

# Determining the amount of time with low glucose in people using premixed (biphasic) insulin

<b>Submission date</b> 03/05/2019	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 22/05/2019	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 01/07/2022	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background & study aims

Diabetes is a lifelong condition where the amount of sugar in the blood is too high. The aim of this pilot study is to collect glucose data using the FreeStyle Libre Pro Flash Glucose Monitoring System from adults with type 2 diabetes using pre-mixed (biphasic) insulin.

### Who can participate?

Patients aged 18 and over with type 2 diabetes using pre-mixed (biphasic) insulin and an HbA1c less than 7.5% (58 mmol/mol).

### What does the study involve?

Participants will wear two Sensors for up to 14 days (glucose data is not visible during this time). Participants will return to the clinic for Visit 2 where the Sensors will be removed, and data uploaded.

### What are the possible benefits & risks of participating?

There is no direct benefit to the participant by taking part in this study. The only risks associated with the study are from obtaining venous blood samples, these are small but could include pain, bruising, local infection and fainting. Data collected may be used to support future pivotal clinical study designs in this population.

### Where is the study run from?

1. Royal Derby Hospital, Derby
2. Royal Berkshire Hospital, Reading
3. Royal Blackburn Hospital, Blackburn
4. Ninewells Hospital, Dundee
5. Royal Infirmary of Edinburgh, Edinburgh
6. Hathaway Medical Centre, Chippenham
7. Kiltarn Medical Centre, Nantwich
8. Ashfields Primary Care Centre, Sandbach
9. Claremont Medial Practice, Exmouth

10. Albany House Medical Centre, Wellingborough
11. Eynsham Medical Group, Eynsham
12. The Adam Practice, Hamworthy

When is the study starting and how long is it expected to run for?  
28/05/2019 to 31/07/2019

Who is funding the study?  
The study is funded by Abbott Diabetes Care Ltd

Who is the main contact?  
Dr Pamela Reid  
Pamela.Reid@abbott.com

**Study website**  
N/A

## Contact information

**Type(s)**  
Public

**Contact name**  
Dr Pamela Reid

**Contact details**  
Abbott Diabetes Care  
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Witney  
United Kingdom  
OX29 0YL  
+44 1993 863024  
Pamela.Reid@abbott.com

## Additional identifiers

**EudraCT/CTIS number**  
Nil known

**IRAS number**

**ClinicalTrials.gov number**  
Nil known

**Secondary identifying numbers**  
ADC-UK-PMS-19040

## Study information

**Scientific Title**

Pilot study to determine Time in HYpoglycaemia when using pre-MixEd (biphasic) insulin

**Acronym**

THYME

**Study objectives**

This pilot study is being conducted to determine the amount of time spent in low glucose or hypoglycaemia (less than 3.9 mmol/L [70 mg/dL]) by people with type 2 diabetes when using pre-mixed (biphasic) insulin.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 17/05/2019, NRES Committee: South West – Cornwall and Plymouth Research Ethics Committee (Level 3, Block B, Whitefriars, Lewins Mead, Bristol, BS1 2NT; 0207 104 8048; nrescommittee.southwest-cornwall-plymouth@nhs.net), ref: 19/SW/0086.

**Study design**

Prospective, multi-centre, single arm, pilot study in both hospital and GP practice settings.

**Primary study design**

Interventional

**Secondary study design**

Single-arm pilot study

**Study setting(s)**

Hospital

**Study type(s)**

Other

**Participant information sheet**

No participant information sheet available.

**Health condition(s) or problem(s) studied**

Type 2 diabetes

**Interventions**

Participants will wear two FreeStyle Libre Pro Flash Glucose Monitoring Sensors for up to 14 days. There is no follow-up period unless the participant experiences an unanticipated adverse device effect (ADE).

**Intervention Type**

Device

**Phase**

Not Applicable

**Primary outcome measure**

Time in hypoglycaemia (<3.9 mmol/L [70 mg/dL]), measured using sensor glucose data collected by the FreeStyle Libre Pro Flash Glucose Monitoring System during the two-week study duration.

**Secondary outcome measures**

Other glycaemic measures such as time in range (3.9-10.0 mmol/L [70-180 mg/dL]), measured using sensor glucose data collected by the FreeStyle Libre Pro Flash Glucose Monitoring System during the two-week study duration.

**Overall study start date**

01/01/2019

**Completion date**

07/08/2019

## Eligibility

**Key inclusion criteria**

1. Aged 18 years or over.
2. Type 2 diabetes treated with pre-mixed (biphasic) insulin for at least 6 months prior to study enrolment.
3. Most recent HbA1c less than 7.5% (58 mmol/mol), recorded in medical notes in last 12 months.

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

40

**Total final enrolment**

43

**Key exclusion criteria**

1. Currently prescribed animal insulin.
2. Concomitant disease or condition that may compromise patient safety including and not limited to; cystic fibrosis, severe mental illness, a diagnosed or suspected eating disorder or any uncontrolled long term medical condition.
3. Has a pacemaker or any other neurostimulators.
4. Currently receiving dialysis treatment or planning to receive dialysis during the study.
5. Women who are pregnant, plan to become pregnant or become pregnant during the study.
6. Participating in another study of a glucose monitoring device or drug that could affect glucose

measurements or management.

7. Known (or suspected) allergy to medical grade adhesives.

8. In the investigator's opinion, unsuitable to participate due to any other cause/reason.

**Date of first enrolment**

28/05/2019

**Date of final enrolment**

24/07/2019

## **Locations**

**Countries of recruitment**

England

Scotland

United Kingdom

**Study participating centre**

**Royal Derby Hospital**

United Kingdom

DE22 3NE

**Study participating centre**

**Royal Berkshire Hospital**

United Kingdom

RG1 5AN

**Study participating centre**

**Royal Blackburn Hospital**

United Kingdom

BB2 3HH

**Study participating centre**

**Ninewells Hospital**

United Kingdom

DD1 9SY

**Study participating centre**

**Royal Infirmary of Edinburgh**  
United Kingdom  
EH16 4SA

**Study participating centre**  
**Hathaway Medical Centre**  
United Kingdom  
SN14 6GT

**Study participating centre**  
**Kiltearn Medical Centre**  
United Kingdom  
CW5 5NX

**Study participating centre**  
**Ashfields Primary Care Centre**  
United Kingdom  
CW11 1EQ

**Study participating centre**  
**Claremont Medial Practice**  
United Kingdom  
EX8 2JF

**Study participating centre**  
**Albany House Medical Centre**  
United Kingdom  
NN8 4RW

**Study participating centre**  
**Eynsham Medical Group**  
United Kingdom  
OX29 4QB

**Study participating centre**

**The Adam Practice**  
United Kingdom  
BH15 4JQ

## **Sponsor information**

### **Organisation**

Abbott Diabetes Care Ltd

### **Sponsor details**

Range Road  
Witney  
United Kingdom  
OX29 0YL  
+44 1993 863164  
Joe.Bugler@abbott.com

### **Sponsor type**

Industry

### **ROR**

<https://ror.org/03wnay029>

## **Funder(s)**

### **Funder type**

Industry

### **Funder Name**

Abbott Diabetes Care

### **Alternative Name(s)**

### **Funding Body Type**

Private sector organisation

### **Funding Body Subtype**

For-profit companies (industry)

### **Location**

United States of America

# Results and Publications

## Publication and dissemination plan

Possible presentation at a diabetes conference, and/or publication in a peer-reviewed journal. Estimated timeline is one year from trial end date.

## Intention to publish date

31/07/2020

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Pamela Reid.

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		17/09/2021	01/07/2022	Yes	No
<a href="#">HRA research summary</a>			28/06/2023	No	No