

Research Bulletin from the Diabetes Trials Unit Translational Research Group

Issue 10 – April 2013

Welcome to our second bulletin of 2013. We hope you enjoy reading about our group's latest news and activities.

New statistician joins the team



We are delighted to welcome Dr Olorunsola "Shola" Agbaje to the TRG team. Shola, a senior medical statistician joined us from the Department of

Research Oncology at Guy's Hospital, London where he supported clinical trials evaluating surgical devices for breast cancer surgeries and modelled prediction of breast cancer survival using clinical, biochemical and gene expression data.

Prior to this, Shola was a member of the Metabolic Modelling Group at the University of Cambridge where he worked on a number of studies including: CLINICIL (monitoring blood glucose in critically ill patients), artificial pancreas for the treatment of subjects with type I diabetes and advanced statistical modelling for estimating insulin sensitivity and glucose effectiveness in type II diabetes.

We wish him every success in his new role.

Aspirin Dosing Study – Countdown to the results begins...

This year has been extremely busy for our statistical and clinical teams as they analyse the data from this trial and write up the results for publication. Having submitted a scientific abstract this month, we remain on-track to report the study findings later this summer, so look out for details in a future bulletin and on our website at www.dtu.ox.ac.uk/trg

Studies Recruiting Soon!

Remote Mood Monitoring

We need 20 people with type 2 diabetes

This pilot study is looking to see whether a simple SMS text-messaging system can be used us to monitor mood changes in people with type 2 diabetes who are starting an injectable therapy such as insulin.

Hypoglycaemia Alert

We need 10 people without diabetes who are undergoing an Insulin Tolerance Test

This research will examine whether earlier warning can be given for people at risk of a very low blood sugar level. To do this we will be looking at changes in pulse rate, breathing rate, sweating and other body changes and combining these data with continuous blood sugar monitoring information.

Lixisenatide in type 1 diabetes

We need 30 people with type 1 diabetes

Lixisenatide (a DPP-4 inhibitor) is one of group of oral therapies used to treat people with type 2 diabetes. We are looking to see whether it can also improve blood glucose control in people with type 1 diabetes when given in addition to their usual insulin therapy.

Get Involved!

We are a very active research centre and are always looking for volunteers, with or without diabetes, and General Practices to assist with recruitment for our studies.

If you, or someone you know, would like further details on any of our upcoming studies, or is interested in joining our research register, please head to our TRG website at www.dtu.ox.ac.uk/trg.

Patient and Public Involvement (PPI)

International Clinical Trials Day will be held on 20 May 2013, with a pilot event at the Albion Street Heath Centre. This event aims to provide patients with information on how they can become more involved with clinical research happening in their area. General information on clinical trials will be available and there will be an opportunity for patients to register for information about upcoming NIHR CRN PPI events.

To find out more about PPI see: http://goo.gl/ShNeX

Diabetes research – headlines from around the world

There have been positive developments in diabetes treatments in recent months. Please see below some of the current hot topics.

Positive report for long-term concordance with statins

Based on evidence showing reduction in allcause mortality, current clinical guidelines support the lifetime use of statins once they are started. However, maintaining long-term concordance is proving to be challenging for a large proportion of patients.

Researchers at Harvard University have reported this month that nearly one in five patients treated with a statin in a routine-care setting had a statin-related adverse event documented, the most common being myalgia or myopathy. Furthermore, over half of these patients stopped taking the medication at least temporarily.

Despite these results, investigators also showed that more than half of patients who stopped taking the statin because of a statin-related event were able to restart it successfully.

These new data do confirm that discontinuation rates are relatively high but are reassuring in that most patients can tolerate the drugs in the long term if they are re-challenged. To find out more see:

https://annals.org/article.aspx?articleID=1671715#

SGLT2 inhibitors – a novel way to treat people with type 2 diabetes

Sodium glucose co-transporter 2 (SGLT2) inhibitors provide a new way of treating diabetes. They work via the kidneys by reducing the reabsorption of glucose. This means that excess glucose in the bloodstream is removed in the urine, helping to lower blood sugar levels. Clinical studies undertaken in many countries have shown that not only is the blood sugar reduced but also blood pressure and body weight. The first two SGLT2 inhibitors to be licensed are dapagliflozin in Europe and canagliflozin in the United States

See <u>http://tinyurl.com/FDA-SGLT2</u> for further details.

Study shows sugary drinks can raise diabetes risk by 22 percent

Researchers questioned 350,000 people from Britain, Germany, Denmark, Italy, Spain, Sweden, France, Italy, and Netherlands about their diet, including how many sugary and artificially sweetened soft drinks and juices they drank each day. They showed that every extra 12 fluid ounce (340 ml) serving of sugarsweetened drink (equivalent to a normal-sized can of Coca-Cola, Pepsi or other soft drink) raised the risk of diabetes by 22%, compared with drinking just one can a month or less. Fruit juice consumption, however, was not linked to diabetes incidence.

Similar results have been found in research in the United States, where several studies have shown that intake of sugar-sweetened drinks is strongly linked with increased body weight and conditions like type 2 diabetes.

The most likely explanation is the observation that a higher body mass index, increased waist circumference and greater prevalence of chronic diseases are seen among consumers of artificially sweetened soft drinks.

See: <u>http://tinyurl.com/sweetdrink</u>