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THE NEW ONCE-WEEKLY BASAL INSULIN FOR TYPE 2 DIABETES: AWIQLI (INSULIN ICODEC)

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ABSTRACT

Type 2 diabetes mellitus (T2DM) is a chronic metabolic disorder that often requires basal insulin therapy to achieve optimal glycaemic control as the disease progresses. Conventional basal insulin analogues require daily administration, which may reduce patient adherence and increase treatment burden. Awiqli® (insulin icodec-abae) is the first once-weekly basal insulin approved by the U.S. Food and Drug Administration (FDA) for adults with type 2 diabetes mellitus. Its ultra-long duration of action is achieved through strong, reversible binding to serum albumin, allowing a stable release of insulin over seven days. This review summarizes the pharmacology, mechanism of action, pharmacokinetics, dosing and administration, manufacturing process, clinical efficacy, safety profile, drug interactions, precautions, advantages, limitations, and future prospects of Awiqli. Clinical evidence from the ONWARDS trial programme demonstrated that once-weekly insulin icodec provides glycaemic control comparable or superior to once-daily basal insulin analogues while maintaining an overall acceptable safety profile, although careful monitoring for hypoglycaemia remains essential. The reduced injection frequency has the potential to improve treatment adherence, patient satisfaction, and quality of life. Overall, Awiqli

represents an important advancement in basal insulin therapy and may transform the management of type 2 diabetes through a more convenient and patient-friendly dose regimen.

KEYWORDS: Awiqli, Insulin Icodec, Type 2 Diabetes Mellitus, Once-weekly Basal Insulin, Glycaemic Control, ONWARDS Trial, Pharmacokinetics.

INTRODUCTION

Despite lifestyle changes and non-insulin medications, blood-glucose management may become challenging in people with type 2 diabetes, a progressive metabolic disease. Basal insulin ultimately becomes necessary for many individuals in order to maintain background insulin activity. However, daily injections are frequently necessary for standard basal insulin, which might increase treatment burden and potentially impact adherence. Awiqli FlexTouch is long-acting basal insulin designed to be administered subcutaneously once a week. It contains insulin icodec-abate. In March 2026, the U.S. Food and Drug Administration authorized Awiqli as a supplement to diet and exercise to help individuals with type 2 diabetes mellitus improve their glycaemic control. It comes in the form of a U-700 pre-filled pen and is designed to offer consistent glucose-lowering action for the duration of the seven-day dosage interval. Insulin icodec strong, reversible binding to albumin in the bloodstream accounts for its extended activity. This creates a circulating insulin depot from which insulin icodec is progressively released. Following release, it works via insulin receptors to promote peripheral tissues' absorption of glucose and lower the liver's synthesis of glucose. Clinical studies from the ONWARDS initiative have contrasted established once-daily basal-insulin analogues with once-weekly insulin icodec. ONWARDS 3 found that weekly icodec reduced HbA1c more than daily insulin degludec in insulin-naive people with type 2 diabetes at 26 weeks; however, icodec was associated with more severe or clinically significant hypoglycemia.While highlighting the importance of proper patient selection, dosage titration, and hypoglycaemia monitoring, a 2026 pooled safety analysis of the ONWARDS studies revealed that the overall safety profile of insulin icodec was typically comparable to that of daily basal-insulin comparators. For certain individuals with type 2 diabetes, Awiqli may result in fewer basal insulin doses, which make it a significant advancement in insulin management. Although its once-weekly frequency may be convenient, proper dosage, patient education, and routine glucose monitoring are crucial because to its extended duration of action.[1,3,4]

Drug Overview

Insulin icodec-abae, a synthetic, long-acting basal insulin analogy, is marketed under the name Awiqli FlexTouch. In March 2026, the U.S. Food and Drug Administration authorized it for use in conjunction with diet and exercise to improve glycaemic control in persons with type 2 diabetes mellitus. Awiqli is a prescription medication that should only be started and changed by a licensed medical practitioner. The product comes in a single-patient-use FlexTouch pre-filled pen with a clear, colourless U-700 insulin solution. U-700 indicates that there are 700 units of insulin icodec per milliliter in the formulation. The pen can inject up to 700 units at a time and provides dosages in 10-unit intervals. It is intended to be administered subcutaneously once a week, often into the upper arm, thigh, or belly. Because Awiqli offers constant background insulin action, it is categorized as basal insulin. Insulin icodec is released gradually over about a week due to its strong, reversible binding to albumin in the blood. This is not the same as traditional basal insulin, which is typically administered once a day. The decrease in injection frequency is the main therapeutic advantage of Awiqli. For certain individuals with type 2 diabetes, a once-weekly treatment plan may lessen the strain of daily basal-insulin injections. Insulin icodec can achieve glycaemic control equivalent to daily basal-insulin analogues, according to the ONWARDS clinical program. However, because of its lengthy duration, precise weekly dose and consistent glucose monitoring are particularly crucial. Awiqli is not to be confused with mealtime or rapid-acting insulin. It is meant to offer background insulin coverage; but, depending on a patient's treatment plan, additional diabetic medications or mealtime insulin may still be necessary. Awiqli is recommended for adults with type 2 diabetes in the US; its efficacy and safety in children and adolescents have not been determined. Awiqli usage, approval status, and prescription guidelines may vary between nations. Therefore, before prescribing or taking the medication, doctors and patients should always refer to the locally authorized product information.[1,2]

Mechanism of Action

Insulin icodec-abae, a modified type of human insulin intended to function as a long-lasting basal insulin, is present in Awiqli FlexTouch. Its primary goal is to assist regulate blood glucose levels throughout the week by providing constant background insulin action. Insulin icodec functions by firmly and reversibly attaching itself to albumin, a blood protein. A circulatory insulin depot is created by this albumin binding. The majority of the insulin is gradually released after being momentarily bound to albumin. The primary justification for administering Awiqli once weekly as opposed to once daily is its delayed release. Following

its release from albumin, insulin icodec attaches itself to insulin receptors on cells in organs such the liver, fat, and skeletal muscle. Similar effects to those of genuine human insulin are produced when these receptors are activated. It facilitates the movement of glucose from the blood into cells where it may be stored or utilized as fuel by increasing the absorption of glucose by muscle and fat cells Insulin icodec inhibits the liver's ability to produce and release glucose into the blood. Additionally, it promotes nutrient storage and lessens the breakdown of protein and fat. When combined, these effects reduce blood glucose levels and contribute to more consistent glucose management during the night and in between meals. Insulin icodec structure has been altered to lower its receptor affinity and delay the body's removal of it. When it reaches the receptor, it stimulates the same insulin-receptor pathways as human insulin despite having a lower affinity. Therefore, rather than being essentially different from the action of regular insulin, its impact is delayed and lasts longer. For individuals who need basal insulin but would like fewer injections, the extended duration of action offers a useful benefit. However, because of its protracted effect, dosage adjustments, unintentional overdoses, and hypoglycaemia may have longer-lasting effects.

After being liberated from albumin, free insulin icodec attaches itself to the insulin receptor, a transmembrane receptor tyrosine kinase found on the surface of tissues that are sensitive to insulin, such as hepatocytes, skeletal muscle, and adipose tissue. Insulin icodec binding triggers intracellular signaling pathways, specifically the phosphatidylinositol-3-kinase (PI3K)/protein kinase B (Akt) pathway, and causes receptor auto phosphorylation. When this route is activated, glucose transporter type 4 (GLUT4) is stimulated to translocate to the plasma membrane of skeletal muscle and adipose cells, improving cellular absorption and utilization of glucose. Insulin icodec increases the absorption of amino acids and protein synthesis in skeletal muscle while also promoting the uptake of glucose for energy generation and glycogen synthesis. Insulin inhibits lipolysis by suppressing hormone-sensitive lipase while promoting glucose absorption and triglyceride production in adipose tissue. These metabolic processes enhance insulin sensitivity and decrease the release of free fatty acids into the blood. Insulin icodec inhibits both gluconeogenesis and glycogenolysis while boosting glycogen synthesis in the liver, hence suppressing hepatic glucose production. In order to maintain steady fasting plasma glucose concentrations, this decrease in hepatic glucose production is especially crucial during fasting periods and in between meals. Insulin icodec promotes better overall metabolic balance by suppressing ketogenesis and proteolysis, much like endogenous human insulin does. Insulin icodec is progressively absorbed into the

systemic circulation after subcutaneous injection. A circulating insulin reservoir is created when more than 99% of circulating insulin icodec reversibly binds to serum albumin. At any given moment, only a very little portion is still in the free, physiologically active form. Because of this reversible albumin binding, insulin icodec's distribution and clearance are slowed, increasing its elimination half-life to around 196 hours, or one week. Throughout the weekly dosage period, insulin icodec's gradual dissociation from albumin guarantees continuous supply of active insulin, reducing variations in plasma insulin concentrations and preserving steady basal insulin activity.[1,3]

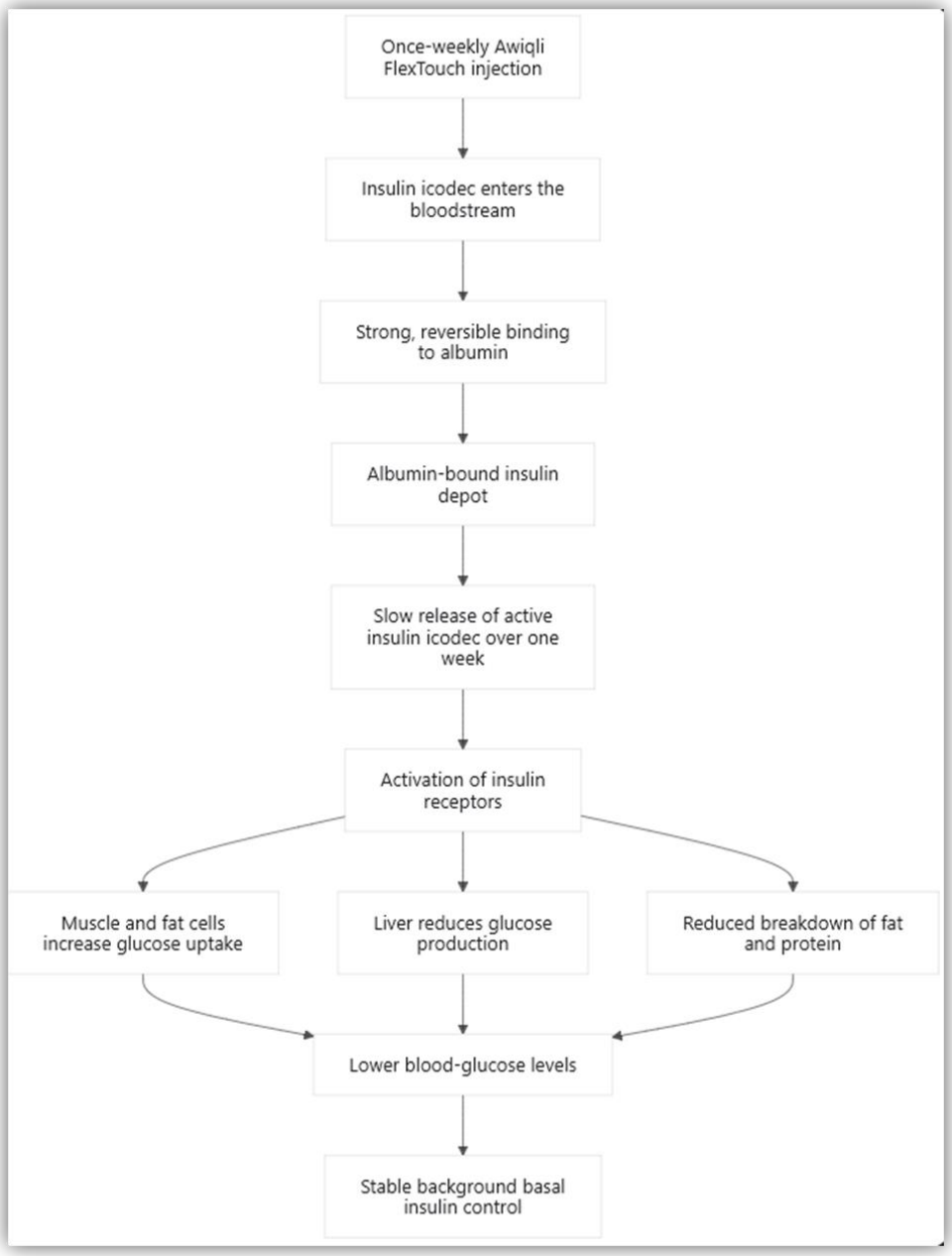


Figure 1: Mechanism of Action of Awiqli (Insulin Icodec).

Pharmacokinetics

Insulin icodec, an ultra-long-acting basal insulin intended for once-weekly delivery, is a component of Awiqli. Because it stays in the bloodstream for a longer amount of time and has a consistent glucose-lowering impact over the course of the weekly dosage interval, its pharmacokinetic profile differs from that of traditional daily basal insulins. Insulin icodec is slowly absorbed into the circulation from the injection site following subcutaneous administration. It can be injected into the upper arm, thigh, or abdominal. After being absorbed, the majority of insulin icodec attaches to albumin, a plentiful blood protein, in a robust and reversible manner. A circulatory insulin depot is created by this albumin binding, which progressively releases active insulin. Insulin icodec gradual release helps maintain basal insulin activity and lessens abrupt fluctuations in insulin levels. Instead of providing a brief peak followed by a swift loss of impact, its activity is dispersed across the full week. Because of this characteristic, Awiqli can be injected once a week on the same day every week. During the initial weeks of therapy, insulin icodec builds up gradually until stable medication concentrations are reached. As a result, a dosage change may not have its full impact right away. When titrating the dosage and keeping an eye on blood glucose levels, medical professionals need to take this delayed adjustment impact into account. The body breaks down insulin icodec in a manner akin to that of normal human insulin. The products of its breakdown are dormant. Since it is not primarily metabolized by common liver-enzyme routes, medications that modify blood-glucose regulation rather than those that directly affect insulin icodec metabolism are typically responsible for clinically significant interactions. IN the trials detailed in the prescription information, kidney impairment, liver impairment, age, sex, race, and ethnicity did not have a clinically significant impact on the pharmacokinetic behaviour of insulin icodec. However, hypoglycaemia may still be more common in those with liver or renal illness, necessitating careful blood-glucose monitoring and customized dosage modification. Because it lowers the frequency of basal insulin injections, the extended duration of insulin icodec is therapeutically beneficial. However, because of its extended action, the consequences of hypoglycaemia, overdosing, or dosage errors may linger longer. Awiqli should thus be recommended cautiously and used in conjunction with routine glucose monitoring.[1]

1. Absorption (A)

- Administered subcutaneously into the abdomen, thigh, or upper arm once weekly.
- Exhibits dose-proportional absorption across the therapeutic dose range.

- Following repeated weekly administration, steady-state plasma concentrations are achieved:
  - 2–3 weeks when initiated with the recommended 50% loading dose.
  - 3–4 weeks without a loading dose.
- In patients with type 2 diabetes receiving 2.9 U/kg, the maximum plasma concentration (Tmax) occurs at a median of approximately 15 hours after injection.
- The prolonged absorption profile supports continuous basal insulin coverage throughout the week.

2. Distribution (D)

- Insulin icodec demonstrates >99% reversible binding to serum albumin.
- Albumin binding forms a circulating depot that slowly releases free insulin, accounting for its prolonged duration of action.
- In vitro studies indicate no clinically relevant displacement interactions with fatty acids or other highly protein-bound drugs.
- The reversible albumin binding contributes significantly to the stable pharmacokinetic profile and reduced day-to-day variability.

3. Metabolism (M)

- Insulin icodec is metabolized similarly to endogenous human insulin.
- Metabolism occurs through proteolytic degradation into small peptide fragments and amino acids.
- All identified metabolites are pharmacologically inactive.
- No active metabolites contribute to its therapeutic effect; the prolonged action is due to its molecular design and albumin binding rather than metabolic activation.

4. Excretion (E)

- The terminal elimination half-life is approximately 1 week (≈196 hours), independent of dose.
- Elimination follows degradation of the insulin molecule rather than renal excretion of unchanged drug.
- The inactive degradation products are subsequently eliminated through normal physiological pathways.

- Population pharmacokinetic analyses indicate that age, sex, race, and ethnicity do not produce clinically meaningful changes in pharmacokinetics, although increasing body weight is associated with lower drug exposure.

Parameter	Awiqli (Insulin Icodec)
Route of administration	Subcutaneous
Dosing frequency	Once weekly
Tmax	~15 hours
Steady state	2–3 weeks (with loading dose) 3–4 weeks (without loading dose)
Plasma protein binding	>99% (albumin)
Metabolism	Proteolytic degradation similar to human insulin
Active metabolites	None
Elimination half-life	Approximately 1 week (≈196 hours)
Major elimination pathway	Degradation to inactive metabolites

Dose and Administration of Awiqli

Dose

- Suggested first dosage for people who have never used insulin
- One weekly subcutaneous injection of 70 units on the same day.
- Dose individualization:
- The patient's metabolic requirements, blood glucose monitoring data, and glycaemic control objectives should all be taken into consideration while titrating the weekly dose.
- When a patient is transitioning from daily basal insulin, the first Awiqli dosage should be given the day following the last daily basal insulin dose.
- Week 1: Give 1.5 x the previous daily basal insulin dosage × 7 (rounded to the nearest 10 units).
- Week 2: Give 7 times the previous daily basal insulin dosage (rounded to the nearest 10 units).
- Starting in week three, modify the weekly dosage based on clinical judgment and blood glucose response.

ADMINISTRATION

- Apply subcutaneously once a week on the same day.
- Inject into the:
  - Abdomen
  - Thigh
  - Upper arm

- To lower the risk of lipodystrophy and localized cutaneous amyloidosis, rotate injection sites within the same anatomical area.
- Avoid using an insulin infusion pump, intravenously, or intramuscularly.
- The Awiqli FlexTouch® pen can provide up to 700 units in a single injection and administers dosages in 10-unit intervals.
- If a dosage is missed, give it as soon as you can as long as there are at least four days (96 hours) until the next weekly dose; after that go back to the usual once-weekly schedule.[1]

Safety and Side Effects of Awiqli

Awiqli (insulin icodec-abae) has a safety profile that is comparable to the basal insulin class. Hypoglycaemia is the most significant dose-limiting adverse effect of insulin treatment and the most often reported adverse response in clinical studies involving individuals with type 2 diabetes.

Common Adverse Reactions

The commonly reported adverse reactions associated with Awiqli include:-

- Hypoglycaemia
- Hypersensitivity reactions (e.g., urticaria, swelling of the face and lips)
- Injection-site reactions
- Lipodystrophy
- Pruritus (itching)
- Rash
- Peripheral edema
- Weight gain

Serious Warnings and Precautions

1. **Hypoglycaemia:** The most common side effect of Awiqli® is hypoglycaemia. Seizures, unconsciousness, and even death are possible outcomes of severe hypoglycaemia. During commencement and dosage modifications, patients should be closely observed.

2. **Hypersensitivity Reactions:** Anaphylaxis and widespread hypersensitivity responses are examples of severe allergic reactions that can happen. If severe hypersensitivity occurs, treatment should be stopped.

3. **Hypokalaemia:** Similar to other insulin products, Awiqli may induce hypokalaemia by moving potassium from the extracellular to the intracellular region. Heart arrhythmias, respiratory paralysis, or even death may result from severe hypokalaemia.

4. Medication Errors and Overdose: Severe hypoglycaemia might arise from unintentional misunderstanding with other insulin medications. Prior to each injection, patients should read the product label, and they should never put insulin from the FlexTouch pen into a syringe.

5. Fluid Retention and Heart Failure: Thiazolidinedione's (TZDs) and insulin usage together may raise the risk of heart failure and fluid retention. It is important to keep an eye out for heart dysfunction symptoms.[1,4]

Drug Interactions

The glucose-lowering impact of Awiqli (insulin icodec-abae) may be altered by a number of drugs, requiring careful monitoring and dose modifications.

- Medications that may make hypoglycaemia more likely include oral antidiabetic medications, GLP-1 receptor agonists, pramlintide, ACE inhibitors, angiotensin II receptor blockers (ARBs), monoamine oxidase inhibitors (MAOIs), salicylates, sulphonamide antibiotics, fibrates, and some fluoroquinolone antibiotics.
- Medications that may lessen insulin's ability to lower blood sugar include corticosteroids, danazol, diuretics, glucagon, isoniazid, niacin, estrogens, oral contraceptives, phenothiazines, protease inhibitors, sympathomimetic agents (such as adrenaline, albuterol, and terbutaline), somatropin, thyroid hormones, and atypical antipsychotics.
- Medications that might raise or lower the need for insulin: Blood glucose levels can be unexpectedly changed by alcohol, beta-blockers, clonidine, lithium salts, and pentamidine. Pentamidine may produce hypoglycaemia at first, then hyperglycaemia.
- The adrenergic warning signs of hypoglycaemia may be obscured by beta-blockers and other sympatholytic medications, making hypoglycaemic episodes more challenging to identify.
- When used with insulin, thiazolidinedione's (TZDs) may raise the risk of heart failure and fluid retention, especially in individuals with underlying cardiac conditions.[1]

Precautions

- **Hypoglycaemia:** The most frequent side effect linked to Awiqli is hypoglycaemia. During the start of treatment, dose titration, changes in physical activity, dietary adjustments, or concurrent drug usage, blood glucose should be continuously monitored.
- **Hypersensitivity:** Patients who have experienced severe hypersensitivity responses to insulin icodec or any of its excipients should not use Awiqli. Anaphylaxis and other severe allergic responses are possible.
- **Hypokalaemia:** Intracellular potassium changes brought on by insulin treatment may result in hypokalaemia. Serum potassium levels should be properly monitored in patients who are at higher risk.
- **Injection-site rotation:** To lower the risk of lipodystrophy and localized cutaneous amyloidosis, which can both affect insulin absorption, injection sites should be switched around within the same anatomical region.
- **Medication errors:** To prevent unintentional replacement with different insulin preparations, patients should confirm the insulin product before to each injection. It is not recommended to take insulin out of the prefilled FlexTouch® pen and put it in a syringe.
- **Heart failure:** Patients on concurrent thiazolidinedione medication should be closely watched for heart failure symptoms. Thiazolidinedione should be stopped if heart failure appears or gets severe.
- **Renal or hepatic impairment:** Due to changed insulin needs, patients with renal or hepatic dysfunction may need more frequent blood glucose monitoring and customized dosage adjustments.[1]

Advantages of Awiqli

➢ **Weekly Dosage**

- The first authorized once-weekly basal insulin, Awiqli®, reduces the frequency of injections from every day to once every week.
- Compared to daily basal insulin therapy, the decreased injection load may enhance treatment convenience, adherence, and patient acceptability.

➢ **Efficient Glycaemic Management**

- The ONWARDS program's clinical trials showed that insulin icodec effectively lowers HbA1c levels that are on par with or higher than those of once-daily basal insulin analogs.

- In insulin-naïve patients with type 2 diabetes, once-weekly insulin icodec reduced HbA1c more effectively than insulin degludec in the ONWARDS 3 study.

➢ **Pharmacokinetic Profile Stability**

- A sustained insulin action with steady basal insulin coverage over seven days is provided by the extended half-life (~1 week) and robust reversible albumin binding.
- This pharmacological profile preserves glucose-lowering action while allowing for less frequent dosing.

➢ **Comparable Safety Profile**

- The ONWARDS clinical studies showed that insulin icodec's overall safety profile was similar to that of once-daily basal insulin analogs.
- The rates of adverse events, such as hypoglycaemia, were typically in line with basal insulin treatments that have been shown to be effective.

➢ **Potential Enhancement of Treatment Compliance**

- Weekly delivery, especially for individuals who struggle with daily insulin injections, may lessen the burden of therapy and promote improved adherence.[3]

Limitations of Awiqli

1. Hypoglycaemia Risk

- Hypoglycaemia continues to be the most clinically significant side effect, much like with previous insulin treatments.
- Because insulin icodec has a prolonged duration of action, hypoglycaemia episodes may need to be closely monitored and managed.

2. Dose Flexibility Is Limited by Long Duration of Action

- Compared to daily basal insulin, the longer half-life of insulin icodec may make quick dosage changes more challenging.
- It could take longer to reach a new steady state if insulin requirements change.

3. Careful Dose Conversion Requirement

- To lower the risk of hypoglycaemia or insufficient glycaemic control, certain dose-conversion techniques are needed when switching from daily basal insulin to weekly insulin icodec.

4. Effects Associated with Injection Sites

- Awiqli may result in injection-site reactions, lipodystrophy, or localized cutaneous amyloidosis, all of which can impair the absorption of insulin, much like other injectable insulin products.

5. Restricted Long-Term Safety Information

- Longer-term real-world data on cardiovascular outcomes, adherence, and uncommon side events are still few, despite clinical trials showing short- to medium-term effectiveness and safety.[3,4]

FUTURE DIRECTIONS OF AWIQLI

1. Increased Utilization in Type 1 Diabetes

- Future studies will assess the effectiveness of once-weekly insulin icodec in people with type 1 diabetes mellitus (T1DM). Studies evaluating insulin icodec in various diabetic populations were part of the ONWARDS clinical program; further data is needed to determine its long-term safety and effectiveness in type 1 diabetes.

2. Extended Safety and Practical Data

- To assess the long-term safety profile of insulin icodec, including cardiovascular outcomes, sustained glycaemic control, adherence, and uncommon adverse events outside of controlled clinical trials, ongoing post-marketing surveillance and real-world research are required.

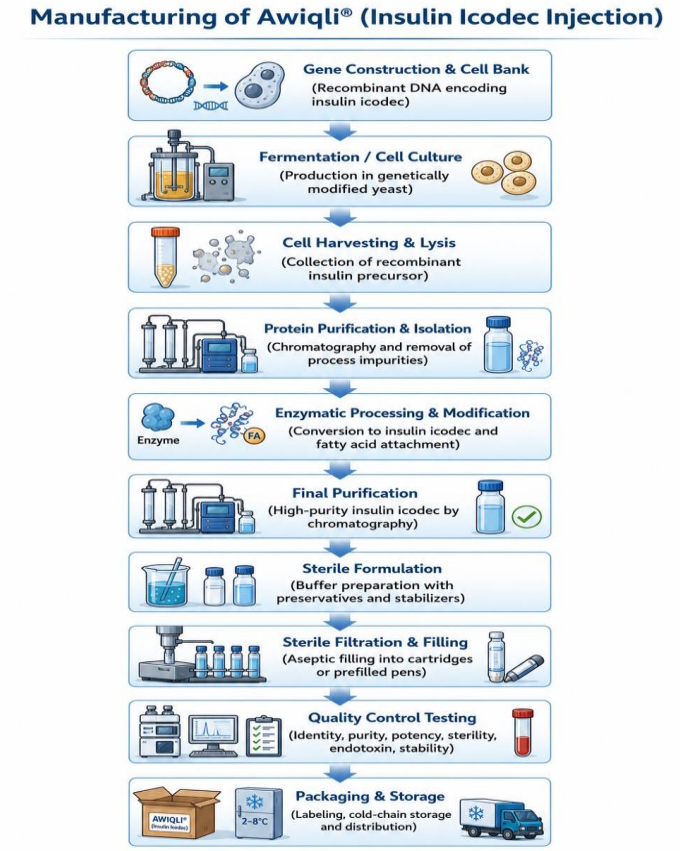
3. Increasing Patient Acceptance and Treatment Compliance

- By lowering the frequency of injections, the once-weekly delivery strategy offers a possible improvement in insulin therapy. In comparison to daily basal insulin therapy, future research may concentrate on determining if a lower injection load enhances adherence, treatment satisfaction, and quality of life.
- Integration with Current Technologies for Diabetes Management
- To maximize dosage modification and customized treatment, future research may examine the integration of insulin icodec therapy with automated glucose monitoring devices, digital diabetes management platforms, and continuous glucose monitoring (CGM).

4. Assessment in Wider Patient Groups

- More clinical research is required to evaluate insulin icodec in a variety of demographics, including as elderly people, those requiring complicated insulin regimens, and patients with varied degrees of renal or hepatic impairment.[3,4]

MANUFACTURING OF AWIQLI (INSULIN ICODEC INJECTION)[1]



MARKETED PRODUCT OF AWIQLI INJECTION

Figure 2: Marketed product of Awiqli® (insulin icodec-abae) U-700 FlexTouch® prefilled pen for once-weekly subcutaneous administration.[5]

Product details

- **Brand name:** Awiqli
- **Generic name:** Insulin icodec-abae
- **Dosage form:** Solution for subcutaneous injection
- **Device:** FlexTouch® prefilled pen
- **Strength:** U-700 (700 units/mL)
- **Administration:** Once weekly
- **Manufacturer:** Novo Nordisk
- **Indication:** Improvement of glycaemic control in adults with type 2 diabetes mellitus, alongside diet and exercise (according to approved labelling).

CONCLUSION

Awiqli (insulin icodec-abae) represents a significant advancement in the treatment of type 2 diabetes mellitus as the first FDA-approved once-weekly basal insulin. Its unique molecular design, characterized by reversible albumin binding and an ultra-long half-life, provides stable basal insulin coverage for an entire week with a single injection. Clinical studies have demonstrated that insulin icodec offers effective glycaemic control comparable to or better than conventional once-daily basal insulin analogues while maintaining an acceptable safety profile when used appropriately. The reduction in injection frequency may improve treatment adherence, patient satisfaction, and overall quality of life, particularly among individuals who experience challenges with daily insulin therapy. However, due to its prolonged duration of

action, careful dose titration, patient education, and regular blood glucose monitoring remain essential to minimize the risk of hypoglycaemia and medication errors. Although long-term real-world evidence is still evolving, Awiqli has the potential to redefine basal insulin therapy and contribute to improved diabetes management. Continued post-marketing surveillance and future clinical research will further establish its long-term efficacy, safety, and role in personalized diabetes care.

REFERENCES

1. U.S. National Library of Medicine. (2026). *Awiqli*—insulin icodec-abae injection, solution*:* Prescribing information. Daily Med., https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=5162b93e-5775-4581-a5e9-e8783ae0acd7&type=display
2. U.S. Food and Drug Administration. (2026). *Novel drug approvals for 2026: Awiqli (insulin icodec-abae).*https://www.fda.gov/drugs/novel-drug-approvals-fda/novel-drug-approvals-2026.
3. Lingvay, I., Asong, M., Desouza, C., et al. (2023). Once-weekly insulin icodec versus once-daily insulin degludec in adults with insulin-naive type 2 diabetes: The ONWARDS randomized clinical trial. *JAMA.*, *330*(3): 228–237. https://doi.org/10.1001/jama.2023.11313.
4. Bajaj, H. S., Andersen, S. B., Hristova, B., et al. (2026). Once-weekly insulin icodec: Safety profile in type 2 and type 1 diabetes based on a pooled analysis of ONWARDS 1– Endocrine Practice.https://doi.org/10.1016/j.eprac.2026.05.003 https://www.indianpharmanetwork.in/awiqli-insulin-icodec-abae/