



Press release date: 5th December 2005

CCTT to move into new laboratory facility

Cardiac Cellular Toxicity Testing (CCTT Ltd), is a contract research organisation moving into the new units in the Medawar Centre on the Science Park. It will be the first company to move into the new laboratory facility in February 2006.

The company carries out tests that are now required by drug regulatory authorities in order to establish the effects caused by new drugs on cardiac cells. These tests have become obligatory since it was discovered that many new drugs for humans cause delayed ventricular repolarisation, a process that is associated with QT interval prolongation (which relates to a slower heart rate) and an increased propensity to induce cardiac arrhythmias (the heart beating irregularly). CCTT specialises in studies on single cardiac cells.

CCTT has more than twenty years' experience with a variety of electrophysiological techniques. These include microelectrode and patch-clamp recording applied to isolated ventricular myocytes (heart cells stimulated to beat individually), Purkinje fibre preparations (heart muscle cells specialised to conduct electrical activity), and cells expressing HERG channel proteins (the HERG channel being a potassium channel in the heart with the catchy name of the Human Ether-a-go-go-Related Gene).

Such problems were originally detected in drugs designed to act specifically on the heart. However, it has since become increasingly apparent that a wide range of drugs designed to act elsewhere in the body (such as antimicrobials, antihistamines, CNS drugs and drugs designed to act on the gastrointestinal

system) may nevertheless adversely affect electrical activity in the heart. In recent years a number of drugs have either been withdrawn from the market or have had their sale restricted because of these problems.

In addition to its regulatory research into the effects of drugs on cardiac tissue, CCTT also serves the drug industry by providing insights into cellular mechanisms of action of new drugs to treat heart disease.

ENDS

For further information contact:

Ian Macpherson The Oxford Science Park 01865 784000