# Biomarkers discovery in the progressive bulbar palsy/amyotrophic lateral sclerosis clinical spectrum: combined tissue and fluid-phase proteomics

https://neurodegenerationresearch.eu/survey/biomarkers-discovery-in-the-progressive-bulbar-palsyamyotrophic-lateral-sclerosis-clinical-spectrum-combined-tissue-and-fluid-phase-proteomics/

**Principal Investigators**

Dr Ian Pike

**Institution**

Proteome Sciences plc

**Contact information of lead PI**
**Country**

United Kingdom

**Title of project or programme**

Biomarkers discovery in the progressive bulbar palsy/amyotrophic lateral sclerosis clinical spectrum: combined tissue and fluid-phase proteomics

**Source of funding information**

The Wellcome Trust

**Total sum awarded (Euro)**

€ 114,191

**Start date of award**

01/01/2014

**Total duration of award in years**

2

**Keywords**
**Research Abstract**
The major obstacle in the development of novel therapeutic strategies for PBP and ALS is the poor understanding of their pathophysiology. The diagnostic delay of more than 15 months from disease onset is due to the lack of firm diagnostic biomarkers and reduces significantly the

therapeutic window for any neuron-rescuing strategy. This has led to failures of clinical trials and can possibly explain the negligible effects of Riluzole, the only licensed drug for ALS. The aim of this study is to establish a panel of accessible biomarkers aiding diagnosis and capable of measuring treatmenl efficacy in PBP. Such a panel of biomarkers will also aid the development of more targeted therapies and better drug selection throughout the treatment phase of disease. Using an unbiased, sensitive proteomic approach based on Tandem Mass Tag@ (TMT@) labeling technology, developed by Proteome Sciences (PS), we will profile affected brain tissue and white cells collected longitudinally from PBP/ALS patients and search for similar fluid-phase biomarkers in matched longitudinal plasma samples. This study will pre-configure biomarkers assays targeting antigens and immunological factors to be tested in routine clinical practice, strenghtening the potential for an early diagnosis and accurate monitoring of the rate of disease progression.

**Further information available at:**

**Types:**
Investments < €500k

**Member States:**
United Kingdom

**Diseases:**
N/A

**Years:**
2016

**Database Categories:**
N/A

**Database Tags:**
N/A