

European Commission grants Cambridge-led group £4.6 million to conduct one-year artificial pancreas trial in 1-7 year olds - September 9, 2016

The University of Cambridge [announced earlier this week](#) that the European Commission will contribute £4.6 million to run a year-long trial investigating use of the artificial pancreas in type 1 children ages one to seven - an ambitious study population for sure, but an age group where automation should make a profound difference on glycemic control and quality of life. The study will compare closed loop to "state of the art insulin pump therapy" (we assume sensor-augmented), first in a pilot phase (n=24), and eventually in a main study (n=94) - no start timing was shared for either phase. We're glad to see a lengthy one-year study duration, and hope this data could support a change in standard-of-care - imagine automated insulin delivery routinely prescribed at diagnosis! The [press release](#) does not specify, but [commentary at ADA](#) suggested upcoming Cambridge studies will run its MPC algorithm on an Android phone talking to the MiniMed 640G/Enlite 3. Study funding will be delivered through the Commission's [Horizon 2020 program](#) to KidsAP, a collaboration between Cambridge scientists and other institutes in Europe and the US. Cambridge will receive about a third of the grant, £1.6 million, for coordinating the project. We've been glad to see the Cambridge team blazing a trail into understudied clinical populations: (i) last month, the group published an [impressive study](#) in NEJM showing the benefits of closed-loop in pregnancy, including during labor; and (ii) their [closed-loop study in inpatient type 2 diabetes](#) was a compelling highlight at ADA. While these populations are usually tougher to study, the benefit:risk balance is often better too. The FDA has also routinely emphasized that younger age groups are key to study early, since devices will be used off label. Medtronic has [begun a pivotal study of the 670G in pediatrics](#) ([see it here on ClinicalTrials.gov](#)), though it only stretches down to 7-13 year olds.

-- By Brian Levine, Adam Brown, and Kelly Close