition:** as other therapies currently approved are extremely toxic to FA patients.
- ✓ **Repurposed drug:** with a development timeline substantially shortened.

Stage of Development:

Starting recruitment of clinical trial

Intellectual Property:

- Granted patent in ES, EP and USA
- Orphan Drug Designation



Developmental stage of the project

Aims

Looking for a partner interested in a license and/or a collaboration agreement to develop and exploit this asset.

Contact details

Consorcio Centro de Investigación Biomédica en Red
(CIBER)
otc@ciberisciii.es
<https://www.ciberisciii.es/en>