Important information about the BD™ U-500 Insulin Syringe—the only syringe designed for use with the Humulin® R U-500 vial

MUTUAL SKU# 235-853

**Indication for Humulin R U-500**

- Humulin R U-500 is a concentrated human insulin indicated to improve glycemic control in adults and children with diabetes mellitus requiring more than 200 units of insulin per day.

- Limitation of Use: The safety and efficacy of Humulin R U-500 used in combination with other insulins has not been determined. The safety and efficacy of Humulin R U-500 delivered by continuous subcutaneous infusion has not been determined.

**Select Safety Information for Humulin R U-500**

- Humulin R U-500 is contraindicated during episodes of hypoglycemia and in patients hypersensitive to Humulin R U-500 or any of its excipients.

- Dosing Errors: Extreme caution must be observed in measuring the dose of Humulin R U-500 because inadvertent overdose may result in serious adverse reaction or life-threatening hypoglycemia.

Please see Important Safety Information on page 5 and click to access Full Prescribing Information.
Dose conversion is not needed with the BD U-500 Insulin Syringe

- Dose conversion is no longer needed when using this syringe with Humulin R U-500 vials
- The U-500 insulin syringe draws to and doses the insulin units prescribed
- Only the U-500 insulin syringe should be used with the U-500 vial
- A prescription is required to dispense BD U-500 insulin syringes

The U-500 insulin syringe can dose up to 250 units (0.5 mL) of U-500 insulin per injection. Each syringe mark corresponds to 5 units of insulin.

The green collar carries a U-500 symbol.

The green markings on the syringe match the green concentration mark, protective cap, and rubber stopper on the U-500 vial with the aqua label (shown on next page).

Please see next page for more information on vial with aqua label.

Select Safety Information for Humulin R U-500

- Hyperglycemia, Hypoglycemia, or Death Due to Dosing Errors in the Vial Presentation: Medication errors associated with the Humulin R U-500 vial resulting in patients experiencing hyperglycemia, hypoglycemia, or death have been reported.

Please see Important Safety Information on page 5 and click to access Full Prescribing Information.
The packaging has changed, but it’s still the same 5x concentrated insulin

The updated U-500 vial

Please note that no changes have been made to the Humulin R U-500 formulation and no replacement is required for existing product. Your patients should continue to use any quantity they have available, as long as the product’s expiration date has not passed.

- The U-500 vial with the aqua label has a green U-500 concentration mark and protective cap that matches the color of the needle shield on the U-500 insulin syringe
- It contains 20 mL of U-500 insulin
- Patients may begin receiving the vial with the green cap as soon as November 2016
- The vial with the green cap includes dosing information for use only with the BD U-500 insulin syringe

The previous U-500 vial may still be dispensed

- U-500 vials with the brown label and orange collar may be dispensed until supplies run out or the lots expire in August 2017
- This vial also contains 20 mL of U-500 insulin
- The vial with the orange collar includes prior dosing information for use with U-100 insulin syringes or volumetric syringes. However, only the U-500 insulin syringe should be used with U-500 insulin

Select Safety Information for Humulin R U-500

Medication errors associated with the Humulin R U-500 vial, continued:

Dispensing

- Instruct patients to always inspect insulin vials to confirm that the correct insulin is dispensed including the correct brand and concentration.
- For the Humulin R U-500 vial, particular attention should be paid to the 20-mL vial size, prominent “U-500” and warning statements on the vial label, and distinctive coloring on the vial and carton.

Please see Important Safety Information on page 5 and click to access Full Prescribing Information.
Separate prescriptions are required to dispense U-500 insulin syringes and U-500 vials

**Example Rx for the U-500 syringe**

RX

**PRESCRIPTION:**
BD U-500 Insulin Syringe

**DISPENSE:** #90

**REFILLS:** 2

**SIG:**
Use with Humulin R U-500 insulin vial only.

**PATIENT INSTRUCTIONS:**
Refer to dosing instructions supplied with your Humulin R U-500 prescription.
Do not substitute.

**Example Rx for the U-500 vial**

RX

**PRESCRIPTION:**
Humulin R U-500 Vial (500 units/mL)

**DISPENSE:**
#20 mL (1 vial)

**REFILLS:** 2

**SIG:**
Administer 115 units SC 30 minutes ac — breakfast — and 85 units SC 30 minutes ac — lunch and evening meal.

**PATIENT INSTRUCTIONS:**
Draw to 115 unit markings before breakfast and 85 unit markings before lunch and evening meal on a U-500 insulin syringe. Inject 30 minutes before meals.
Do not substitute.

Dispense the U-500 insulin syringe as written and do not substitute as it may lead to dosing errors.

For more information, call The Lilly Answers Center at 1-800-LillyRx (1-800-545-5979), or visit Humulin.com.

**Important stocking and dispensing information**

- The U-500 insulin syringe is available by prescription only, not over the counter
- The syringe NDC# is 08290-3267-30

**Select Safety Information for Humulin R U-500**

Medication errors associated with the Humulin R U-500 vial, continued:

**Prescribing**

- Dosing errors have occurred when Humulin R U-500 was administered with syringes other than a U-500 insulin syringe. Patients should be prescribed U-500 syringes for use with Humulin R U-500 vials. The dose of Humulin R U-500 should always be expressed in units of insulin.

Please see Important Safety Information on page 5 and click to access Full Prescribing Information.
Starting patients on the U-500 insulin syringe

For patients new to U-500:
• Confirm patients know their dose. Because the U-500 insulin syringe delivers units in increments of 5, the starting dose must be a multiple of 5
• Ask if they understand how to draw up the prescribed units with the U-500 insulin syringe; point out that the number of units shown on the syringe is the number of units they receive
• Patients should use only the U-500 insulin syringe to administer Humulin R U-500

For patients currently using the U-500 vial who are transitioning to the U-500 insulin syringe:
• Confirm their current dose in units
• Ask if they understand how to draw up the prescribed units with the U-500 insulin syringe; point out that the number of units shown on the syringe is the number of units they receive
• Remind patients that with the U-500 syringe, a unit is a unit. No more dose conversion is required
Here’s an example: A patient who is prescribed 100 units of U-500 insulin with the U-500 insulin syringe will draw the syringe to the 100-unit mark to measure the dose prescribed. In contrast, previously with the U-100 insulin syringe, a patient would have drawn to the 20-unit marking.

Let patients know that they can call The Lilly Answers Center (1-800-545-5979) or visit Humulin.com for additional information.

Select Safety Information for Humulin R U-500
Medication errors associated with the Humulin R U-500 vial, continued:

Administration
• Instruct patients to always check the insulin label before each injection.
• Use only a U-500 insulin syringe with Humulin R U-500 to avoid administration errors. Do not use any other type of syringe to administer Humulin R U-500. Adhere to administration instructions.
• Instruct the patient to inform hospital or emergency department staff of the dose of Humulin R U-500 prescribed.

Please see Important Safety Information on page 5 and click to access Full Prescribing Information.
Important Safety Information for Humulin R U-500

Contraindications
- Humulin R U-500 is contraindicated during episodes of hypoglycemia and in patients hypersensitive to Humulin R U-500 or any of its excipients.

Warnings and Precautions
- Dosing Errors: Extreme caution must be observed in measuring the dose of Humulin R U-500 because inadvertent overdose may result in serious adverse reaction or life-threatening hypoglycemia.
- Hyperglycemia, Hypoglycemia, or Death Due to Dosing Errors in the Via Presentation: Medication errors associated with the Humulin R U-500 vial resulting in patients experiencing hyperglycemia, hypoglycemia, or death have been reported.

Dispensing
- Instruct patients to always inspect insulin vials to confirm that the correct insulin is dispensed including the correct brand and concentration.
- For the Humulin R U-500 vial, particular attention should be paid to the 20-mL vial size, prominent “U-500” and warning statements on the vial label, and distinctive coloring on the vial and carton.

Prescribing
- Dosing errors have occurred when Humulin R U-500 was administered with syrings other than a U-500 insulin syringe. Patients should be prescribed U-500 syringes for use with Humulin R U-500 vials. The dose of Humulin R U-500 should always be expressed in units of insulin.

Administration
- Instruct patients to always check the insulin label before each injection.
- Use only a U-500 insulin syringe with Humulin R U-500 to avoid administration errors. Do not use any other type of syringe to administer Humulin R U-500. Adhere to administration instructions.
- Instruct the patient to inform hospital or emergency department staff of the dose of Humulin R U-500 prescribed.
- If using the Humulin R U-500 KwikPen, patients should be counseled to dial and dose the prescribed number of units of insulin (NO dose conversion is required).
- DO NOT transfer Humulin R U-500 from the Humulin R U-500 KwikPen into any syringe for administration. Overdose and severe hypoglycemia can occur.

Never Share a KwikPen or U-500 Syringe Between Patients, even if the needle is changed. Sharing poses a risk for transmission of blood-borne pathogens.

Hyperglycemia or Hypoglycemia with Changes in Insulin Regimen: Changes in insulin, manufacturer, type, or method of administration should be made cautiously and only under medical supervision and the frequency of blood glucose monitoring should be increased.

Hypoglycemia: Hypoglycemia is the most common adverse reaction associated with insulin, including Humulin R U-500. Severe hypoglycemia can cause seizures, may be life-threatening, or cause death. Severe hypoglycemia may develop as long as 18 to 24 hours after an injection of Humulin R U-500. Hypoglycemia can impair concentration ability and reaction time; this may place an individual and others at risk in situations where these abilities are important, such as driving or operating other machinery.
- Hypoglycemia can happen suddenly and symptoms may differ in each individual and change over time in the same individual.
- Early warning symptoms of hypoglycemia may be less pronounced in patients and caregivers must be educated to recognize and manage hypoglycemia.
- Self-monitoring of blood glucose plays an essential role in the prevention and management of hypoglycemia. In patients at higher risk for hypoglycemia and patients who have reduced symptomatic awareness of hypoglycemia, increased frequency of blood glucose monitoring is recommended.

Hypersensitivity and Allergic Reactions: Severe, life-threatening, generalized allergy, including anaphylaxis, can occur with insulin products, including Humulin R U-500. If hypersensitivity reactions occur, discontinue Humulin R U-500; treat per standard of care and monitor until symptoms and signs resolve.

Hypokalemia: Insulin use can lead to hypokalemia that left untreated may cause respiratory paralysis, ventricular arrhythmia, and death. Use caution in patients who may be at risk for hypokalemia (e.g., patients using potassium-lowering medications, patients taking medications sensitive to serum potassium concentrations).

Fluid Retention and Heart Failure with Concomitant Use of PPAR-gamma Agonists: Thiazolidinediones (TZDs), which are PPAR-gamma agonists, can cause dose-related fluid retention, particularly when used in combination with insulin. Fluid retention may lead to or exacerbate heart failure. Observe patients for signs and symptoms of heart failure. If heart failure develops, it should be managed according to current standards of care, and discontinuation or dose reduction of the PPAR-gamma agonist must be considered.

Adverse Reactions
- Adverse reactions include hypoglycemia, allergic reactions, lipodystrophy, injection site reactions, weight gain, peripheral edema, and immunogenicity.

Drug Interactions
- Some medications may alter glucose metabolism and may necessitate insulin dose adjustment. Signs of hypoglycemia may be reduced or absent in patients taking antiadrenergic drugs. Particularly close monitoring may be required.

Use in Specific Populations
- Pregnancy Category B: There are no adequate and well-controlled studies in pregnant women, evidence from published literature suggests that good glycemic control in patients with diabetes during pregnancy provides significant maternal and fetal benefits.
- Pediatric Use: There are no well-controlled studies of use of Humulin R U-500 in children. Standard precautions as applied to use of Humulin R U-500 in adults are appropriate for use in children.
- Geriatric Use: There are no well-controlled studies of use of Humulin R U-500 in geriatric patients. In elderly patients with diabetes, the initial dosing, dose increments, and maintenance dosage should be conservative to avoid hypoglycemia.
- Renal or Hepatic Impairment: Frequent glucose monitoring and insulin dose reduction may be required in patients with renal or hepatic impairment.

Dosage and Administration
- Prescribe Humulin R U-500 ONLY to patients who require more than 200 units of insulin per day.
- Humulin R U-500 is available as a KwikPen or a multiple dose vial. Patients using the vial must be prescribed the U-500 insulin syringe to avoid medication errors.
- DO NOT perform dose conversion when using the Humulin R U-500 KwikPen. The dose window of the KwikPen shows the number of units of Humulin R U-500 to be injected and NO dose conversion is required.
- DO NOT perform dose conversion when using a U-500 insulin syringe. The markings on the syringe show the number of units of Humulin R U-500 to be injected. Each marking represents 5 units of insulin.
- Instruct patients using the vial to use only a U-500 insulin syringe and on how to correctly draw the prescribed dose into the syringe. Confirm that the patient has understood these instructions and can correctly draw the prescribed dose with their syringe.
- Advise the patient to read the Patient Information and Instructions for Use.
- Instruct patients to always check the insulin label before administration to confirm the correct insulin product is being used.
- Inspect Humulin R U-500 visually and only use if the solution appears clear and colorless.
- Administer Humulin R U-500 subcutaneously two or three times daily approximately 30 minutes before a meal. Rotate injection sites to reduce the risk of lipodystrophy.
- Individualize the dose of Humulin R U-500 based on metabolic needs, blood glucose monitoring results, and glycemic control goal.
- Do NOT administer Humulin R U-500 intravenously or intramuscularly.
- Do NOT mix Humulin R U-500 with other insulins.

Storage
- Protect from heat and light. Do not freeze. Do not use Humulin R U-500 after the expiration date stamped on the label.
- Insulin U-500 Vials: Unopened vials of Humulin R U-500 should be kept in a refrigerator. Opened (in-use) vials of Humulin R U-500 should be kept in the refrigerator or at room temperature and used within 40 days of opening. Throw away any opened vial after 40 days of use, even if there is insulin left in the vial.
- Insulin R U-500 KwikPen: Unopened Humulin R U-500 KwikPens should be kept in a refrigerator. Opened (in-use) Humulin R U-500 KwikPens should be kept at room temperature and used within 28 days of opening. Do not refrigerate opened KwikPens. Throw away any opened KwikPens after 28 days of use, even if there is insulin left in the pen.

Click to access Full Prescribing Information and Patient Information. See Instructions for Use included with the vial.

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