

Abstract: Traumatic brain injury (TBI) is among the leading causes of death and disability and the main cause of death among the under-45s. Most patients with moderate to severe TBI are admitted to intensive care units (ICUs) The “PROSAFE” ICU network was recently established in 6 European countries through EU funding (PHEA 2007331), and has continued to collect high-quality data beyond the grant duration. In 2011, 225 ICUs had joined PROSAFE, recruiting a total of 73,163 patients, 2,694 of whom were admitted for TBI. Hence the network can expect to enrol 7-9,000 moderate to severe TBI patients in 4 years. The PROSAFE consortium has already focused attention on TBI and has just started collecting additional information on this condition in order to develop a prognostic model to identify centres of excellence in TBI management. Aims of proposal are to consolidate the existing network in order to better describe the epidemiology of moderate-severe TBI in 7 countries (Greece has now joined the consortium); build a prognostic model based on short- and long-term outcome measures; identify most effective clinical interventions for optimally treating TBI patients, and recognize the determinants of optimal vs suboptimal performance. All TBI-CDEs endorsed by InTBIR will be collected, along with other items needed to develop a sensible prognostic model, permitting the consortium to join forces with international collaborative initiatives in the field. Availing of the coordinating institute’s biobank and consolidated expertise in biochemical and genetic biomarkers, the aim is to identify prognostic markers and underlying genetic factors influencing response to treatment and final outcome. The PROSAFE consortium is thus in a position to guarantee superior quality data collection in 7 countries and ensure it continues beyond the life of the project. These conditions are essential if the consortium is to contribute to Europe playing a key role in the success of the InTBIR initiative.