Grup TLP Barcelona: a pioneering strategic alliance for a comprehensive approach of borderline personality disorder

It is estimated that between 1 and 2% of the general population suffers from a borderline personality disorder (BPD), a severe mental illness marked by a pattern of ongoing instability on emotions, in behaviour and relationships. For a better approach to this condition, CIP Serveis Sàtic Mental (mental health services for adults in community at different care models), Fundació Orienta (dedicated to care, promotion and prevention of mental health in children and adolescents) in collaboration with the professional team from Vall d’Hebron Institut de Recerca (research group in Psychiatry, Mental Health and Substance abuse) created in 2010 Grup TLP Barcelona. This innovative strategic alliance to jointly promote training, research and comprehensive treatment of BPD at different stages of life.

The therapeutic approach of Grup TLP Barcelona is also novel because it is based on an integrative model that reaches the entire life cycle of the disease (from crisis to rehabilitation), developed at different levels of care (outpatient and partial or total hospitalization), depending on the patient’s evolutionary stage and the subtype disorder that he/she presents.

Grup TLP Barcelona is likewise a pioneer worldwide in the integration of the three forms of psychotherapy that have proven more scientific evidence on improving BPD: Transference Focused Psychotherapy (TFP), developed by Professor Otto F. Kernberg, director of the Personality Disorders Institute in New York; Mentalization Based Therapy (MBT), developed by Professor Peter Fonagy and Professor Anthony W. Bateman; and Dialectical Behavioural Therapy (DBT), developed by Professor Marsha Linehan.

In terms of research and teaching, we must mention that Grup TLP Barcelona carries out research projects to improve awareness of the disorder, among which the study of structural and functional neurobiological abnormalities throughout life, should be emphasized. Different training programs and supervisors for professionals aimed at optimizing the effectiveness of the specific therapeutic techniques are also carried out.

In fact, advances in our therapeutic and patient tracking methods have led us to a continuous growth that, to this day, arouses the interest of professionals from all around the world. Their challenge is to acquire the training and focusing needed to outline a crosswise, flexible and innovative treatment to obtain beneficial results. Not for nothing the goal of Grup TLP Barcelona is to improve the quality of life of people suffering from this disorder.

http://www.gruptlpbarcelona.org

NANOMOL TECHNOLOGIES: adding value to molecules

Nanomol Technologies is a spin-off company commercializing drug delivery technologies developed by Nanomol group with worldwide recognized research in nanoscience and molecular materials, which belongs to the Materials Science Institute of Barcelona – CSIC and CIBER-BBN.

Nanotechnology is now mature and ready to be the revolution in the medical, pharmaceutical and biotech sectors, by promoting the development of new nanomedicines with unprecedented specificity, higher efficacy and reduced toxicity. To commercially exploit the enormous potential of these nanomedicines, it is crucial to develop robust technological platforms, being at the same time transversal, efficient, scalable and easily adaptable to Good Manufacturing Practices (GMP) requirements.

Nanomol Technologies aims to take the lead in the implementation of Nanotechnology as a Key Enabling Technology for medicine.

DELOS proprietary technology of Nanomol is a one-step procedure able to prepare lipid-based nanovesicles that encapsulate Active Pharmaceutical Ingredients (APIs) and Biomolecules in a highly homogeneous and reproducible way. Multifunctional nanovesicles obtained by DELOS behave as advanced nanocarriers for the efficient transport and delivery of active molecules such as proteins, genetic material as well as small and mid-size APIs.

In this framework, Nanomol discovered and commercializes the QUATSUV encapsulation concept to achieve new high quality nanoformulations. These new nanocapsules have a broad range of applications in pharmacy, cosmetics, and as materials templates, because they are stable for periods as long as several years and their morphologies and physico-chemical properties do not change upon rising temperature or dilution. They can be produced by an easy scalable process, using compressed fluids as green solvent media and under GMP requirements. QUATSUVs are made by ingredients already approved for pharmaceutical use; and they provide an efficient integration of actives and an easy functionalization yielding multifunctional nanocarriers.

DELOS manufacturing procedure and QUATSUVs encapsulation concept are enabling technologies for the development of new topical, inhalation and parenteral pharmaceutical nanoformulations. Up to date these novel platforms have already yielded two new nanomedicine candidates that are nowadays under pharmaceutical development by Nanomol Technologies in partnership with pharma companies: a) the alpha-galactosidase(GLA)@peptidenanoliposome, to be used with a parenteral delivery route for the treatment of Fabry’s disease, and b) the epidural growth factor delivery, for the topical treatment of complex wounds such as Diabetic Food Ulcer.