THE DIFFERENCES BETWEEN
HUMAN PREMIX INSULIN AND
PREMIX INSULIN ANALOG

HUMAN
premix insulin

eg, NOVOLIN® 70/30

Premix insulin
ANALOG

NOVOLOG® MIX 70/30

VS

Physicians often prescribe analog basal and bolus insulin. Would your patients on human premix insulin benefit from an analog, too?

Indications and Usage
• NovoLog® Mix 70/30 is an insulin analog indicated to improve glycemic control in patients with diabetes mellitus.

Important Limitations of Use
• In premix insulins, such as NovoLog® Mix 70/30, the proportions of rapid-acting and long-acting insulins are fixed and do not allow for basal versus prandial dose adjustments.

Important Safety Information
Contraindications
• NovoLog® Mix 70/30 is contraindicated during episodes of hypoglycemia and in patients hypersensitive to NovoLog® Mix 70/30 or one of its excipients.
Explore the differences when choosing a premix formulation

Human premix insulin
e.g., NOVOLIN® 70/30

Premix insulin analog
NOVOLOG® MIX 70/30

- No NPH insulin
- More closely matches the body’s physiologic insulin profile
- Available in a discreet FlexPen®
- Flexible dosing: dosed within 15 minutes before or after starting a meal in patients with type 2 diabetes
- Same co-pay on most managed care plans

70/30 insulin analog
NOVOLOG® MIX 70/30

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“NovoLog® Mix 70/30 has a flexible dosing approach that allows patients with type 2 diabetes to dose within 15 minutes before or after meal initiation vs 30 minutes before meals required with human premix insulin.”

“Intended as a guide. Lower acquisition costs alone do not necessarily reflect a cost advantage in the outcome of the condition treated because there are other variables that affect relative costs. Formulary status is subject to change.”

Please see Important Safety Information throughout.
Click here for Prescribing Information.
Patients may benefit from an insulin analog that more closely matches the body’s physiologic insulin profile

Flexible dosing vs human premix insulin

NovoLog® Mix 70/30 should be dosed within 15 minutes before or after meal initiation in patients with type 2 diabetes vs 30 minutes before a meal for human premix insulin (eg, Novolin® 70/30).

Important Safety Information (cont’d)

Warnings and Precautions

- **Never Share a NovoLog® Mix 70/30 FlexPen® Between Patients, even if the needle is changed.** Sharing poses a risk for transmission of blood-borne pathogens.

- **Administration:** NovoLog® Mix 70/30 should not be mixed with any other insulin product, administered intravenously, or used in insulin infusion pumps. NovoLog® Mix 70/30 has a faster onset of action than human insulin premix 70/30 and should be dosed within 15 minutes before meal initiation for patients with type 1 diabetes. For patients with type 2 diabetes, dosing should occur within 15 minutes before or after meal initiation.

Single-center, randomized, double-blind, 24-hour, crossover trial in 24 healthy male volunteers receiving 1 injection of NovoLog® Mix 70/30 or human premix 70/30 0.3 units/kg. Serum insulin concentrations were assayed every 30 minutes. Adapted from Weyer et al, 1997.¹
In the IMPROVE™ study, converting patients from human premix insulin to NovoLog® Mix 70/30 provided:

Glycemic control and safety

In the IMPROVE™ study, converting patients from human premix insulin to NovoLog® Mix 70/30 provided:

**GLYCEMIC CONTROL**

<table>
<thead>
<tr>
<th>A1C reduction</th>
<th>P&lt;0.0001</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.21%</td>
<td>1.8%</td>
</tr>
<tr>
<td>7.37%</td>
<td></td>
</tr>
</tbody>
</table>

A 92% reduction in major hypoglycemic events was also observed (0.36 to 0.03 events/patient/year; values based on patient recall, P<0.0001).

Simple unit-to-unit conversion

<table>
<thead>
<tr>
<th>1 unit</th>
<th>1 unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human premix 70/30</td>
<td>NovoLog® Mix 70/30</td>
</tr>
</tbody>
</table>

Results from patients who completed the IMPROVE™ study who were previously treated with human premix ± oral antidiabetic drug (OAD) therapy and had A1C values available at baseline and final visit. The IMPROVE™ study was a multinational, open-label, nonrandomized, 26-week, observational study that evaluated the safety and efficacy of NovoLog® Mix 70/30 in patients with type 2 diabetes, n=3856.

Please see Important Safety Information throughout. Click here for Prescribing Information.
**Important Safety Information (cont’d)**

**Warnings and Precautions**

- **Hypoglycemia:** Hypoglycemia is the most common adverse effect of insulin therapy. The timing of hypoglycemia may reflect the time-action profile of the insulin formulation. Glucose monitoring is recommended for all patients with diabetes. Any change of insulin dose should be made cautiously and only under medical supervision.

- **Hypokalemia:** Insulin, particularly when given in settings of poor glycemic control, can cause hypokalemia. Use caution in patients predisposed to hypokalemia.

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**Broad access**

NovoLog® Mix 70/30 is covered for a majority of managed care patients nationwide.²³

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**More units, same co-pay**

One box of NovoLog® Mix 70/30 FlexPen® provides 50% more insulin than human premix insulin in a vial for the same co-pay on most managed care plans.¹

Visit [novologmix70-30pro.com](http://novologmix70-30pro.com) and access the “Coverage and Savings” tab to check formulary coverage for your patients.

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¹Intended as a guide. Lower acquisition costs alone do not necessarily reflect a cost advantage in the outcome of the condition treated because there are other variables that affect relative costs. Formulary status is subject to change.

²Managed care plans only. Does not include Medicaid and Medicare Part D. Multiple products within the same therapeutic class may be considered preferred and on the same tier.

³Formulary data are provided by Fingertip Formulary® and are current as of January 2015. Because formularies do change and many health plans offer more than one formulary, please check directly with the health plan to confirm coverage for individual patients. © 2015 Fingertip Formulary. All rights reserved.

⁴One box of FlexPen® equals 1500 units vs 1 vial with 1000 units.
Offer patients a discreet delivery device

NovoLog® Mix 70/30 FlexPen®—the world’s #1 selling prefilled insulin pen

Proven accuracy
Requires low injection force
Lasts up to 14 days without refrigeration and should not be refrigerated once in use

With NovoFine® Plus needles, our shortest and thinnest needles available

SuperFlow Technology™—designed to enhance flow rates and reduce dosage force
Ultrastrong—designed to resist bending or breaking
Universal—fits all currently available insulin pens

*IMS Health Inc. IMS Global MIDAS (3 years ending July 2014).
Support patients in managing their diabetes

With NovoLog® Mix 70/30, your patients benefit from a variety of support resources, including:

- **Cornerstones4Care®**
  Free, personalized, and award-winning support through the Cornerstones4Care® program.

- **Patient Brochure**
  Explains the benefits of NovoLog® Mix 70/30 and how to use the FlexPen® device for your patients.

- **Patient Active Learning (PAL) Kit**
  Features both printed and audio instructions to help patients get off to a good start (available through Cornerstones4Care®).

- **Novo Nordisk Instant Savings Card**
  Product savings through the Novo Nordisk Instant Savings Card. Restrictions apply; see card for details.

To learn more about these resources, visit [novologmix70-30pro.com](http://novologmix70-30pro.com) and look under the “Resources” tab. You can also direct your patients to [novologmix70-30.com](http://novologmix70-30.com), where they can access the resources themselves.

Important Safety Information (cont’d)

Warnings and Precautions (cont’d)

- **Renal and Hepatic Impairment:** Like all insulins, NovoLog® Mix 70/30 requirements may be reduced in patients with renal impairment or hepatic impairment.

- **Hypersensitivity and Allergic Reactions:** Severe, life-threatening, generalized allergy, including anaphylaxis, may occur with insulin products, including NovoLog® Mix 70/30.

- **Fluid retention and heart failure can occur with concomitant use of PPAR-gamma agonists:** Fluid retention and heart failure can occur with concomitant use of thiazolidinediones (TZDs), which are PPAR-gamma agonists, and insulin, including NovoLog® Mix 70/30.
EXPLORE THE BENEFITS OF NOVOLOG® MIX 70/30

- Improved glycemic control
- FlexPen®—a discreet, prefilled, dial-a-dose insulin delivery device
- Broad coverage
  Similar co-pay to human premix insulin on most managed care plans

1:1

- Simple unit-to-unit conversion from human premix insulin
- Patient support resources including Cornerstones4Care®

For additional information, product samples, and more, visit novologmix70-30pro.com

Important Safety Information (cont’d)

Adverse Reactions

- Adverse reactions observed with insulin therapy include hypoglycemia, allergic reactions, local injection site reactions, lipodystrophy, rash, and pruritus.

Use in Specific Populations

- The safety and effectiveness of NovoLog® Mix 70/30 have not been established in pediatric patients. Clinical studies of NovoLog® Mix 70/30 did not include sufficient numbers of patients aged 65 and over to determine whether they respond differently than younger patients.

Please see Important Safety Information throughout. Click here for Prescribing Information.

REFERENCES:

Cornerstones4Care®, FlexPen®, NovoFine®, Novolin®, and NovoLog® are registered trademarks of Novo Nordisk A/S.

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