The Future Is Now: Software-Guided Intensive Insulin Therapy in the Critically Ill

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Abstract

Since the development of intensive insulin therapy for the critically ill adult, tight glycemic control (TGC) has become increasingly complicated to apply and achieve. Software-guided (SG) algorithms for insulin dosing represent a new method to achieve euglycemia in critical illness. We provide an overview of the state of SG TGC with an eye to the future. The current milieu is disorganized, with little research that incorporates newer variables of dysglycemia, such as glycemic variability. To develop and implement better algorithms, scientists, programmers, and clinicians need to standardize measurements and variables.