

## Glytec gets patent allowance for Therapy Advisor

11 April 2019 | News

**The company is expanding its software-as-a-medical-device platform to support the optimization of ALL diabetes medications.**



The United States Patent and Trademark Office has granted Glytec another patent allowance for systems and methods related to a product registered under the brand name, Therapy Advisor. Currently, under development, the new product will extend the company's core competencies beyond insulin optimization to include oral, inhaled and non-insulin injectable diabetes medications.

The patent allowance depicts the following key systems and methods:

- A dosing controller comprising data processing hardware in communication with memory hardware periodically obtains, at the end of a reoccurring, configurable time interval, training data for a plurality of patients, including patient-state information such as age, gender, medical history, body mass index, risk factors and financial attributes; also, for those who use anti-diabetes medications: dose-combinations and a glycated hemoglobin measurement associated with each dose-combination, and for those who use insulin: blood glucose history, meal bolus doses administered during scheduled time intervals, and outcome attributes associated with each meal bolus dose. The data processing hardware then identifies for the plurality of patients included the training data, as applicable: optimum dose-combinations of anti-diabetes medications and/or optimum meal bolus doses of insulin for each scheduled time interval.
- Upon receiving patient-state information for a new treated patient, the data processing hardware determines, as applicable, a next recommended dose-combination of anti-diabetes medications based on one or more of the optimum dose-combinations identified within the training data and/or a next recommended meal bolus dose of insulin for a scheduled time interval based on a combination of the meal bolus doses of insulin previously administered by the new treated patient and one or more of the optimum meal bolus doses of insulin identified within the training data. The data processing hardware then transmits the next recommended dose-combination of anti-diabetes medications and/or the next recommended meal bolus dose of insulin to a portable device configured to display the information to the new treated patient, and as applicable, automatically dial in the number of units of insulin and administer them to the new

treated patient.

Glytec has grown its intellectual property portfolio to more than two dozen issued and allowed patents. “Developing cutting-edge innovations is a hallmark of Glytec’s DNA, and Therapy Advisor is the latest example of that,” says Robby Booth, Senior Vice President Research & Development. “This newest allowance is one of many more to come, both domestic and international. We’ll be issuing additional announcements in the near future.”

- A dosing controller comprising data processing hardware in communication with memory hardware periodically obtains, at the end of a reoccurring, configurable time interval, training data for a plurality of patients, including patient-state information such as age, gender, medical history, body mass index, risk factors and financial attributes; also, for those who use anti-diabetes medications: dose-combinations and a glycated hemoglobin measurement associated with each dose-combination, and for those who use insulin: blood glucose history, meal bolus doses administered during scheduled time intervals, and outcome attributes associated with each meal bolus dose. The data processing hardware then identifies for the plurality of patients included the training data, as applicable: optimum dose-combinations of anti-diabetes medications and/or optimum meal bolus doses of insulin for each scheduled time interval.
- Upon receiving patient-state information for a new treated patient, the data processing hardware determines, as applicable, a next recommended dose-combination of anti-diabetes medications based on one or more of the optimum dose-combinations identified within the training data and/or a next recommended meal bolus dose of insulin for a scheduled time interval based on a combination of the meal bolus doses of insulin previously administered by the new treated patient and one or more of the optimum meal bolus doses of insulin identified within the training data. The data processing hardware then transmits the next recommended dose-combination of anti-diabetes medications and/or the next recommended meal bolus dose of insulin to a portable device configured to display the information to the new treated patient, and as applicable, automatically dial in the number of units of insulin and administer them to the new treated patient.

Glytec has grown its intellectual property portfolio to more than two dozen issued and allowed patents. “Developing cutting-edge innovations is a hallmark of Glytec’s DNA, and Therapy Advisor is the latest example of that,” says Robby Booth, Senior Vice President Research & Development. “This newest allowance is one of many more to come, both domestic and international. We’ll be issuing additional announcements in the near future.”

Founded in 2006, Glytec is the pioneer of digital therapeutics, improving the lives of people with diabetes by making insulin a more effective and accessible option for millions unable to achieve their treatment goals. The company’s patented eGlycemic Management System is the only FDA-cleared software-as-a-medical-device (SaMD) platform to enable the mass personalization of insulin across the continuum of care: inpatient, outpatient and virtual settings alike. Glytec offers several comprehensive programs combining evidence-based decision support technologies with expert professional services proven to aid providers in achieving best practices and standardization while reducing hyperglycemia, hypoglycemia, A1C, readmissions, length of stay and cost