



# The Scientific Times

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**EASD**

European Association  
for the Study of Diabetes

The European Association for the Study of Diabetes (EASD) holds its Annual Meeting in a different European city each year. The participants include more than 15,000 delegates from over 130 countries.

The scientific programme includes more than 1,200 talks and presentations on the latest results in diabetes research by leading experts in the field.

This year, EASD was held in Barcelona, Spain from 16<sup>th</sup> to 20<sup>th</sup> Sep 2019.

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## Vildagliptin + Metformin Slows The Progression Of T2DM-**VERIFY STUDY**

A recent, randomized, double-blind VERIFY Study showed the long-term efficacy and safety of Vildagliptin + Metformin combination over a 5 years treatment period.

VERIFY study was conducted across 254 centres in 34 countries and involved 2001 treatment-naïve diverse individuals recently diagnosed with T2DM (HbA1c between 6.5–7.5%).

VERIFY study results showed that, patients treated with early combination of Metformin + Vildagliptin had lower HbA1c levels (below 6.0%, 6.5% or 7.0%) for 5 years versus those patients who received add-on Vildagliptin only after Metformin monotherapy failure.

Patients who initially received combination therapy with Vildagliptin + Metformin were less likely to experience sustained treatment failure (HbA1C  $\geq$ 7% during a 5-year period).

Combination of Vildagliptin and Metformin was found to be safe and well tolerated.

It was concluded that early intervention with a combination therapy of Vildagliptin plus Metformin provides greater and durable long-term benefits compared with the current standard-of care initial Metformin monotherapy for patients with newly diagnosed type 2 diabetes.

**“Early treatment with Vildagliptin and Metformin provides greater and durable glycaemic control as compared to Metformin monotherapy in newly diagnosed type 2 diabetes”**

To get more insights from EASD 2019, click the following link  
<https://www.easd.org/annual-meeting/easd-2019.html>

# Dapagliflozin Prevents HF Events, Even In Non-diabetics - DAPA HF STUDY

Latest DAPA HF trial showed that Dapagliflozin added to standard therapy provides substantial benefits to patients with chronic heart failure with reduced ejection fraction (HFrEF). Dapagliflozin was also found to be beneficial in patients without diabetes.

DAPA HF enrolled 4744 patients with HFrEF and randomly assigned them to once-daily Dapagliflozin 10 mg or placebo.

Dapagliflozin reduced the relative risk for the primary outcome (a composite of time to first cardiovascular (CV) death or HF

hospitalization or urgent HF visit requiring intravenous therapy) by 26% when added to standard therapy, compared with standard care alone (hazard ratio [HR] - 0.74; P = 0.00001).

Dapagliflozin lowered the risk for worsening HF events by 30% (HR - 0.70), HF hospitalizations by 30% (HR - 0.70) and CV death by 18% (HR - 0.82).

In addition, Dapagliflozin reduced the risk for all-cause death by 17% (HR - 0.83) and patient-reported HF symptoms, without an increase in adverse events.

**“Dapagliflozin prevents CV death and HF events in patients with or without T2DM”**

**“A triple combination of Dapagliflozin, Saxagliptin & Metformin was recently approved by USFDA and EMA”**

# Oral Semaglutide Effective Across A Wide Range Of Diabetes Patients - PIONEER TRIALS

PIONEER trials investigated the efficacy of oral Semaglutide (GLP-1 RA) in type 2 diabetes patients.

PIONEER 2 trial showed that oral Semaglutide 14 mg daily resulted in significantly greater reduction in HbA1c (1.4% vs. 0.9%) in uncontrolled T2DM patients as compared to Empagliflozin (SGLT2 inhibitor) 25 mg daily. The difference between the 2 groups remained significant even at 52 weeks.

The patient in Semaglutide group lost significantly more weight than those in the Empagliflozin group (mean 4.7 vs 3.8 kg) at 52 weeks.



**“USFDA recently approved oral Semaglutide, making it first oral GLP-1 RA to get USFDA’s approval in type 2 diabetes”**

PIONEER 8 trial revealed that addition of Semaglutide to Insulin caused significantly greater dose-dependent reductions in both mean HbA1c and body weight versus placebo at both 26 and 52 weeks.

In all of the PIONEER studies, the researchers found that oral Semaglutide was well tolerated and had a safety profile that was consistent with that of other GLP-1 RA as well as that of subcutaneous Semaglutide.

The researchers concluded that the findings support the use of oral Semaglutide across a broad population of patients with T2DM.

# Glimepiride Is As Efficacious And Safe As Linagliptin – CAROLINA STUDY

The latest CAROLINA study is a multinational RCT involving 6033 T2DM patients from 43 countries including India. It is the longest cardiovascular outcome trial (CVOT) to date with median duration of over 6.3 years.

CAROLINA study concluded that, Glimepiride is as effective as Linagliptin (DPP-4 inhibitor) for achieving glycaemic control. HbA1c level dropped more quickly with Glimepiride, but by the end of the trial both groups had returned to a baseline of around 7%.

There was no difference in the

proportion of patients for whom new glucose lowering therapies, including insulin, were required.

Glimepiride was found to be non-inferior to Linagliptin for the incidence of non-fatal MI, non-fatal stroke and CV deaths.

There was also no difference between Glimepiride and Linagliptin for hospitalization for heart failure, CV death, non-CV death and all-cause mortality.

Thus, CAROLINA study provides reassurance about the long-debated cardiovascular safety of sulfonylureas.



Cardiosafe

**“The non-inferiority  
of Glimepiride to  
Linagliptin reassures  
the CV safety of  
Glimepiride”**

# Insulin Degludec Shows Equal Efficacy and Lesser Hypoglycemia Than Insulin Glargine - CONCLUDE TRIAL

CONCLUDE trial compared next-generation long-acting basal Insulins, Glargine and Degludec in 1,609 type 2 diabetes patients poorly controlled on basal Insulin with or without oral diabetes medications.

Both Insulin Glargine and Degludec lowered HbA1c from an average above 8.5% to 7.0% in just 24 weeks.

The primary endpoint, the rate of overall symptomatic hypoglycaemia in the maintenance period of 36 weeks was numerically lower in Insulin Degludec, but not statistically significant as compared



to Insulin Glargine.

Insulin Degludec significantly reduced the rate of severe hypoglycaemia by 80% and nocturnal symptomatic hypoglycaemia by 37% when compared with Insulin Glargine during the maintenance period (36-week) and by 62% and

43% respectively in the total treatment period (88 weeks) when compared with Insulin Glargine.

Furthermore, Insulin Degludec showed a 12% lower insulin dose requirement with an end-of-trial mean daily insulin dose of 67U, compared with 73U for insulin glargine U300.0.

**Both Insulin Glargine  
and Degludec lowered  
HbA1c by 1.5% in just  
24 weeks.**

# ENVISION PRO - A New Professional CGM

## Received European Approval

Medtronic announced that it received European approval (formally called “CE Mark” approval) for “**Envision Pro**” – its new professional CGM (continuous glucose monitoring) for type 1 or type 2 diabetes.

Envision Pro is fully-disposable, does not require fingerstick calibrations, and automatically uploads data directly to the Envision Pro app via Bluetooth and then relays it to CareLink, which is a program that provides information and insights to clinicians. Envision Pro allows a doctor or diabetes specialist to get continuous glucose data over the duration of the CGM (7 days).



The data helps people with diabetes and their doctor to personalize treatment and figure out ways to improve glucose management.

Abbott and Dexcom also have professional CGM systems, called **Abbott FreeStyle Libre Pro** and **Dexcom G4 Platinum**. Abbott FreeStyle Libre Pro was approved by USFDA in 2016 while Dexcom’s newer G6 Pro is currently under FDA review.

# INSULIN SMART PEN - Connected to Mobile

## App for Better Decision Support



Live life, less complicated.

**inpen**<sup>TM</sup>  
by Companion Medical

A novel, Companion Medical’s **InPen** is a reusable, Bluetooth-enabled smart insulin pen that automatically records the amount of mealtime insulin a user injects and the time of injection.

Smart Pen connected to mobile app “**Dexcom Clarity**” gives user information about their recent CGM trends and statistics and estimated HbA1c based on 14 days of CGM data.

This integration of Smart Pen and Dexcom Clarity Mobile App enables health care providers to access a comprehensive view of a patient’s therapy plan, help in increasing the effectiveness of treatment, thus paving the way for improved and transparent treatment decisions.

For any scientific queries on above topic

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