



Editorial

Guest Editorial: Mood disorders-preclinical, clinical and translational aspects



The topic of this special issue 'Mood disorders, preclinical, clinical and translational aspects' reflects the complex situation in this research area. Since the 1960s of the last century a very optimistic belief was present about our possibilities to understand the cause of many brain diseases, including mood disorders, and our ability to find and develop new medicines for those brain disorders. A new class of antidepressants selective serotonin reuptake inhibitors (SSRIs) was found and introduced in the market. SSRIs are still the first choice antidepressants in nowadays treatment of major depression. Although new antidepressants have been developed after the SSRIs, they have not led to better treatments. Simultaneously, research into the underlying brain mechanisms of mood disorders (and other psychiatric and neurological diseases) has grown considerably but it becomes increasingly clear that we are far from solutions. Neuropsychiatric disorders are very complex pathologies of the central nervous system with multiple genetic, epigenetic and environmental determinants, along with badly understood symptoms, mechanisms and risk factors.

Many CNS oriented pharmaceutical companies decided to stop or seriously diminish their CNS research for new drugs, particularly in the area of mood disorders. This has to do with the lack of insight into the cause of the disorder which makes searching for a specific target extremely difficult and therefore risky, but also with the enormous costs associated with developing a new antidepressant which has to be substantially better (in terms of efficacy, side effects and onset of action) than existing antidepressants. However, many researchers (preclinical and clinical) continue to believe in the possibility of finding new treatments for devastating brain disorders. Preclinical researchers are convinced that by making better animal models for human psychiatric diseases the predictive validity will improve considerably. Clinical researchers believe that more fundamental research of the very heterogeneous phenotypes in various psychiatric diseases might contribute to new psychiatric diagnostic classifications that better fit with the underlying biology. Translational neuroscience and pharmacology are on their way to create new and exciting tools and targets in our search for new psychiatric drugs in areas with large unmet medical needs.

This special issue emerged on the occasion of the retirement at April 1, 2014 of professor Dr. Berend Olivier from the department of Psychopharmacology of the Utrecht Institute for Pharmaceutical

Sciences at Utrecht University. Berend organized a farewell symposium around his retirement day (March 28, 2014). Apart from the invited lecturers at this symposium he invited several scientists for a contribution to a special issue of European Journal of Pharmacology, edited by himself. The contributors to this special issue on 'Mood disorders: preclinical, clinical and translational progress' are scientists who played an important role in the scientific career of Berend which covers more than 40 years. He worked for more than 22 years in a pharmaceutical company, followed by helping to establish a biotech company in the US but gradually moving to an academic position always keeping close collaborations with pharmaceutical and biotech companies.

The present special issue on mood disorders is filled with contributions dealing with various aspects of mood disorders and the wealth of data and hypotheses presented shows the very positive attitude of all translational researchers to work on better, safer and more efficacious drugs for serious brain disorders. This is an absolute must in the coming decades because our present armamentariums to treat CNS disorders are not really medicines that treat the underlying disease mechanisms; they most and for all treat symptoms and effects are gone when stopping medication. Is it possible to find new drugs that affect and repair disease mechanisms in the brain? This will be the task that brain and drug investigators are confronted with. The coming decades fundamental research into the underlying causes must unravel these mechanisms and close translational collaboration between these fundamental and industrial researchers should bring new medications.

I thank all my friends for their contributions and hope to enjoy many breakthrough findings in the quest for new and better drugs for a large population of seriously diseased patients.

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