The Medication Adherence Expertise Center at the University of Groningen in the Netherlands links up with Elucid

Final development of an advanced smart pill bottle to monitor patient adherence

Assistant Professor Dr Job van Boven discusses the trial subjects' adherence data in real time with trial coordinator Tanja Zijp

MANCHESTER, UNITED KINGDOM, July 9, 2019 /EINPresswire.com/ -- The Medication Adherence Expertise Center at the University of Groningen in the Netherlands links up with Elucid on final development of an advanced smart pill bottle to monitor patient adherence

- Second clinical trial of Pill Connect system to be undertaken through University of Groningen following successful trial of prototypes with major CRO
- The Medication Adherence Expertise Center of the Netherlands based at the University Medical Centre of Groningen University is a world leader in medication adherence
- Adherence is a major problem in both clinical trials and in the community
- Pill Connect system physically dispenses a pill when patients respond to a reminder. Reminders by text or phone call if pill is not dispensed
- Provides clinicians and trialists with comprehensive data on patient's adherence pattern

The Medication Adherence Expertise Center of the Netherlands based at the University Medical Center Groningen is working closely with Elucid mHealth on the final development of a smart pill dispensing solution called Pill Connect which will prompt patients and allow both trial investigators and doctors to effectively monitor medication adherence and provide novel insights. Assistant Professor of drug utilisation research Dr Job FM van Boven will lead the collaboration and the running of a clinical trial entitled "Patient acceptability and technical robustness of a smart pill connect system for monitoring non-adherence". The trial is already underway and due to report back in early August.

The Pill Connect system has already undergone a very successful trial with a major CRO with prototype devices which recorded a 91% technical robustness. The collaboration is on final refinements to the bottle to achieve 100% robustness and will involve 10 subjects on a 13 day trial. The trial will compare results with the prototype trial and also provide data on ease of use and transmission of data to the doctor or investigator.

Assistant professor Dr. Job FM van Boven commented, "We still have to wait for the study results, but a smart medication dispense system like this could really open up the current black box of medication adherence. In doing so, this provides both trialists and clinicians with unprecedented opportunities to support patients making the most of their medication."

Patient adherence is key in clinical trials to ensure that trial results are as accurate as possible. It is also key in the community where adherence rates of under 60% are not uncommon, even in crucial disease areas such as transplant rejection drugs.1

Elucid is already in discussions with several top tier Pharmas, CROs, CMOs, and the NHS all of whom all keen to find effective ways to monitor patient adherence in real time.

How the Pill Connect system works
- Preparation - A patient has an app loaded onto their mobile phone (iPhone or android) which contains the pill regime – eg twice a day. Is trained how to use the app – 20 minutes - and given a Pill Connect bottle loaded with pills.
- Patient use -The patient receives a reminder to take a pill via the app at a pre-determined time. The patient responds to the reminder and a pill is dispensed and the data sent to a control centre.
- Side effects – If the patient is unwell or believes that they are suffering from a side effect to the medication they have the option to not take the pill and tell the investigator why.
- Non – adherence/not wanting to take pill - If the patient does not respond or has a reason why they can't take the medication, a text or call can be made automatically or manually to prompt adherence or find out the reason for refusal.
- Comprehensive data - The doctor or administrator has comprehensive data on each patients dispensing pattern.
- Safety - The bottle is locked outside the prescribed times to prevent double dosing.

The Pill Connect dispenser mechanism and electronics are designed to fit onto a standard pill bottle which is easily filled or refilled by a pharmacist. The capacity of the pill bottle will depend upon the pill size but will have a minimum of thirty pills. The dispensing mechanism can be adjusted to handle pills or capsules of different sizes.

Elucid CEO, James Burnstone, commented, "We are delighted to be working with the team in Groningen given they have such wide expertise in this area. The trial will incorporate some changes we made to the prototype bottles and we are aiming for 100% robustness."

About for the Medication Adherence Expertise Center at the University of Groningen
The Medication Adherence Expertise Center of the Netherlands (MAECON) is a multidisciplinary center based at the University Medical Center Groningen in the Netherlands. The adherence centre brings together multidisciplinary adherence expertise and knowledge from the medical, pharmaceutical, big data, e-health technology and behavior research fields. Together, the faculty has been involved in >150 studies involving medication adherence across the globe. The adherence center's mission is to optimize patients' chronic medication use in such a way that they achieve maximum benefit at minimal cost.

About Elucid mHealth
Elucid mHealth is a health technology company based in Manchester, UK developing smart solutions to improve patient care. Pill Connect, Elucid's smart dispensing system which aims to improve and monitor patient adherence, is running a series of clinical trials over the course of the next few months.
www.elucid-mhealth.com/index.html

1 www.ncbi.nlm.nih.gov/pmc/articles/PMC5061615/

FOR MEDIA INFORMATION:
Simon Vane Percy
(t) + 44 (0) 1737 821 891
(e) simon@vanepercy.com

Simon Vane Percy
Vane Percy & Roberts
+44 1737 821891
email us here