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Safety and clinical effectiveness of iGlarLixi in people with type 2 diabetes mellitus in Mexico

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Abstract

Aims: To evaluate the safety and effectiveness of iGlarLixi in people with type 2 diabetes mellitus (T2DM) in clinical practice in Mexico.

Materials and Methods: This was a prospective, observational, multicentre study in adults with T2DM who were prescribed iGlarLixi in routine clinical practice in Mexico. The participants were followed for 24 ± 1 months. The primary endpoint included the incidence proportion, incidence rate of adverse drug reactions (ADRs), serious ADRs and the severity of suspected ADRs possibly related to iGlarLixi throughout the study.

Results: The study included 330 participants (mean ± SD age: 57.8 ± 11.9 years, weight: 77.1 ± 17.7 kg, duration of diabetes: 14.1 ± 9.9 years, and female: 55.5%). During the 24-month study, 59 participants (17.9%; 95% confidence interval [CI]: 13.9–22.4) reported 95 ADRs, with a mean of 0.164 events per participant-year. The most commonly reported ADRs were gastrointestinal disorders (11.2%), with nausea being the most frequent (7.3%). HbA1c decreased from 9.5% at baseline to 7.3% at the end of the study. Additionally, 51.7%, 64.6% and 86.3% of participants achieved the glycaemic target of HbA1c < 7%, FPG < 110 mg/dL and PPG < 180 mg/dL, respectively, at the end of the study. A significant decrease ($p < 0.0001$) in 7-point self-monitoring plasma or capillary blood glucose was observed from baseline to 3, 6, 12 and 24 months post iGlarLixi initiation.

Conclusions: iGlarLixi demonstrated a consistent safety profile aligned with findings from previous randomised controlled trials. The most common ADRs were gastrointestinal disorders that were generally tolerable. Over 50% of participants treated with iGlarLixi achieved their glycaemic targets.

KEYWORDS
effectiveness, glycaemic targets, iGlarLixi, Mexico, safety

INTRODUCTION

Mexico is one of the countries with the highest rates of diabetes cases in North America and the world. According to the International Diabetes Federation, there were 14.1 million people with diabetes in Mexico in 2021, which is expected to increase to 21.2 million by 2045.[1] Additionally, Mexico ranked among the top 10 countries in terms of total diabetes-related healthcare expenditure, spending approximately USD 19.9 billion on adults in 2021.[1] Factors contributing to the rising prevalence of type 2 diabetes mellitus (T2DM) include population growth, an aging demographic, economic development and increasing urbanization, which lead to a more sedentary lifestyle and an increased consumption of unhealthy food associated with obesity.[1,2] Further studies conducted in the US revealed that obesity and lack of physical activity are the main reasons for the increase in the prevalence of T2DM.[3,4]

Effective diabetes management is crucial to prevent several life-threatening conditions, such as cardiovascular diseases, neuropathy, nephropathy, lower-limb amputation and visual loss or even blindness.[1] Maintaining glucose levels between 70 and 130 mg/dL before meals and below 180 mg/dL 2 h after starting a meal is recommended to reduce diabetes-related complications and risks.[5–7]

Basal insulin (BI) provides glycaemic control primarily by targeting fasting plasma glucose (FPG); therefore, people may still experience elevated glucose levels after eating when treated with BI alone.[8] The updated guidelines by the American Diabetes Association (ADA) and the European Association for the Study of Diabetes recommend adding a glucagon-like peptide-1 receptor agonist (GLP-1 RA) to insulin whenever feasible.[9]

iGlarLixi, a fixed-ratio combination of insulin glargine 100 U/mL and lixisenatide, is indicated for the treatment of adults with T2DM who are inadequately controlled by oral anti-diabetic drugs (OADs), BI or GLP-1 RA.[10] iGlarLixi has been shown to be well tolerated and effective in clinical trials and real-world evidence (RWE) studies.[10–12] Compared to using either glargine 100 U/mL or lixisenatide alone, iGlarLixi offers better glycaemic control with weight benefit and no increased hypoglycaemia risk. Additionally, fewer gastrointestinal (GI) adverse events (AEs) were reported with iGlarLixi compared to lixisenatide alone.[10]

Despite the clinical development of iGlarLixi involving multiple trials, certain limitations need to be addressed, such as the underrepresentation of the Mexican population, insufficient detection of AEs and specific types of adverse drug reactions (ADRs). Therefore, the ASSIGLIX-MX study, a 24-month observational multicentre research study, was conducted to evaluate the real-world safety and effectiveness of iGlarLixi in clinical practice in Mexico, aiming to enhance the safety and well-being of Mexican patients treated with iGlarLixi.

METHODOLOGY

Study design

The ASSIGLIX-MX was a prospective, observational, multicentre real-world study. The study was conducted during February 2019 to September 2022 at 19 centres (located in Urban) distributed across Mexico and included adults (≥18 years) with T2DM, suboptimally controlled with OADs ± BI and with glycated haemoglobin (HbA1c) ≥7.0% for 30 days prior to the study initiation. Study samples were representative of the Mexican population as the sites were distributed along Mexican regions. Individuals who initiated treatment with iGlarLixi as per physicians' discretion, according to the approved Mexican prescription information (Información para prescribir amplia, IPPA), and who were able to understand the study procedures and provided written informed consent were included.

Key exclusion criteria included hypersensitivity to the active substances in iGlarLixi or any of the excipients; type 1 diabetes mellitus or diabetic ketoacidosis; participation in a study of any other investigational product, medical device or procedure; and individuals who, according to the investigators' judgment, were not willing or able to comply with study procedures.

Data collection

Study data were collected in an electronic case report form at each site by the investigator. Baseline data were obtained by reviewing medical records and collected at the participants' inclusion visit to the site. The follow-up data were collected during participants' routine medical appointments, which took place within 24 ± 1 months of follow-up at the study sites and were expected to occur approximately every 3 months. Participants were provided with a diary to record their 7-point self-monitored blood glucose (SMBG) profile, fasting plasma glucose (FPG), iGlarLixi treatment and hypoglycaemia events (Figure 1).

This study was conducted in compliance with all international guidelines and Mexican national laws and regulations, as well as any applicable guidelines. All necessary regulatory submissions (e.g., Institutional Review Board/Independent Ethics Committee) were performed in compliance with local regulations, including local data protection.

Study endpoints

The primary endpoint (safety) included the incidence proportion, incidence rate of ADRs, serious ADRs and severity of suspected ADRs possibly related to iGlarLixi throughout the study. The secondary endpoints included: (a) the effectiveness of iGlarLixi in achieving the HbA1c goals defined by the ADA and Norma Oficial Mexicana (NOM) at months 3, 6, 12 and 24; (b) the effectiveness of iGlarLixi in achieving the FPG, 2-h post-prandial glucose (PPG) goals defined by the NOM at months 3, 6, 12 and 24; (c) Change in HbA1c, FPG and 7-point SMBG from baseline to months 3, 6, 12 and 24; and (d) the incidence of hypoglycaemia during the iGlarLixi titration phase and change in hypoglycaemia incidence from baseline to months 3, 6, 12 and 24. The study also assessed changes in treatment satisfaction

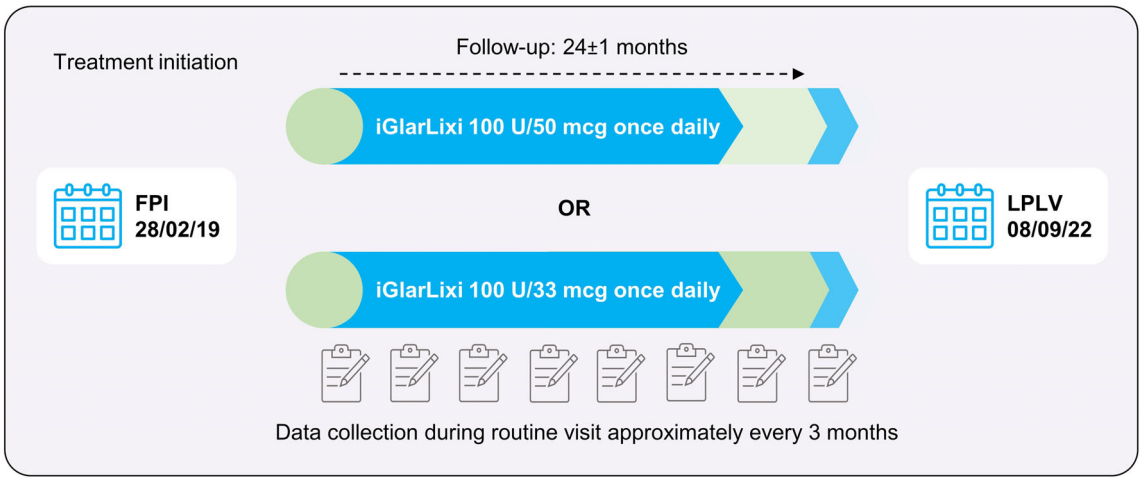

FIGURE 1 Study design. FPI, first patient in; LPLV, last patient last visit.

from baseline to months 3, 12 and 24, as assessed by the Diabetes Treatment Satisfaction Questionnaire (DTSQ).

Statistical analysis

The sample size was calculated based on the primary endpoint (the incidence proportion of suspected ADRs reported during the 24-month study period). According to the Risk Management Plan for the product, the incidence of the most suspected ADRs was expected to fall within the range of 3.5% to 50%. Considering this incidence, a sample size of 330 participants allowed a margin of error in the acceptable range of 2% to 5.4%.

All quantitative variables were summarised using descriptive statistics, that is, mean, standard deviation (SD), median, quartiles 1 (Q1) and 3 (Q3) and range (minimum and maximum values). All qualitative variables were summarised by absolute (*n*) and relative (%) frequencies, with 95% confidence intervals (CIs), whenever applicable. A statistical analysis was performed through frequency tables for qualitative variables and tables with descriptive statistics for quantitative variables. All safety events were coded using System Organ Class and Preferred Term according to Medical Dictionary for Regulatory Activities ([MedDRA] v 24.1).

RESULTS

Participant disposition

Of the 330 participants recruited from 19 sites, 227 (68.8%) completed the study. Among the 103 (31.2%) participants who did not complete the study, the most common reasons for early discontinuation reported were lost to follow-up by 41 (39.8%), withdrawal of consent by 18 (17.5%) and financial hardships by 13 (12.6%). Nine (8.7%) participants discontinued the study due to AEs, with GI disorders being the most common, and 6 (5.8%) participants discontinued because of other reasons. Discontinuation due to investigator decision and iGlarLixi discontinuation occurred in 11 (10.7%) participants. There were 5 (4.9%) deaths related to coronavirus disease 2019 (COVID-19), respiratory insufficiency and myocardial infarction. The final recruitment phase and the conduct phase of the study coincided with the COVID-19 pandemic period. Out of 117 participants whose data regarding previous anti-diabetic medication was collected, 56 (47.9%) were on metformin in combination with other hypoglycaemic agents, and the rest were on metformin in combination with insulin with or without other hypoglycaemic agents. Out of 330 participants, 315 (96.3%) are on any concomitant treatment, metformin being most common 162 (51.4%). The COVID-19 vaccine was also widely administered, with 90 (28.6%) participants receiving it (Supplementary Table 1). There was no imputation of missing data, except for the computation of a worst-case scenario for the retention rate, where patients with missing data at 12 and 24 months were considered to have discontinued iGlarLixi.

Baseline characteristics

Detailed baseline characteristics are provided in Table 1. The mean ± SD age was 57.8 ± 11.9 years, body weight was 77.1 ± 17.7 kg, HbA1c was 9.5 ± 1.8% and the duration of diabetes was 14.1 ± 9.9 years.

Primary endpoint

During the study, at least one ADR was experienced by 59 (17.9%) out of 330 participants (95% CI: 13.9–22.4). A total of 95 ADRs were recorded in these participants during the follow-up period. The incidence rate was low at 0.164 (95% CI: 0.134–0.200). The most common ADRs were GI disorders, reported by 11.2% of participants. Common

TABLE 1 Baseline characteristics and medical history.

	Participants ($N = 330$)
Age (years)	57.8 ± 11.9
Q1	49
Q3	66
Female, *n* (%)	183 (55.5)
Body weight (kg)	77.1 ± 17.7
Q1	65.30
Q3	86.20
BMI (kg/m^2)	29.3 ± 5.5
Q1	25.39
Q3	32.28
HbA1c (%)	9.5 ± 1.8
FPG (mg/dL)	179.9 ± 62.2
Participant with 2-h PPG < 140 mg/dL (%)	7.3
Medical history and comorbidities, *n*	
T2DM duration (years)	14.1 ± 9.9
Q1	6
Q3	20
Relevant medical history or current comorbidities, *n* (%)	226 (68.5)
Hypertension	131 (58.0)
Dyslipidaemia	109 (48.2)
Neuropathy	54 (23.9)
Nephropathy	26 (11.5)
Retinopathy	25 (11.1)
Peripheral nerve disease	24 (10.6)
Coronary heart disease	17 (7.5)
Stroke	3 (1.3)
Congestive heart failure	1 (0.4)
Other	82 (36.3)
	Participants ($N = 117$)
Prior anti-diabetic treatment, *n* (%)	
Metformin plus other hypoglycaemia agents	56 (47.9)
Metformin plus OADs and BI	22 (18.8)
Metformin plus BI	19 (16.2)
Metformin monotherapy	13 (11.1)

Abbreviations: Q1, Quartile 1; Q3, Quartile 3; BI, basal insulin; BMI, body mass index; FPG, fasting plasma glucose; HbA1c, glycated haemoglobin, OAD, oral anti-diabetics drug; PPG, post-prandial plasma glucose; T2DM, type 2 diabetes mellitus.

ADRs reported were general disorder and administration site conditions and nervous system disorders, reported in 5.5% and 2.1% of participants, respectively (Table 2). There were no serious ADRs during the study. Of the 95 recorded ADRs, most (72.6%) were mild. The patients recovered from the ADR in 90.5% of cases. In 8.4% of ADRs, the patients had not yet recovered by the end of the follow-up. There was one ADR (1.1%) with an unknown outcome (Supplementary Table 2).

TABLE 2 ADRs by frequency.

n (%)	Total participants ($N = 330$)	Total ADRs ($N = 95$)
Very common ADRs (≥10%)		
Gastrointestinal disorders	37 (11.2)	58 (61.1)
Common ADRs (≥1% and <10%)		
General disorder and administration site condition	18 (5.5)	21 (22.1)
Nervous system disorders	7 (2.1)	7 (7.4)
Uncommon ADRs (≥0.1% and <1%)		
Skin and subcutaneous tissue disorders	3 (0.9)	4 (4.2)
Kidney and urinary disorders	2 (0.6)	2 (2.1)
Metabolism and nutrition disorders	1 (0.3)	2 (2.1)
Psychiatric disorders	1 (0.3)	1 (1.1)
Rare ADRs (≥0.01% and <0.1%)	-	-
Very rare ADRs (<0.01%)	-	-

Abbreviation: ADR, adverse drug reaction.

Subgroup analysis based on age (<65 and ≥65 years) and obesity status (obese and non-obese) revealed no significant differences in ADRs between these groups. The incidence ratio for age groups was 0.911 (95% CI: 0.583–1.423, $p = 0.9857$), while for obesity status, it was 0.793 (95% CI: 0.522–1.203, $p = 0.1692$).

In further analysis, the incidence of ADRs was compared between age groups, and no statistically significant difference was found (17.9% of the patients <65 years vs. 17.8% of the patients ≥65 years, $p = 0.9857$). Similarly, no statistically significant difference was found between obese and non-obese patients (14.6% and 20.4%, $p = 0.1692$) and between the presence and non-presence of cardiovascular disease (21.1% vs. 17.7%, $p = 0.7571$) (Supplementary Table 3).

Secondary endpoints

Changes in glycaemic parameters

At baseline, mean ± SD HbA1c was 9.5% ± 1.8%, which decreased to 7.9% ± 1.3% at month 3 and 7.3% ± 1.4% at the end of the study, showing a rapid initial decline. The reduction at each time point was statistically significant ($p < 0.0001$) (Figure 2A). Six months after iGlarLixi initiation, 36.8% and 19.8% of participants achieved HbA1c ≤7.0% and ≤6.5%, respectively ($p < 0.0001$), which further increased to 51.7% and 31.5%, respectively, at the end of the study (Figure 2B).

A statistically significant decrease ($p < 0.0001$) in 7-point SMBG was observed between baseline and at 3, 6, 12 and 24 months after iGlarLixi initiation. The average glucose at all points remained below 150 mg/dL (Figure 3A). At the end of the study, 64.6% of participants achieved an average FPG < 110 mg/dL (Figure 3B) and 86.3% of participants achieved an average 2-h PPG < 180 mg/dL (Figure 3C).

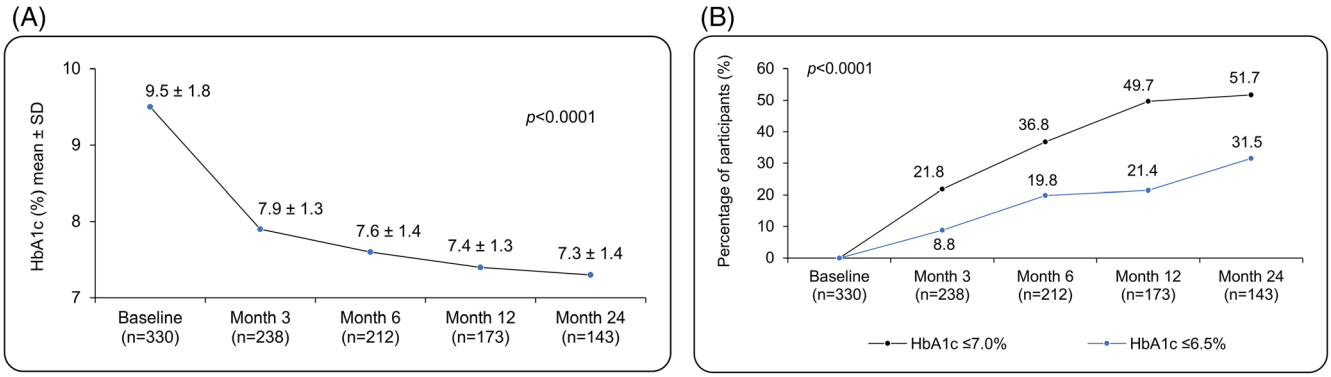

FIGURE 2 (A) Change in the mean HbA1c throughout the study and (B) Participants achieving target HbA1c. HbA1c, glycated haemoglobin; SD, standard deviation.

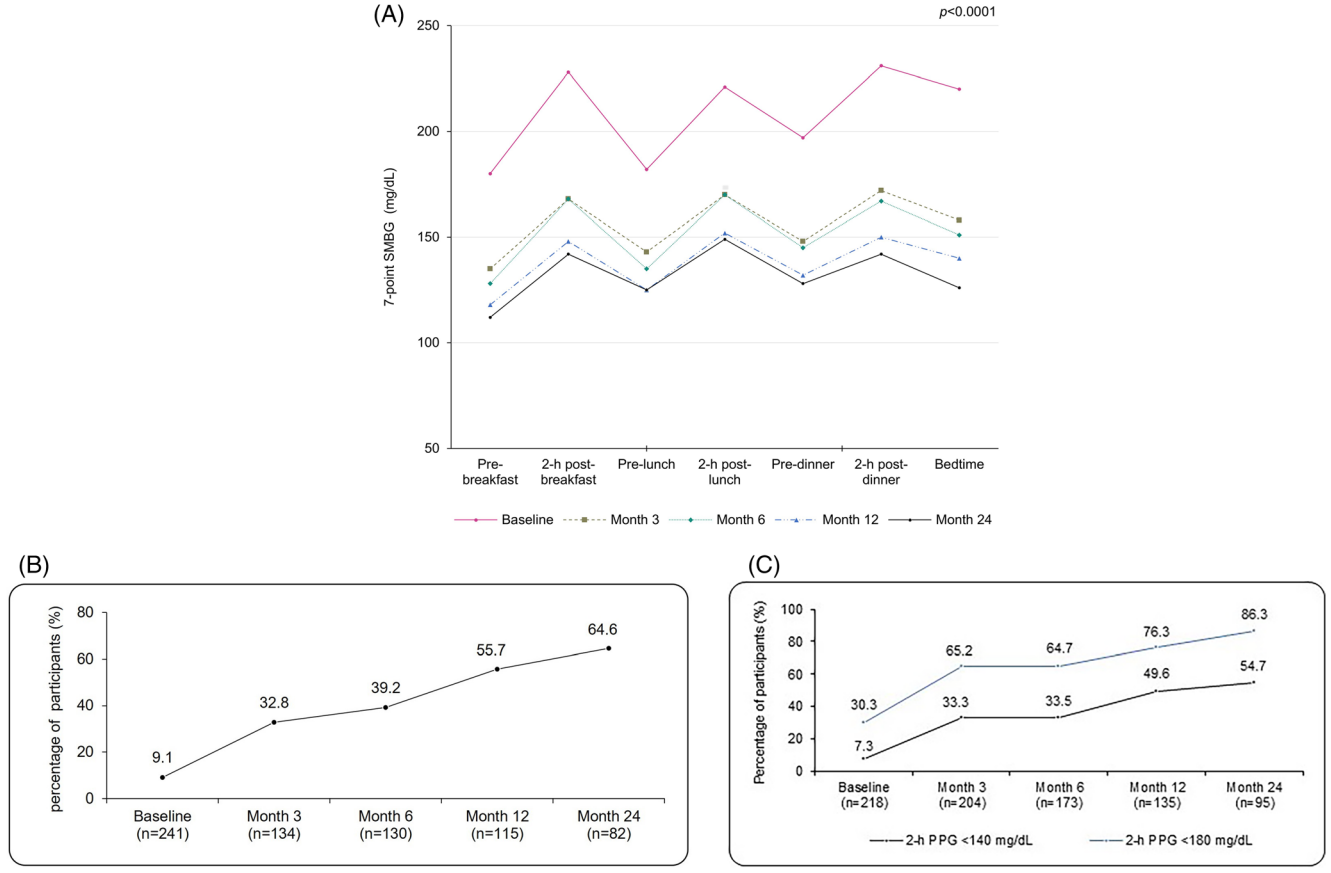

FIGURE 3 (A) Change in 7-point SMBG, (B) Participants achieving FPG < 110 mg/dL and (C) Participants achieving 2-h PPG < 180 and <140 mg/dL. FPG, fasting blood glucose; PPG, post-prandial glucose; SMBG, self-monitoring blood glucose.

Treatment with iGlarLixi

The mean ± SD starting dose of iGlarLixi was 21.8 ± 10.9 U of insulin glargine 100 U/mL and 9.0 ± 3.9 mcg of lixisenatide. At month 24, the dose was 30.9 ± 11.7 U of insulin glargine 100 U/mL and 12.3 ± 4.3 mcg of lixisenatide. A total of 251 (77.5%) participants initiated iGlarLixi treatment before breakfast, 63 (19.4%) participants initiated between breakfast and lunch, 8 (2.5%) participants initiated between lunch and dinner and 2 (0.6%) participants initiated between dinner and bedtime.

Hypoglycaemia

Overall, one-fifth of the enrolled participants (66 out of 330; 20.0%) experienced ≥1 hypoglycaemia event from treatment initiation to the

end of follow-up. In these 66 participants, documented symptomatic hypoglycaemia (daytime) had the highest incidence, occurring in 40 (12.3%) participants, followed by probable symptomatic hypoglycaemia in 14 (4.3%) and asymptomatic hypoglycaemia in 11 (9.2%). Severe hypoglycaemia was reported in 6 (1.8%) participants, while unknown hypoglycaemia was reported in 5 (1.5%) participants.

Other AEs

Adverse event-related deaths were reported in 5 (1.5%) participants, but none were related to iGlarLixi. Of these five cases, one was due to acute myocardial infarction, one due to suspected COVID-19, two due to confirmed COVID-19 infections and one due to acute respiratory insufficiency.

Treatment satisfaction

The mean DTSQ score at baseline was 23.8 ± 9.2. Treatment satisfaction with iGlarLixi, as assessed at month 3 after iGlarLixi treatment, was significantly ($p < 0.0001$) higher compared to baseline, with a mean DTSQ of 31.1 ± 5.3. This corresponds to an absolute mean increase of 7.2 ± 9.8 points.

Treatment retention

The retention rate (i.e., the proportion of participants on iGlarLixi treatment) at 12 and 24 months was 90.2% and 84.8%, respectively, in participants with non-missing data ($n = 276$ at both timepoints).

DISCUSSION

The present study was conducted in routine clinical practice to assess the real-world safety and effectiveness of iGlarLixi in Mexican people with T2DM. Participants were followed for up to 24 months to evaluate the long-term durability of iGlarLixi's effectiveness. About 70% of study participants completed the follow-up.

The safety data from this study align with previous clinical trials, which also indicated non-severe hypoglycaemia and GI AEs are most frequently reported with iGlarLixi in treating individuals with T2DM.[12] In our study, hypoglycaemia events occurred in one-fifth of participants (20.0%) and GI AEs accounted for the highest incidence of ADRs (11.2%) from treatment initiation to the end of follow-up. Importantly, no new safety risks were identified in the Mexican population during this study, and the observed safety profile is consistent with data from the clinical programme.[13–17] Notably, a lower proportion of participants reported documented symptomatic hypoglycaemia events (12.3%) with iGlarLixi in our study compared with prior clinical trials (14.2%–40%).[13–16]

Commonly reported GI AEs in the present study were nausea (7.3%), vomiting (1.5%) and diarrhoea (1.5%), which align with a previous study, the LixiLan-L trial,[14] where GI AEs commonly occurred (17.0%) in participants receiving iGlarLixi. The AEs were mild, with nausea occurring in 10.4% of participants, diarrhoea in 4.4% of participants and vomiting in 3.6% of participants.[14] In another study, the LixiLan-O trial,[13] the incidence of GI AEs (21.7%) was commonly seen in participants treated with iGlarLixi. Nausea was the most common GI AE experienced with iGlarLixi, occurring in 9.6% of participants, followed by 9.0% experiencing diarrhoea and 3.2% experiencing vomiting.[13]

iGlarLixi demonstrated comparable safety across different groups, including elderly (≥65 years) and younger participants (<65 years), obese and non-obese individuals, and those with or without cardiovascular disease, as indicated by the similar incidence rates of ADRs (data not shown for subgroups). Our safety data indicate that approximately 14% to 22% of individuals treated with iGlarLixi in a real-world setting are expected to experience an ADR, which, in the majority of cases, would be non-serious, mild and transient.

Statistically significant reductions in HbA1c, FPG and 2-hour PPG from baseline to each of the study timepoints (3, 6, 12 and 24 months) were observed. Notably, improvements were evident as early as 3 months after starting treatment, indicating an early impact on glycaemic control. The decrease in HbA1c with iGlarLixi treatment observed in the current study is in line with previous clinical trial data.[10,16,18] The results of the present study are also aligned with a previous trial conducted in people with long-standing T2DM and inadequately controlled with BI and reported a higher proportion of study participants who achieved glycaemic targets with a beneficial effect on body weight and no additional risk of hypoglycaemia and fewer GI AEs.[14] This real-world study also explored the durability of effectiveness of iGlarLixi for up to 24 months, which was not explored in earlier phase III trials. Glycaemic control achieved with iGlarLixi at month 3 (with respect to HbA1c, FPG, 2-h PPG and 7-point SMBG) was maintained till month 24, showing the long-lasting effect of iGlarLixi.

According to Mexican NOM015-SSA2-2010 guidelines, attaining an FPG between 70 and 130 mg/dL is one of the goals of T2DM treatment.[19] Participants in this study had a mean baseline FPG significantly higher than the recommended threshold, at 179.9 mg/dL. However, 6 months after initiating iGlarLixi treatment, the mean FPG decreased to 127.6 mg/dL, falling below the recommended cut-off and reflecting a statistically significant mean decrease of 52.3 mg/dL from baseline. Furthermore, participants continued to show improvements in FPG, reaching an average FPG of 118.7 mg/dL at 12 months and 114.9 mg/dL at 24 months.

Another goal of T2DM treatment, as outlined in the Mexican NOM-015-SSA2-2010 guidelines, is to attain a 2-h PPG value <140 mg/dL.[19] At baseline, 7.3% ($n = 218$) of the participants with available data had a mean plasma glucose <140 mg/dL, based on the three 2-h PPG assessments from the 7-point SMBG profile (breakfast, lunch and dinner). This proportion increased to 33.3% at month 3 and 54.7% at month 24. By the end of the study, 86% ($n = 95$) of participants achieved the 2-h PPG <180 mg/dL. The impact of the time of administration of iGlarLixi on PPG levels was not observed; however, the 7-point SMBG indicated that the mean PPG for the three meals

was <180 mg/dL. In Mexico, the major meal of the day is typically lunch. Although most participants had taken iGlarLixi before breakfast, an effect on the PPG levels was noted even after their primary meal, which indicated the longer duration of action of iGlarLixi.

Participants reported significantly higher treatment satisfaction, with the mean DTSQ score rising from 23.8 at baseline to 31.1 at month 3. These results align with the previously conducted SoliMix trial, where participants also reported greater treatment satisfaction (TRIM-D scores increased from 68.3 at baseline to 80.4) and 80.5% of participants reported complete control or improvement in diabetes by week 26 with iGlarLixi.[20]

The COVID-19 pandemic greatly affected participant recruitment and retention across studies due to lockdowns and reduced medication adherence. Researchers faced significant challenges, as seen in trials in both Ireland[21] and the UK.[22] Decreased medication adherence was one of the factors affecting diabetes management during lockdown, which imposed many restrictions.[23] Although final recruitment and the conduct phase of the current study coincided with the COVID-19 pandemic, and despite widespread issues as mentioned previously, the study achieved a notably high retention rate of 90.2% at 12 months and 84.8% at 24 months. At month 12, the most common reasons for discontinuing iGlarLixi reported were AEs in 9 participants, financial hardship by 5 participants and lack of efficacy in 5 participants. At month 24, the most common reasons for discontinuation reported were AEs in 12 participants, financial hardship by 8 participants and other reasons (not specified) by 8 participants.

The study allowed timely detection of new risks, a better characterization of the suspected ADRs and an overall greater understanding of the safety profile of the product in the uncontrolled environment of routine clinical practice, where numerous participant-related and non-participant-related variables were at play. It also determined whether the efficacy of the product demonstrated in clinical trials is translated into its effectiveness in a real-world setting. Overall, this will contribute to the safety and well-being of the Mexican people who may be treated with iGlarLixi in the future.

The ASSIGLIX-MX study is the first RWE to evaluate the safety and efficacy of a FRC in a representative population of Mexican patients treated by a specialist in daily clinical practice. This study leverages RWE to assess the product's effectiveness and safety, offering valuable insights that complement RCTs. Another strength of this study is a longer follow-up period (24 months). Additionally, the study highlights the previously unexplored aspect of the durability of iGlarLixi, a feature not investigated in the phase III study. The main limitation of the study is the potential heterogeneity of the data, as it was collected from 19 different sites in Mexico. Additionally, despite being conducted in specialized centres, challenges in dose titration arose due to the participant-specific circumstances. Due to the observational nature of the study, we can infer associations but not causations which limits the ability to determine direct cause-and-effect relationships. Potential biases, such as selection bias (where the sample may not be representative of the broader population) and reporting bias (where certain outcomes may be more likely to be reported than others), could affect the study's validity. The small sample size further limits the generalizability of the findings, as it may not capture the full variability of the population. Additionally, the COVID-19 pandemic may have influenced the study's outcomes by introducing external variables, such as changes in behaviour, health status or access to healthcare, which were not accounted for in the study design. However, each centre implemented retention strategies, such as phone calls and Zoom consultations, to mitigate these impacts.

In conclusion, the safety data from this study support the established safety profile of iGlarLixi for the treatment of people with T2DM in Mexico, including the elderly, obese and those with cardiovascular disease. No new safety risks were identified. Significant and sustained reductions in HbA1c, FPG and PPG were observed, along with a significant increase in the proportion of participants achieving glycaemic goals. This study confirms that the efficacy of iGlarLixi demonstrated in previous clinical studies translates into real-world effectiveness, with these benefits being durable for up to 24 months. To gain a deeper insight into the durability and wider applicability of these advantages, additional research is essential, especially studies that include varied and large population groups with extended follow-up durations.

AUTHOR CONTRIBUTIONS

All named authors meet the International Committee of Medical Journal Editors (ICMJE) criteria for authorship for this article, take responsibility for the integrity of the work and have given their approval for this version to be published. Maria Elena Sañudo-Maury and Luis Anguiano were involved in the conception and design of the study. Juan Rosas-Guzman, Alberto Navarro-Lara and Leobardo Sauque-Reyna were involved in data acquisition. All authors substantially contributed to the data analysis/interpretation of the results, critically reviewed the manuscript and approved the final version for submission and are accountable for the accuracy and integrity of this manuscript.

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FUNDING INFORMATION

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CONFLICT OF INTEREST STATEMENT

Juan Rosas-Guzman: has been providing medical update lectures (for primary care physicians) on diabetes and complications only for Grünenthal, Astra Zeneca and Eli Lilly—Boehringer Ingelheim and presented ASSIGLIX-MX study results at academic meetings for Sanofi. Alberto Navarro-Lara: an advisor and speaker of Sanofi. Luis Anguiano: an employee of Sanofi and may hold Sanofi stocks. Leobardo Sauque-Reyna an advisor and speaker for Novo Nordisk, Sanofi and Boehringer Ingelheim. Maria Elena Sañudo-Maury: a Sanofi employee

at the time of the study and may hold Sanofi shares; her current affiliation is Private Office Tlalpan, Mexico City, Mexico.

PEER REVIEW

The peer review history for this article is available at https://www.webofscience.com/api/gateway/wos/peer-review/10.1111/dom.16357.

DATA AVAILABILITY STATEMENT

Qualified researchers may request access to patient-level data and related documents [including, e.g., the clinical study report, study protocol with any amendments, blank case report form, statistical analysis plan, and dataset specification]. Patient-level data will be anonymized, and study documents will be redacted to protect the privacy of trial participants. Further details on Sanofi's data sharing criteria, eligible studies, and process for requesting access can be found at https://www.vivli.org.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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