Consulting services

We have a team of scientists with a strong track record of industry alliances and each with more than 20 years of experience in their specialist areas, available for consultancy in the regenerative neurobiology arena. This group provides our clients with unique know how relating to traumatic brain and spinal cord injury, ocular disease, dementia, neurodegenerative conditions, neural cancer and angiogenesis, with technical expertise in a broad range of unprecedented *in vivo* and *in vitro* disease modelling and drug screening paradigms, together with a flexibility to routinely exceed client's expectations.



Intellectual property

Neuregenix interests are focused on the development of drugs and biomarkers for the early diagnosis and treatment of acute and chronic neurodegenerative disease. The company's unique science, stemming from the work of the founding scientists at the University of Birmingham, is focused on developing a range of diagnostic tests and novel therapeutics. We actively seek to establish partnerships to develop our patented science and technology.

Testimonial

"Neuregenix fields a team of extraordinary individuals who compliment one another in their unique strengths. Among the CROs that we have worked with, Neuregenix is one of the very best in terms of scientific knowledge, expertise, data quality, timelines, flexibility and personal contacts. The team at Neuregenix were instrumental in helping us to bring one of our siRNA drugs through a range of demanding preclinical trials, prior to IND approval for Phase 1 clinical trial."

Quark Pharmaceuticals



Neuregenix Ltd, Birmingham Research Park, Vincent Drive, Birmingham, B15 2SQ, UK













Neuregenix offers:

A consulting and neural tissue/cell analysis and assay service for target validation and compound screening in the neural repair, acute/chronic neurodegeneration, regeneration and angiogenesis arena.

Our scientists have world renowned expertise in preclinical discovery (*in vitro* and *in vivo* proof-of concept), histopathology, bioanalytical testing services and strategic consulting in the neural drug development process. We also commercialise intellectual property relating to neural repair generated at the University of Birmingham.

An outsourcing alliance with Neuregenix drives research programmes by delivering operational and service excellence through:

Innovation drivers: Advancements in efficiency by exploiting state of art science and technology

Flexible resources: Access to a range of routine and bespoke *in vivo* neural disease models along with *in vitro* bioanalytical services for target validation and drug screening/evaluation Integrated services: Discovery through to IND approval for phase I clinical trials Clinical support: Opportunity to consult with a range of clinical specialists

Bespoke and established in vivo rodent models & technologies

Brain injury Sub-arachnoid haemorrhage Glaucoma Optic neuritis Closed globe injury Optic nerve injury (recommended model to study CNS axon regeneration) Spinal cord injury Peripheral nerve injury Diabetic neuropathy Multiple sclerosis Glioblastoma Angiogenesis Viral and non-viral gene and si(h)RNA delivery to neurons and glia CNS and PNS neuroprotection assays (retinal ganglion cells, dorsal root ganglion cells, spinal neurons, etc) CNS scarring assays (optic nerve, brain, spinal cord) PK/PD CSF/blood sampling Functional endpoints All models can be coupled to a broad range of microarray, genomic, proteomic, spectrometric and histological analyses

Using Acumen® Explorer and flow cytometry technology for state of the art *in vitro* bioanalytical services

High content medium throughput combined image analysis and cytometry (quantitative measurement) at a single cell level within large adherent and non-adherent cell populations (neuroblastoma, glioblastoma, rat and human primary neurons, endothelial, kidney, liver, thyroid, assays on other cells developed at request. Including:

Binding assays Kinase activity assays RNAi/gene delivery and profiling - effect on cell survival, apoptosis, cell proliferation, cell cycle kinetics, protein expression, nuclear translocation, cell shape, cell size, etc Agonist/antagonist testing cAMP induction Screening of commercially available ligand libraries such as Enzo Life Sciences Toxicity assays Different experimental paradigms, including short or medium term cell culture, oxidative stress, hypoxia, genotoxic stress Assays to determine effect on cell viability, cell death, apoptosis, DNA damage, ploidy, cell proliferation, cell cycle kinetics Protein expression and localisation assays Analysis of viral and non-viral gene/s(i/h)RNA delivery Bespoke assay development



Genomic and proteomic analysis of primary human and non-human neuronal tissues/cells, including, but not limited to, retinal, cortical, hippocampal, cerebellar, meningeal, choroid, spinal cord, peripheral nerve, glial, endothelial. Neuron survival assays Neurite outgrowth assays Neurite outgrowth inhibition assays Angiogenesis assays (aortic ring, HUVEC migration and tube formation, etc)