



EDIT-B: fighting the diagnostic delay of bipolar disorder

Bipolar disorder is a mental health condition that causes extreme shifts in a person's mood and energy level. Globally, 45 million people [1] are correctly diagnosed and treated for bipolar disorder. More concerning though is that bipolar disorder is often confused with depression, meaning that of the 300 million people currently living with unipolar depression [2], 40% could be misdiagnosed and potentially have bipolar disorder [3]. Because of this, an accurate diagnosis in many countries can be as long as 8 years [4].

Navigating through the world without a diagnosis

No diagnosis, or misdiagnosis can have devastating consequences to an individual's life as well as negatively affecting healthcare systems. The societal cost of just one year's delay in diagnosis is estimated at €50k per patient in Europe [5], and because medical treatment differs substantially between bipolar disorder and unipolar depression, a misdiagnosed prescription of antidepressants can be harmful to bipolar patients, who are at risk of worsening their condition and developing comorbidities.

"For me an earlier diagnosis would have meant everything because it would have saved me a very hard and very difficult stage of my life." Isabel, diagnosed with bipolar disorder in 2009.

A simple blood test helps practitioners make a quicker diagnosis

The **EDIT-B consortium** is tackling this diagnostic challenge with myEDIT-B, a blood test that's used in the clinical daily routine as a diagnostic aid for psychiatrists to differentiate unipolar depression from bipolar disorder.

With no equivalent test on the market, the main objective of the myEDIT-B test is to provide objective biological data, complementing the psychiatrists' consultation, to provide an accurate and rapid differential diagnosis to drastically reduce the delay in diagnosis as well as the misdiagnosis with harmful consequences for the patient. EDIT-B has already undergone clinical validation in two studies on independent cohorts, and is CE IVD marked, boasting sensitivity and specificity rates above 80% [6].

The myEDIT-B test is revolutionary in the field of psychiatry

ALCEDIAG, which leads the consortium, is a French-based diagnostic company whose ambition is to advance precision psychiatry by introducing biology into clinical routines using editing-based RNA biomarkers and Artificial Intelligence to change the lives of millions of patients.

When the brain malfunctions it send signals, just as a sick liver would. ALCEDIAG realised that by capturing these signals, or biomarkers, via a blood test that detects alterations in RNA molecules, a process known as RNA editing, they could identify a person living with undiagnosed bipolar disorder.

This short film is all about the power of teamwork and tells the story of ALCEDIAG's journey and their collaboration with EIT Health Partners with differing expertise to help healthcare professionals improve the diagnostic outcomes for people living with bipolar disorder.

EIT Health helped ALCEDIAG realise their idea

With a potentially life-changing solution on their hands, ALCEDIAG realised they would need to work with the right partners to help test and develop myEDIT-B at scale, navigate the complex regulatory requirements and ensure the solution reaches as many people as possible in Europe and beyond.

EIT Health not only provided ALCEDIAG with critical funding (€2.5M) to kick-start the project but, more importantly, as part of the EIT Health network, connected them to suitable EIT Health Partners.

The subsequently formed EDIT-B consortium, enabled ALCEDIAG to work with world-class experts in mood disorders and in 2023, [launch myEDIT-B in Italy, two years' ahead of schedule](#). In 2024 on World Bipolar Day, 30 March, myEDIT-B launched in France and the consortium members are now working to ensure the solution reaches Europe and beyond.

[1] James, S. L. et al. (2018). Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*, 392(10159), 1789–1858. [2] Institute of Health Metrics and Evaluation. (2022). Global Health Data Exchange (GHDx). [online] Available at: <<http://ghdx.healthdata.org/gbd-results-tool?params=gbd-api-2019-normalink/d780dfbe8a381b25e1416884959e88b>> [Accessed 9 March 2022]. [3] Angst, J. et al. (2011). Prevalence and characteristics of undiagnosed bipolar disorder in patients with a major depressive episode: the BRIDGE study. *Archives of general psychiatry*, 68(8), 791–799. [4] MCINTYRE, Roger S., BERK, Michael, BRIETZKE, Elisa, et al. Bipolar disorders. *The Lancet*, 2020, vol. 396, no 10265, p. 1841–1856. [5] Global Burden of Disease Study 2004; DKFZ [6] Salvetat, N. (2021). A game changer for bipolar disorder diagnosis using RNA editing-based biomarkers. *Translational Psychiatry*, 89(9) 201.