

# **Impressions from EASD 2016**

Dr Caroline Day reports from the European Association for the Study of Diabetes Conference in Munich, Germany, 12–16 September 2016

#### Introduction

Munchen Messe/ICM, located about 10 km east of Munich city centre, site of the 40th EASD annual meeting, was again host to the EASD for its 52<sup>nd</sup> annual meeting. More people attended the meeting this year (n=15,318) than in 2004, but the number of delegates from the UK declined by about 16% to 1,027. Nevertheless, the UK retained 2<sup>nd</sup> position – behind the host nation – among the 134 countries represented at the meeting. Approximately 45% of delegates were experimental and clinical scientists, the remainder were clinicians.

# Abstracts

The usual EASD-sponsored and industrysponsored symposia prior to the conference and outside the standard (8.30-18.30h) conference day offered consolidation, new perspectives and updates on a range of topics.<sup>1,2</sup> The mighty abstract book is a thing of the past, with small banks of printers supplying individual abstracts on request. However, a print version containing 1,167 abstracts is available,<sup>3</sup> plus abstracts, eposters and webcasts of symposia and most of the talks in the 48 oral presentation sessions can be viewed online.4 To check what you'd like to access it will be helpful to peruse the Final Programme which is available as an online flipbook and pdf, with the summary timetable on pages 30-33.5

# Highlights

There is always too much of interest amongst the EASD symposia and debates, but this can now be overcome post-meeting by settling down for a couple of hours of catch-up screen time via the virtual meeting site.<sup>4</sup> The prize lectures (Table 1) were diverse, providing background and state-of-the-art information as well as some interesting personal asides.

The buzz at this meeting was generated by anticipation of new data and updates from the cardiovascular outcome trials, LEADER (Liraglutide Effect and Action in Diabetes: Evaluation of cardiovascular outcome Results), SUSTAIN 6 (Semaglutide Unabated Sustainability in treatment of type 2 diabetes) and

#### Table 1 Prize lectures at EASD

Prize	Lecturer	Title (day of presentation)
Claude Bernard Lecture	Mark E Cooper (Australia)	Uncomplicating diabetes: interactions between metabolic and haemodynamic signalling pathways in the pathogenesis of diabetic complications ( <i>Tuesday</i> )
Camillo Golgi Lecture	Peter Rossing (Denmark)	Personalising prevention of diabetic nephropathy from proteinuria to profile-omics <i>(Tuesday)</i>
Albert Renold Lecture	Michael S German (USA)	Balancing beta cell mass: generation, degeneration and regeneration ( <i>Tuesday</i> )
EASD-Novo Nordisk Foundation Diabetes Prize for Excellence	Andrew Hattersley (UK)	Defining heterogeneity in diabetes to improve clinical care ( <i>Wednesday</i> )
Minkowski Lecture	Patrick Schrauwen (Netherlands)	Let's energise: mitochondria and energy turnover to comBAT type 2 diabetes (Thursday)

EMPA-REG OUTCOME (Empagliflozin cardiovascular outcome event trial in type 2 diabetes mellitus patients ), which reported in the final session of the penultimate day and the last day of the meeting. However, good things come to those who wait – and these trials all showed significant microvascular and macrovascular benefits in type 2 diabetic patients at high vascular risk.

All three studies met their primary endpoint of non-inferiority to usual care and also showed superiority. All-cause death and cardiovascular death were significantly reduced by treatment with liraglutide or empagliflozin, whilst semaglutide reduced non-fatal stroke (p<0.04). Only empagliflozin reduced hospitalisation for heart failure (p=0.002), while only semaglutide decreased revascularisations (p=0.003). All three treatments significantly delayed the onset and progression of nephropathy. Eye outcomes did not show significant improvements in any of the studies and an increase in retinopathy (p=0.02) was observed in SUSTAIN 6. This was the first time that SUSTAIN 6 has reported; 98% of subjects completed the study and adverse events were similar to those seen with other glucagon-like peptide-1 receptor agonists. Phase III trials with oral semaglutide are currently in progress.

DURATION 8 (Diabetes therapy utilization: Researching changes in A1C, weight, and other factors through intervention with exenatide once weekly), which reported in the last session of the meeting, showed that in patients with type 2 diabetes poorly controlled on metformin, addition of exenatide QW and dapagliflozin for 28 weeks significantly improved weight, blood pressure and glycaemic control compared with addition of either agent alone. The ADDITION trial (Anglo-Danish-Dutch study of intensive treatment in people with screen detected diabetes in primary care), conducted in primary care, supported early intensive multifactorial intervention to reduce vascular risk in people with newly diagnosed type 2 diabetes.

In terms of devices, the ITCA650, an implantable osmotic minipump loaded with exenatide for 1 year was more effective at reducing HbA<sub>1c</sub> than treatment with sitagliptin. Insulin pumps, artificial pancreas systems and glucose monitors grow in sophistication, and the relatively uncomplicated Libre Flash glucose monitoring system improved overall glycaemic control and reduced time (38%) in the hypoglycaemic range in younger (18–25 years) and older (>25 years) insulin-treated patients. A wander through the poster sessions is recommended.

### **Diary date**

Next year's EASD (11–15 September) will again be held at the International Fair of Lisbon, close to the waterfront and Vasco de Gama bridge. If you're into forward planning, the 2018 EASD meeting in Berlin will break with tradition and be held during the first week of October.

#### References

- Industry sponsored symposia at EASD 2016. Available at: http://www.easd-industry.com/ programme.html?week=201637
- EASD sponsored symposia at EASD 2016. Available at: http://www.easd.org/index. php?option=com\_content&view=article&id=2 08:non-commercial-symposia&catid=14:easd
- Abstracts of 52nd EASD Annual Meeting 2016. Diabetologia 2016;59(1 Suppl):1–581. ISSN: 0012-186X (Print), 1432-0428 (Online). http://dx.doi.org/10.1007/s00125-016-4046-9
- 52nd EASD Annual Meeting 2016, access to abstracts, eposters and webcasts. Available at: http://www.easdvirtualmeeting.org/
- 5. Final Programme of the 52nd EASD Annual

Meeting 2016. Available at: http://www. easd.org/. Flipbook at: http://www.easd.org/images/easdwebfiles/annualmeeting/52ndmeeting/Flipbook/index.html#p=1. PDF at: http:// www.easd.org/images/easdwebfiles/annualmeeting/52ndmeeting/Flipbook/EASD2016 \_Final%20Programme\_update.pdf.

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http://dx.doi.org/10.15277/bjd.2016.101 Br J Diabetes 2016;**16**:210-211

# Diary

#### 8 February 2017

Monogenic Diabetes Symposium The Mercure Exeter Rougemont Hotel, Exeter, UK http://www.diabetologists-abcd.org.uk/Lists/Events/ DispForm.htm?ID=69

#### 28 February 2017

3rd Joint ABCD Renal Association Meeting – Advances and Controversies NEC Birmingham

#### 10 May 2017

2nd Meeting of the ABCD Insulin Pump Network-UK Titanic Centre, Belfast

# 10th & 11th May 2017

Association of British Clinical Diabetologists Spring Meeting Titanic Centre, Belfast

# 9th-13th June 2017

American Diabetes Association San Diego, California

### 11th-15th September 2017

European Association for the Study of Diabetes 53rd Annual Meeting, Lisbon, Portugal 16th-18th May 2018 17th Malvern Diabetic Foot Conference Malvern, Worcestershire https://www.malverndiabeticfoot.org/

#### For other meetings see

http://www.diabetologists-abcd.org.uk/Lists/Events/AllItems.htm