

Safe and effective digital glycaemic control: Results from a 1,000-patient clinical trial

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Hyperglycaemia and glycaemic variability are linked to worse outcomes in ICU patients^[1].

Glycaemic control is challenging due to inter- and intra- patient variability. There is a need for patient-specific solutions.

STAR^[2] is a glycaemic control protocol
uses a digital twin and predictive AI
modulates insulin *and* nutrition

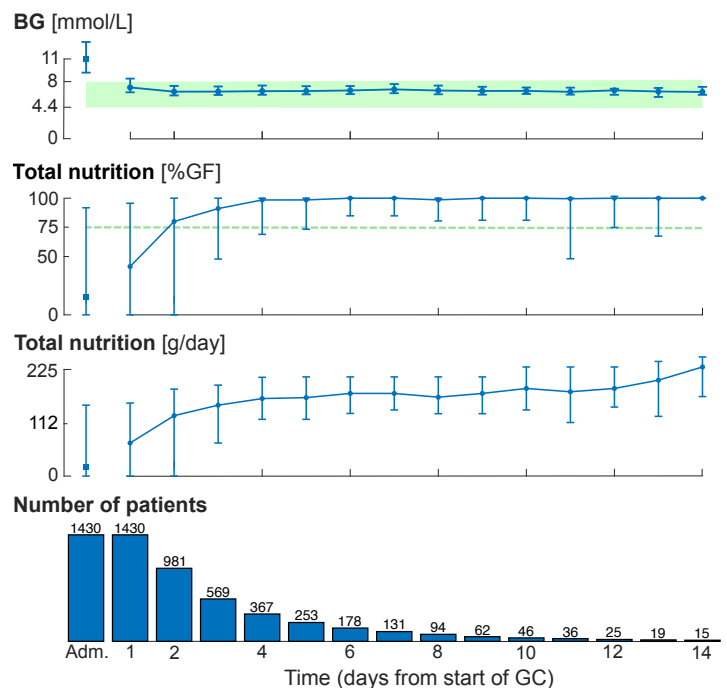
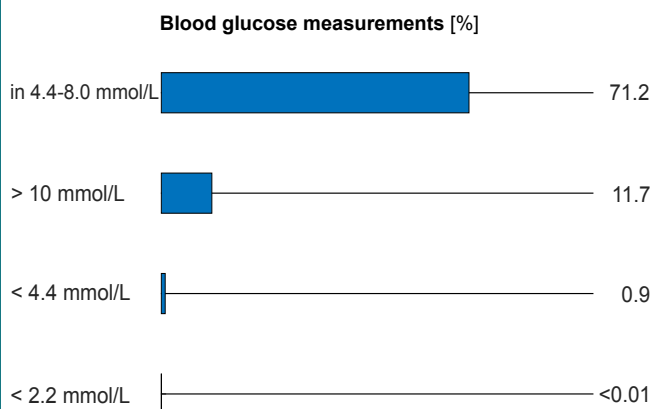
We collected and analyzed glycaemic control and nutrition data from 5 years of use of STAR protocol.

Time period: April 2019 - December 2024

Cohort: 1085 patients $\Rightarrow$ 1430 episodes

ICU unit: Christchurch Hospital, New Zealand

STAR provides safe and effective control with personalised nutrition delivery.



Tight glycaemic control can be achieved safely.
Safe and effective control is associated with improved patient outcomes.

Personalised and progressive nutrition delivery according to patients needs is associated with improved outcomes.

Adaptability to individual patients' needs supports broader adoption in ICUs and offers a robust platform for evaluating the clinical impact of GC.

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[1] C.W. Hsu. World Journal of Critical Care Medicine. 2012.

[2] K.W. Stewart, C.G. Pretty, H. Tomlinson, et al. Annals of Intensive Care. 2016.