Terrace House Dr Martin de Bock Department of Paediatrics 4 Oxford Terrace University of Otago Christchurch



Re: DOB: Address:

Dear admitting clinician,

This individual has type 2 diabetes and has been enrolled in a study, *First in human feasibility study; automated insulin delivery utilizing Dexcom next generation algorithm in adults with diabetes.* Dr Martin de Bock (University of Otago) is the Co-ordinating Principal Investigator.

Individuals in this study are using an insulin pump, a continuous glucose monitoring system, and an app on a smart phone which contains the *Next Generation AID algorithm*. This system is designed to make safe, automated and temporary adjustments to basal insulin rates in order to maximise the time in target sensor glucose range (3.9 - 10.0 mmol/L) and minimise the risk of hypoglycaemia without the need for meal announcement. In the case of failure of the system (such as phone/app failure), the pump will alert the user and switch to standard pump therapy.

We have asked the individual participant to contact us if they are admitted to hospital or experience a major health event, however if the participant is unable to let us know please can you make contact with the research team. If the individual is incapable of managing their automated insulin delivery system on admission to hospital, or there is any significant hyperglycemia (>16 mmol/L), ketonaemia (>1.0 mmol/L) or hypoglycemia, the pump should be disconnected from the body and an alternative form of insulin delivery arranged (eg. injections or infusion).

If you have any concerns about glycaemic control or questions regarding the technology, please contact a member of the study team at any time.

For Waikato patients: please start by phoning the research nurses, followed by Dr Ryan Paul if needed. For South Island patients, please phone Dr Tom Wilkinson.

- Hamilton patients: Claire Lever (Research Nurse), 027 330 3756 or claire.lever@aotearoadiabetescollective.org.nz
- Thames/Coromandel patients: Solita Donnelly (Research Nurse), 027 328 4229 or solita.donnelly@aotearoadiabetescollective.org.nz
- Waikato: Dr Ryan Paul, 021 743214 or ryan.paul@waikatodhb.health.nz
- Christchurch and Dunedin: Dr Thomas Wilkinson, 027 3536505 or Thomas.wilkinson@cdhb.health.nz

Yours sincerely,

(Approved by Principal Investigator Dr. Martin de Bock)

