

CUTTING KIDNEY FAILURE RISK

Type 2 diabetes drug found to also help some avoid dialysis, transplant

BY DELTHIA RICKS
delthia.ricks@newsday.com

A drug that lowers blood sugar in people with type 2 diabetes also lowers the risk of end-stage kidney failure by 30 percent, a finding that may help spare kidney function in scores of patients and save billions of dollars by keeping them off dialysis, doctors reported Monday.

Type 2 diabetes has reached epidemic proportions on Long Island and beyond, which means problems occurring as a result of it are rising as well. Kidney failure has been increasing by 5 percent a year for more than a decade, and almost half the people on dialysis in the United States have type 2 diabetes.

In an international clinical

trial that is being hailed as a landmark study, patients with type 2 diabetes and chronic kidney disease who took the drug Invokana found their risk of advancing to full-blown kidney failure declined by a third. That means the medication helped stave off the need for dialysis and kidney transplants, and reduced the risk of death from end-stage renal disease.

In addition to sparing kidney function, the drug also helped reduce cardiovascular problems, the research revealed.

"This is the first study to show such a big effect," said Dr. Douglas Lax, chief of nephrology at Mercy Medical Center in Rockville Centre, who was not part of the research. "It was also the first to look at patients

whose kidney disease was already advanced."

About 13,000 people were tested in the study worldwide, with about half of them receiving Invokana and the other half receiving a placebo. The study was stopped midstream because it would have been unethical to continue with people taking a placebo that wasn't helping.

Doctors who led the study, which was called the Credence clinical trial, estimated that for every 1,000 people taking the drug for 2.5 years, there would be 47 fewer cases of kidney failure, dialysis and transplants. Instances of adverse effects in the research — toe, foot and leg amputations — were similar among patients taking Invokana and the placebo.

Invokana is a product of Janssen Pharmaceuticals and costs about \$475 a month. It was approved in 2013 to lower blood sugar. But doctors who tested it

for its capacity to spare kidney function said they hope the U.S. Food and Drug Administration will approve it for this new role. Physicians, meanwhile, are free to use any approved drug "off label," which means prescribing it for a new lifesaving indication.

"Kidney disease can be slowly progressive," Lax said, "but the fact that they could show such large differences between groups is pretty amazing to me."

Lax said Invokana is the first drug for type 2 diabetics that addresses kidney disease in more than 15 years. Although the study has just been published in the *New England Journal of Medicine* and reported at a medical conference in Australia, Lax said he will consider it for some of his patients. In addition to his role at Mercy, he oversees dialysis centers in Hempstead, Ocean-side, Bellmore, Freeport and Woodmere.

The National Kidney Founda-

tion commended the research Monday and noted the mounting toll of kidney disease.

"Chronic kidney disease is a largely invisible and growing public health problem with limited treatment options available," the kidney foundation said in a statement, adding that the study "is encouraging for patients with diabetic kidney disease and an important step forward to staving off end-stage renal disease.

"Diabetes is a key risk factor for chronic kidney disease, and accounts for 44 percent of all end-stage renal disease cases. However, less than 40 percent of those with diabetes are completely assessed for kidney disease," the foundation said.

Nearly 750,000 people annually and 2 million worldwide develop end-stage kidney disease, according to the Kidney Project at the University of California, San Francisco.

More tech issues for LIRR

BY ALFONSO A. CASTILLO
alfonso.castillo@newsday.com

An MTA contractor, while working to fix an error in how it was installing positive train control technology on Long Island Rail Road trains, has discovered it made another mistake — further setting back completion of the federally required, \$1 billion crash-prevention project, officials said Monday.

The news came at the Metropolitan Transportation Authority Board's railroad committee meeting in Manhattan, where board members received an update on the project. Deborah Chin, the MTA's director of positive train control, or PTC, said that during re-installation of one of hundreds of "undercar scanner antennas" recently recalled because of calibration errors, workers discovered another mistake in how a related component was being installed.

Chin said that contrary to the manufacturer's directions, workers from the MTA's PTC contractor, a joint venture of Bombardier Transportation and Siemens Rail Automation, had been soldering "variable capaci-

tors" onto circuit boards, rather than bolting them.

"We corrected that [original problem] and started to move forward, only to find it was masking another problem," said Siemens Mobility Management president John Palichug, who acknowledged the heat applied to the electrical component from the soldering made it defective.

PTC works by having the antennas on trains communicate with radio transponders installed along tracks to automatically slow down or stop a train that goes too fast or violates a signal.

The latest blunder — coming less than two months after the contractor vowed it had stepped up its quality-control efforts — incensed MTA officials, including the authority's new chairman, Patrick Foye, who called the error "appalling."

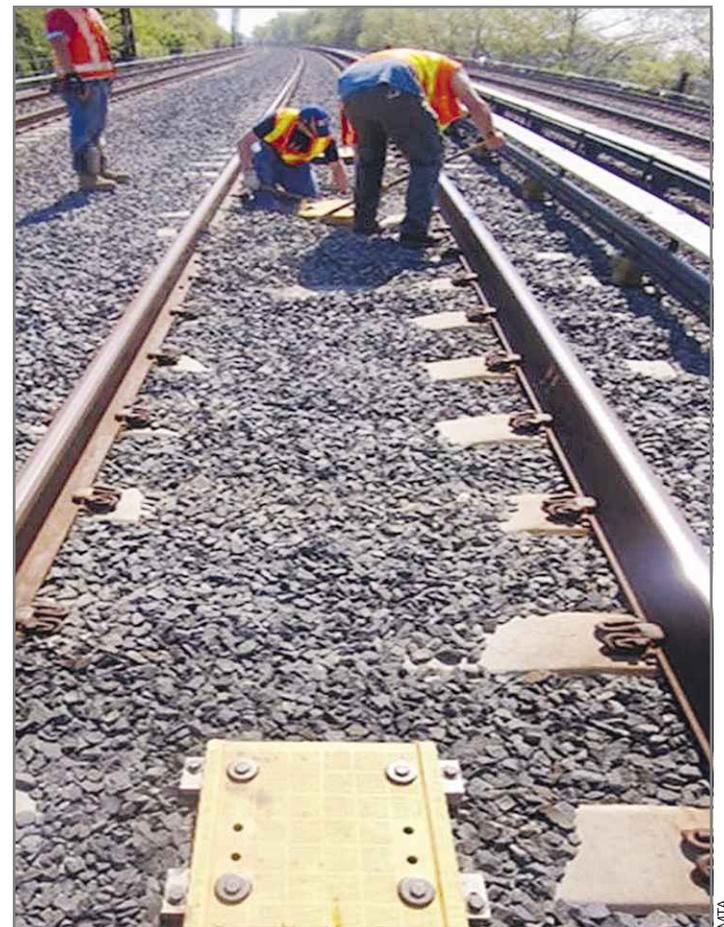
"None of us would accept this level of failure from a brother-in-law or a sister-in-law. I would not accept this from a startup," MTA Board member Neal Zuckerman told the contractors' representatives at the meeting. "I certainly would not accept it from an \$80 billion revenue, publicly traded company that serves

across the globe ... It is a completely unacceptable standard."

Chin said the latest foul-up sets the project back another "couple of weeks," as the contractor has to make further repairs to nearly 1,000 LIRR train antennas before they can be reinstalled. The contractors said they are testing a solution to the new problem, and aim to have it resolved by October.

Under the U.S. Rail Safety Improvement Act of 2008, which stemmed from a Chatsworth, California, commuter train crash that killed 25 people, railroads were required to have PTC in place by the end of 2015. When it became apparent that most railroads could not meet the deadline, federal lawmakers agreed to push it to 2018. Having encountered various delays, the LIRR last year sought and was granted another extension until 2020 to complete the project. Missing the deadline could result in fines as high as \$27,904 a day.

Palichug said Siemens and Bombardier remain committed to meeting the MTA's schedule, and have added "a tremendous number of people" to the effort.



Transponders for use with the Long Island Rail Road's new positive train control system are installed on the Montauk Line.