

Press Release

Cell Guidance Systems Ltd, Cambridge, UK. September 6th 2011.

Growth Factor Technology to Accelerate the Dawn of Stem Cell Therapies

Growth factors are protein messenger molecules that bind to specific cell surface receptors initiating a cascade of events that control the development of a cell. Recombinant growth factors, which are manufactured in-vitro, are basic tools of stem cell science. However, these recombinant growth factors can be extremely expensive and, perhaps more importantly, lack sufficient biological activity. These shortcomings have significantly hampered progress towards the development of effective cellular therapies.

Cell Guidance Systems Ltd has now commercialized a breakthrough technology that is set to transform the stem cell field. The Company's STARTM (Serial Tethered ARray) growth factor technology works by tethering multiple growth factors to a liquid phase, flexible backbone to form a cluster array, like beads on a string. When this growth factor array comes into contact with a cell, multiple growth factor-receptors interactions are made at the same time. This results in much stronger binding and increased biological activity.

FGF2, the first STARTM growth factor to be launched, is one of the most widely used growth factors. Dr Michael Jones, CEO of Cell Guidance Systems, explains "The potency of STAR FGF2 far exceeded our expectations. For maintenance of some types of stem cells, we were achieving better results than standard growth factors at concentrations one thousand-fold lower. We now have experimental data with four separate growth factors each of which deliver stunning levels of performance. This is a technology that will accelerate scientific development and commercial feasibility of a wide range of stem cell therapeutics".

Cell Guidance Systems is currently focussing on growth factors for blood cells where the huge costs of growth factors are inhibiting progress, and making the process commercially unfeasible. In addition, the development of growth factors to make cells for the treatment of Parkinson's disease is a priority. Ongoing, Cell Guidance Systems has a developmental program which will deliver a comprehensive range of STAR growth factors to the market over the coming months and years.

Notes to Editors

Cell Guidance Systems is a research reagents business, developing a range of synergistic technologies to accelerate and enable stem cell science. Our core research capabilities are based around culture of human pluripotent stem cells and growth factors. The Company has licensed and developed technologies that address essential elements of stem cell scientists work flow. The company has offices in the UK and US.

www.cellgs.com