



Preface

Drug discovery in neurodegenerative disorders: a defeat for pharmacology?



CNS disorders represent an emergent socio-economical problem in Europe and worldwide. The ‘cost and burden’ of major brain diseases in Europe, has been reported to amount to about 800 billion euro per year with 179 million people of all ages having a brain disease. The magnitude of these figures cannot be ignored and reflects an unquestionable level of emergency. Among brain disorders, neurodegenerative disorders are some of the most prevalent, devastating and yet poorly treated illnesses. The development of new drugs for CNS disorders has the potential to provide patients with significant improvements in quality of life, and to reduce the future economic burden on health-care systems. Because the approval of CNS drugs with novel mechanisms of action has been rare in recent years, there is the need to ameliorate the drug discovery processes in this field. Focusing on treatments that target disease pathophysiology will improve the chances of developing therapies that go beyond current symptomatic therapies. Indeed, the identification of new molecular targets involved in the pathogenesis of neurodegenerative disorders represents the essential step for the design of disease-modifying drugs able to counteract the progression of disorders such Alzheimer’s disease (AD), Amyotrophic lateral sclerosis (ALS) and Parkinson’s disease (PD).

This Special Issue explores the latest developments in the evolving field of drug discovery processes in neurodegenerative disorders providing new relevant updates on the identification and validation of new pharmacological targets for the treatment of AD, ALS and PD.

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