BACTERIA OF THE *Burkholderia cepacia* complex (Bcc), a group of nine related species, are opportunistic pathogens in cystic fibrosis (CF) patients, associated with a poor prognosis and patient-to-patient transmissibility. The pulmonary deterioration in Bcc-colonized/infected patients presents a heterogeneous pattern leading, sometimes, to a fulminant development- the cepacia syndrome.

To evaluate the relationship between colonization/infection with the different Bcc species and the clinical course, the authors carried out a retrospective study of 31 CF patients followed at Hospital de Santa Maria with Bcc bacteria isolations from January 1995 to March 2006. Patients were categorized into groups: Group I- with intermittent isolations, and Group II – with chronic isolations. The prevalence of Bcc species was as follows: *B. cepacia* 57%, *B. cenocepacia* 43%, *B. multivorans* 7%, *B. stabilis* 13%.

Three of the patients died with the cepacia syndrome. The species *B. cepacia* and *B. stabilis*, usually less frequent in CF populations characterized in Europe and North America, were isolated in a considerable percentage of the patients examined. No correlation could be established between the species and the clinical outcome.

Deteriorated but not stable patients from group II, whose lung function and hospitalization due to pulmonary exacerbation could be retrospectively analyzed, exhibited significant differences concerning the number of hospitalizations and pulmonary function (FEV1) between the previous year and the years following Bcc isolation.

Based on the available data, it is currently impossible to outline preventive measures through the molecular characterization of Bcc isolates, reinforcing the notion that the recommended control measures must be followed.