

## **REPORT BACK FROM THE UEGW MEETING HELD IN VIENNA**

**OCTOBER 18<sup>th</sup> – 22<sup>nd</sup> 2014**

The United European Week (UEGW) is the largest and most prestigious GI meeting in Europe and fast becoming the most prestigious in the world. Over 13 000 participants from 118 countries attended, 3500 abstracts were submitted with 466 invited lectures and eleven simultaneous live streams to a global audience.

The Research Prize went to Professor Rebecca Fitzgerald from Cambridge University for her pioneering work in the early detection of oesophageal cancer, using a cyto-sponge technique which is simple to use. Attached to a string it can be easily swallowed and brushes the whole of the lower oesophageal mucosa thereby minimizing sample bias which occurs with oesophageal biopsies. Combining auto-fluorescence imaging and biomarkers such as P53 may help define high risk patients with Barrett's who require treatment.

The Gut Microbiome continues to receive a large amount of attention, not only in the treatment of C-difficile infection and inflammatory bowel disease (IBD) but also the role of the Microbiome in obesity is becoming more persuasive. The obesity induced diet decreases Microbiome diversity and the obese Microbiome is highly efficient at extracting energy. Bariatric surgery appears to alter the Microbiome. There are over 10 million genes that potentially impact on health and dozens of disease associations. There is evidence showing that the Gut Microbiome can predict irritable bowel syndrome (IBS) and the spectrum of organisms in IBS differs from that of the normal individual, with higher numbers of *S bovis* in IBS and with lower diversity. Two IBS faecal transplantation studies have been registered, one is ongoing and one is about to begin.

The ABC of fatty liver (NAFLD) was highlighted by Massimo Pinzani who classified NAFLD into six different types - ASH (alcohol), BASH (both alcohol and non alcoholic), CASH (chemotherapy), DASH (drug), NASH (non alcoholic) and PASH (PNLPA3). The primary treatment of NAFLD remains weight loss with small amounts of weight loss resulting in significant reductions in liver fat and improvements in insulin resistance, whereas massive weight loss reduces pro-inflammatory cytokine release of IL6 and TNF in the liver. Vitamin E and Pioglitazone remain the mainstay of therapy, with newer drugs such as Obeticholic acid (a FXR agonist) showing promise. Drugs such as Simtuzumab that inhibit collagen are also potential therapeutic agents in NAFLD.

Not all patients with intolerances to wheat are due to coeliac disease. Clinically important syndromes such as non-coeliac gluten sensitivity and wheat allergy, are being increasingly recognized. It is important to recognize that patients with coeliac disease, may have IBS and therefore, not all symptoms are attributed to wheat. A new study has revealed that patients with IBS may improve on a low FODMAP diet, regardless of the amount of gluten in the diet. Therefore wheat may not be the culprit.

Progress in Hepatitis C viral infection continues to progress at an exhilarating speed, with three drugs now being registered in the EU, namely, Sofosbuvir, Simeprevir and Daclatasvir. Various drug regimens all include Sofosbuvir with or without Ribavirin will give over 90% SVRs through all five genotypes with similar results in difficult to treat patients such as cirrhotics and those co – infected with HIV.

The highlight of the IBD sessions was a duet by Sylvio Danese and Simon Travis in the plenary session discussing how to translate basic immunology into clinical reality. Despite the remarkable successes of biologics in the treatment of IBD there have been many failures; what have we learned from all the successes? The recent spectacular success of treating HCV over the last twenty-five years begs an analogy. In contrast to IBD the target in HCV is well defined and known.

In IBD, making the right choice between new therapies, especially if the target is not known is important. IBD animal models are limited and choosing the right pathway in the treatment of humans with IBD is imperative especially in deciding whether to target immune cells or non-immune cell targets. Perhaps directing treatment of non-immune cells may become more important in the future.

Another important issue is timing - are we treating the disease at the right time with the right drug, since the natural history and lifetime evolution of IBD varies between patients and it is well known that anti-TNF therapy is most effective in early disease.

Are we and should we be blocking multiple pathways? The recent availability of Vedolizumab an integrin inhibitor makes blocking multiple pathways all the more possible.

Lessons from the success in trials of IBD have highlighted the importance of getting the target right, treating a homogenous patient population, improving the indices to correlate with biological inflammation and agreeing on outcomes defining remission. In other words, we need to be speaking the same language. Clinicians need to work in close collaboration with basic scientists and we need to integrate science with clinical care.

I look forward to UEGW 2105 in Vienna.  
Chris Kassianides