

## How to Switch Insulin Products

Switching insulins should always be done with prescriber approval and close monitoring. Advise patients to closely monitor blood glucose levels after switching insulins. If switching between human insulin brands (e.g., *Humulin R* to *Novolin R*, *Humulin N* to *Novolin N*, or *Humulin N/R* or *Novolin N/R* to “store brand” *N/R*), keep the number of units each day the same. However, because these brands are not AB rated you may need to contact the prescriber for approval to switch brands. See our chart, *Comparison of Insulins and Injectable Diabetes Meds*, for meal timing, onset, peak, duration of action, and other information. Also see our algorithm, *Initiation and Adjustment of Insulin Regimens for Type 2 Diabetes*.

Clinical Scenario	Recommendation/Comments
<b>NPH to long-acting</b>	
NPH to insulin detemir ( <i>Levemir</i> )	<ul style="list-style-type: none"> <li>• Convert unit-per-unit.<sup>1</sup></li> <li>• Some patients may require more insulin detemir than NPH.<sup>1</sup></li> <li>• Give insulin detemir once daily, or divide twice daily.<sup>1</sup></li> <li>• Do not mix insulin detemir with other insulins.<sup>1</sup></li> </ul>
NPH to insulin glargine U-100 ( <i>Lantus</i> , <i>Basaglar</i> )  NPH to insulin glargine U-300 ( <i>Toujeo</i> )	<ul style="list-style-type: none"> <li>• NPH once daily: convert unit-per-unit to <i>Lantus</i> or <i>Toujeo</i> and give once daily.<sup>2,14</sup> No specific information to guide NPH once daily to <i>Basaglar</i> switch. Consider conversion as for <i>Lantus</i>, given <i>Lantus/Basaglar</i> dose equivalency.<sup>12</sup></li> <li>• NPH twice daily: reduce total daily dose by 20% and give <i>Lantus/Basaglar</i> or <i>Toujeo</i> once daily.<sup>2,12,14</sup></li> <li>• May take ≥5 days to see the max effect of the selected dose of <i>Toujeo</i>. Do not increase dose more often than every 3 to 4 days.<sup>14</sup></li> <li>• Do not mix insulin glargine with other insulins.<sup>2,12,14</sup></li> </ul>
<b>Long-acting to NPH</b>	
Insulin detemir ( <i>Levemir</i> ) to NPH	<ul style="list-style-type: none"> <li>• Convert unit-per-unit.<sup>3</sup></li> <li>• Give NPH twice daily (e.g., 50:50 or 2/3 in AM and 1/3 before dinner or at bedtime).<sup>3,4</sup></li> </ul>
Insulin glargine U-100 ( <i>Lantus</i> , <i>Basaglar</i> ) to NPH  Insulin glargine U-300 ( <i>Toujeo</i> ) to NPH	<ul style="list-style-type: none"> <li>• Convert unit-per-unit from <i>Lantus</i>.<sup>3</sup></li> <li>• No specific information to guide <i>Basaglar</i> to NPH switch. Consider conversion as for <i>Lantus</i>, given <i>Lantus/Basaglar</i> dose equivalency.<sup>12</sup></li> <li>• No specific information to guide <i>Toujeo</i> to NPH switch. Consider 20% dose reduction to be conservative.</li> <li>• Give NPH twice daily (e.g., 50:50 or 2/3 in AM and 1/3 before dinner or at bedtime).<sup>3,4</sup></li> </ul>

More. . .

Clinical Scenario	Recommendation/Comments
<b>Long-acting to long-acting</b>	
Insulin glargine U-100 ( <i>Lantus</i> ) to/from insulin glargine U-100 ( <i>Basaglar</i> )	<ul style="list-style-type: none"> <li>Convert unit-per-unit<sup>12</sup></li> </ul>
Insulin detemir ( <i>Levemir</i> ) to insulin glargine U-100 ( <i>Lantus</i> , <i>Basaglar</i> )	<ul style="list-style-type: none"> <li>Consider converting unit-per-unit to <i>Lantus</i>.<sup>3,5</sup> A lower daily dose may be needed.<sup>7</sup></li> <li>No specific information to guide <i>Levemir</i> to <i>Basaglar</i> switch. Consider conversion as for <i>Lantus</i>, given <i>Lantus/Basaglar</i> dose equivalency.<sup>12</sup></li> <li>Give once daily.<sup>5,12</sup></li> <li>Do not mix insulin glargine with other insulins.<sup>2,12</sup></li> </ul>
Insulin detemir ( <i>Levemir</i> ) to insulin glargine U-300 ( <i>Toujeo</i> )	<ul style="list-style-type: none"> <li><i>Levemir</i> once daily: convert unit-per-unit and give once daily.<sup>16</sup></li> <li><i>Levemir</i> twice daily: reduce total daily dose by 20% and give once daily.<sup>18</sup></li> <li>May take <math>\geq 5</math> days to see the max effect of the selected dose of <i>Toujeo</i>. Do not increase dose more often than every 3 to 4 days.<sup>14</sup></li> <li>Do not mix insulin glargine with other insulins.<sup>14</sup></li> </ul>
Insulin glargine U-100 ( <i>Lantus</i> , <i>Basaglar</i> ) to insulin glargine U-300 ( <i>Toujeo</i> )	<ul style="list-style-type: none"> <li><i>Lantus</i> once daily: convert unit-per-unit and give once daily.<sup>16</sup></li> <li><i>Lantus</i> twice daily: convert unit-per-unit (or reduce by about 10% or less) and give once daily.<sup>18</sup></li> <li>For patients controlled on <i>Lantus</i>, expect that a higher daily dose (about 10% to 18%) of <i>Toujeo</i> will be needed to maintain control.<sup>17</sup></li> <li>No specific information to guide <i>Basaglar</i> to <i>Toujeo</i> switch. Consider conversion as for <i>Lantus</i>, given <i>Lantus/Basaglar</i> dose equivalency.<sup>12</sup></li> <li>May take <math>\geq 5</math> days to see the max effect of the selected dose of <i>Toujeo</i>. Do not increase dose more often than every 3 to 4 days.<sup>14</sup></li> <li>Do not mix insulin glargine with other insulins.<sup>14</sup></li> </ul>
Insulin glargine U-100 ( <i>Lantus</i> , <i>Basaglar</i> ) to insulin detemir ( <i>Levemir</i> )	<ul style="list-style-type: none"> <li>Convert unit-per-unit from <i>Lantus</i>.<sup>1,5</sup></li> <li>No specific information to guide <i>Basaglar</i> to <i>Levemir</i> switch. Consider conversion as for <i>Lantus</i>, given <i>Lantus/Basaglar</i> dose equivalency.<sup>12</sup></li> <li>Give once daily, or divide twice daily.<sup>1</sup></li> <li>If divided twice daily, a higher daily dose may be needed.<sup>7</sup></li> <li>Do not mix insulin detemir with other insulins.<sup>1</sup></li> </ul>

Clinical Scenario	Recommendation/Comments
<b>Long-acting to long-acting, continued</b>	
Insulin glargine U-300 ( <i>Toujeo</i> ) to insulin glargine U-100 ( <i>Lantus</i> , <i>Basaglar</i> ) or insulin detemir ( <i>Levemir</i> )	<ul style="list-style-type: none"> <li>Reduce dose by about 20% when converting to <i>Lantus</i> or <i>Basaglar</i>.<sup>12,17</sup></li> <li>No info specific to <i>Levemir</i>; consider 20% dose reduction to be conservative.</li> </ul>
<b>NPH or long-acting to ultra-long acting</b>	
NPH, insulin detemir ( <i>Levemir</i> ), or insulin glargine ( <i>Lantus</i> , <i>Basaglar</i> , <i>Toujeo</i> ) to insulin degludec ( <i>Tresiba</i> )	<ul style="list-style-type: none"> <li>Convert total daily dose unit-per-unit and give once daily.<sup>19</sup></li> <li>Consider a 20% dose reduction if switching from a twice-daily schedule.<sup>21</sup></li> <li>Also consider a dose reduction when switching from a once-daily schedule.<sup>21</sup></li> <li>Do not increase the dose more often than every 3 to 4 days.<sup>19</sup></li> </ul>
<b>Ultra-long acting to NPH or long-acting</b>	
Insulin degludec ( <i>Tresiba</i> ) to NPH, insulin detemir ( <i>Levemir</i> ), or insulin glargine ( <i>Lantus</i> , <i>Basaglar</i> , <i>Toujeo</i> )	<ul style="list-style-type: none"> <li>Limited information. Consider converting unit-per-unit.<sup>22</sup></li> <li>Give <i>Levemir</i>, <i>Lantus</i>, <i>Basaglar</i>, or <i>Toujeo</i> once daily, or divide <i>Levemir</i> twice daily.<sup>1,2,12,14</sup></li> <li>Give NPH twice daily (e.g., 50:50 or 2/3 in AM and 1/3 before dinner or at bedtime).<sup>3,4</sup></li> </ul>
<b>NPH or long-acting to premixed ultra-long acting/rapid-acting</b>	
NPH, insulin detemir ( <i>Levemir</i> ), or insulin glargine ( <i>Lantus</i> , <i>Basaglar</i> , <i>Toujeo</i> ) to insulin degludec/insulin aspart ( <i>Ryzodeg</i> 70/30)	<ul style="list-style-type: none"> <li>Start <i>Ryzodeg</i> 70/30 at the same unit dose and injection schedule (i.e., once or twice daily) with the main meal(s).<sup>20</sup></li> <li>In patients switching from a regimen that includes a basal plus regular or rapid-acting insulin at mealtimes, start <i>Ryzodeg</i> 70/30 once daily with the main meal at the same unit dose as the basal insulin. Continue the regular or rapid-acting insulin at the same dose for meals <u>not</u> covered by <i>Ryzodeg</i> 70/30.<sup>20</sup></li> <li>No information available concerning <i>Ryzodeg</i> switch to NPH or long-acting insulins.</li> </ul>
<b>Regular to rapid-acting</b>	
Regular human insulin ( <i>Humulin R</i> , <i>Novolin R</i> ) to rapid-acting insulin analog (insulin aspart [ <i>NovoLog</i> ], insulin glulisine [ <i>Apidra</i> ], insulin lispro [ <i>Humalog</i> ])	<ul style="list-style-type: none"> <li>Convert unit-per-unit.<sup>3,8-10</sup></li> <li>Due to rapid onset and shorter duration of action, more basal insulin and more total insulin may be required to prevent pre-meal hypoglycemia.<sup>10</sup></li> <li>Rapid-acting insulin analogs have a faster onset of action and a shorter duration of action than human regular insulin. See <i>Comparison of Insulins and Injectables Diabetes Meds</i> for specifics of meal timing.<sup>11</sup></li> </ul>

Clinical Scenario	Recommendation/Comments
<b>Regular to inhaled insulin</b>	
Regular human insulin ( <i>Humulin R</i> , <i>Novolin R</i> ) to mealtime insulin inhalation powder ( <i>Afrezza</i> )	<ul style="list-style-type: none"> <li>Round each mealtime insulin dose up to the nearest 4 units, then convert unit-per-unit to the <i>Afrezza</i> dose (available in 4-unit and 8-unit cartridges).<sup>15</sup></li> </ul>
<b>Rapid-acting to regular</b>	
Insulin aspart ( <i>NovoLog</i> ), insulin glulisine ( <i>Apidra</i> ), or insulin lispro ( <i>Humalog</i> ) to regular human insulin ( <i>Humulin R</i> , <i>Novolin R</i> )	<ul style="list-style-type: none"> <li>Convert unit-per-unit.<sup>3,8-10</sup></li> <li>Rapid-acting analogs have a faster onset and a shorter duration of action than human regular insulin. See <i>Comparison of Insulins and Injectible Diabetes Meds</i> for specifics of meal timing.<sup>11</sup></li> </ul>
<b>Rapid-acting to rapid-acting</b>	
Insulin aspart ( <i>NovoLog</i> ), insulin glulisine ( <i>Apidra</i> ), or insulin lispro ( <i>Humalog</i> ) to insulin aspart ( <i>NovoLog</i> ), insulin glulisine ( <i>Apidra</i> ), or insulin lispro ( <i>Humalog</i> )	<ul style="list-style-type: none"> <li>Convert unit-per-unit.<sup>3,8-10</sup></li> <li>See <i>Comparison of Insulins and Injectible Diabetes Meds</i> for specifics of meal timing.<sup>11</sup></li> </ul>
<b>Rapid-acting to inhaled insulin</b>	
Insulin aspart ( <i>NovoLog</i> ), insulin glulisine ( <i>Apidra</i> ), or insulin lispro ( <i>Humalog</i> ) to mealtime insulin inhalation powder ( <i>Afrezza</i> )	<ul style="list-style-type: none"> <li>Round each mealtime insulin dose up to the nearest 4 units, then convert unit-per-unit to the <i>Afrezza</i> dose (available in 4-unit and 8-unit cartridges).<sup>15</sup></li> </ul>
<b>Inhaled insulin to rapid-acting or regular</b>	
Insulin inhalation powder ( <i>Afrezza</i> ) to insulin aspart ( <i>NovoLog</i> ), insulin glulisine ( <i>Apidra</i> ), insulin lispro ( <i>Humalog</i> ), regular human insulin ( <i>Humulin R</i> , <i>Novolin R</i> )	<ul style="list-style-type: none"> <li>Convert unit-per-unit.<sup>15</sup></li> <li>See <i>Comparison of Insulins and Injectible Diabetes Meds</i> for specifics of timing in relation to meals.<sup>11</sup></li> </ul>

Clinical Scenario	Recommendation/Comments
<b>Regular to Long-Acting</b>	
Regular human insulin ( <i>Humulin R</i> , <i>Novolin R</i> ) to insulin glargine ( <i>Lantus</i> , <i>Basaglar</i> , <i>Toujeo</i> ), insulin detemir ( <i>Levemir</i> ), or NPH	<ul style="list-style-type: none"> <li>Add up the total daily dose and start with 50% as intermediate or long-acting insulin, or start an initial insulin regimen, as suggested in our algorithm, <i>Initiation and Adjustment of Insulin Regimens for Type 2 Diabetes</i>.<sup>6</sup></li> </ul>
<b>Premixed to premixed</b>	
Premixed NPH/regular insulin ( <i>Humulin 70/30</i> , <i>Novolin 70/30</i> ) to premixed protamine/rapid-acting analog (insulin lispro protamine/insulin lispro [ <i>Humalog Mix 75/25</i> ], insulin aspart protamine/insulin aspart [ <i>NovoLog Mix 70/30</i> ])	<ul style="list-style-type: none"> <li>Convert unit-per-unit.<sup>3,13</sup></li> <li>Premix analogs have a faster onset but similar duration compared to human premixes. See <i>Comparison of Insulins and Injectables Diabetes Meds</i>, for specifics of meal timing.<sup>11</sup></li> </ul>
Premixed protamine/rapid-acting analog (insulin lispro protamine/insulin lispro [ <i>Humalog Mix 75/25</i> ], insulin aspart protamine/insulin aspart [ <i>NovoLog Mix 70/30</i> ]) to premixed NPH/regular insulin ( <i>Humulin 70/30</i> , <i>Novolin 70/30</i> )	<ul style="list-style-type: none"> <li>Convert unit-per-unit.<sup>3,13</sup></li> <li>Premix analogs have a faster onset but similar duration compared to human premixes. See <i>Comparison of Insulins and Injectables Diabetes Meds</i>, for specifics of meal timing.<sup>11</sup></li> </ul>
Premixed protamine/rapid-acting analog (insulin lispro protamine/insulin lispro [ <i>Humalog Mix 75/25</i> ], insulin aspart protamine/insulin aspart [ <i>NovoLog Mix 70/30</i> ]), or premixed NPH/regular insulin ( <i>Humulin 70/30</i> , <i>Novolin 70/30</i> ) to premixed insulin degludec/insulin aspart ( <i>Ryzodeg 70/30</i> )	<ul style="list-style-type: none"> <li>If using premix once or twice daily, convert unit-per-unit and give <i>Ryzodeg 70/30</i> on the same injection schedule.<sup>20</sup></li> <li>In patients also using regular or rapid-acting insulin at mealtimes, continue the regular or rapid-acting insulin at the same dose for meals <u>not</u> covered by <i>Ryzodeg 70/30</i>.</li> <li>Do not increase the <i>Ryzodeg 70/30</i> dose more often than every 3 to 4 days.<sup>20</sup></li> </ul>

Clinical Scenario	Recommendation/Comments
<b>Premixed to inhaled insulin</b>	
Premixed NPH/regular insulin ( <i>Humulin 70/30</i> , <i>Novolin 70/30</i> ), premixed protamine/rapid-acting analog (insulin lispro protamine/insulin lispro [ <i>Humalog Mix 75/25</i> ], insulin aspart protamine/insulin aspart [ <i>NovoLog Mix 70/30</i> ]) to mealtime insulin inhalation powder ( <i>Afrezza</i> )	<ul style="list-style-type: none"> <li>• Divide half the total daily insulin dose equally among the three meals of the day, and round each mealtime insulin dose up to the nearest 4 units, then convert unit-per-unit to the <i>Afrezza</i> dose (available in 4-unit and 8-unit cartridges).<sup>15</sup></li> <li>• Give the other half of the total daily insulin dose as basal insulin (i.e., NPH, insulin glargine, or insulin detemir).<sup>15</sup></li> </ul>
<b>U-100 insulin to U-500 insulin</b>	
All types of other insulins to <i>Humulin R U-500</i>	<ul style="list-style-type: none"> <li>• Determine the total daily dose of U-500 used by adding the units of all types of other insulins given in one day (i.e., unit-per-unit conversion).<sup>23</sup></li> <li>• Divide the total daily dose into a two or three times a day regimen (given 30 minutes before meals) for most patients.<sup>23</sup> See our chart, <i>Tips to Improve Insulin Safety</i>, for suggested starting points based on total daily dose.</li> </ul>
<b>Long-acting to long-acting + GLP-1 agonist</b>	
Insulin glargine U-100 ( <i>Lantus</i> , <i>Basaglar</i> ), insulin detemir ( <i>Levemir</i> ), or insulin glargine U-300 ( <i>Toujeo</i> ) to insulin glargine U-100 + lixisenatide ( <i>Soliqua</i> )	<ul style="list-style-type: none"> <li>• Information not based on any specific long-acting insulin product. Conversions are simply for patients uncontrolled on a long-acting (basal) insulin <math>\leq 60</math> units/day.<sup>24</sup></li> <li>• Patients on insulin glargine <math>&lt; 30</math> units/day, convert to 15 units insulin glargine/5 mcg lixisenatide once daily.<sup>24</sup></li> <li>• Patients on insulin glargine 30 units/day to 60 units/day, convert to 30 units insulin glargine/10 mcg lixisenatide once daily.<sup>24</sup></li> <li>• <i>Soliqua</i> has not been studied with prandial insulins.<sup>24</sup></li> <li>• Do not mix <i>Soliqua</i> with other insulins.<sup>24</sup></li> <li>• Titrate doses weekly by 2 to 4 units of insulin glargine (equals 0.66 mcg to 1.32 mcg of lixisenatide component).<sup>24</sup></li> <li>• Maximum daily dose is 60 units insulin glargine/20 mcg lixisenatide.<sup>24</sup></li> </ul>

Clinical Scenario	Recommendation/Comments
<b>Long-acting or ultra-long acting to ultra-long acting + GLP-1 agonist</b>	
Insulin glargine U-100 ( <i>Lantus</i> , <i>Basaglar</i> ), insulin detemir ( <i>Levemir</i> ), insulin glargine U-300 ( <i>Toujeo</i> ), or insulin degludec ( <i>Tresiba</i> ) to insulin degludec + liraglutide ( <i>Xultophy</i> )	<ul style="list-style-type: none"> <li>• Dosing recommendations are the same regardless of previous insulin dose.<sup>25</sup></li> <li>• Start with 16 units insulin degludec/0.58 mg liraglutide given once daily.<sup>25</sup></li> <li>• Do not mix <i>Xultophy</i> with other insulins.<sup>25</sup></li> <li>• Titrate doses every three to four days, by 2 units insulin degludec (equals 0.072 mg liraglutide).<sup>25</sup></li> <li>• Maximum daily dose is 50 units insulin degludec/1.8 mg liraglutide.<sup>25</sup></li> </ul>

*Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.*



**Project Leader in preparation of this professional resource:** *Melanie Cupp, Pharm.D., BCPS (last modified February 2017)*

## References

1. Product information for *Levemir*. Novo Nordisk Inc. Princeton, NJ 08540. February 2015.
2. Product information for *Lantus*. Sanofi-Aventis U.S. LLC. Bridgewater, NJ 08807. August 2015.
3. U.S. Food and Drug Administration. Information regarding insulin storage and switching between products in an emergency. Page last updated May 27, 2015. <http://www.fda.gov/Drugs/EmergencyPreparedness/ucm085213.htm>. (Accessed October 27, 2016).
4. Kroon LA, Williams C. Diabetes mellitus. In: Alldredge BK, Corelli RL, Ernst ME, et al, editors. *Koda-Kimble & Young's Applied Therapeutics: the Clinical Use of Drugs*. 10<sup>th</sup> ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2013:1223-300.
5. King AB. Once-daily insulin detemir is comparable to once-daily insulin glargine in providing glycaemic control over 24 h in patients with type 2 diabetes: a double-blind, randomized, crossover study. *Diabetes Obes Metab* 2009;11:69-71.
6. Professional Resource, Initiation and Adjustment of Insulin Regimens for Type 2 Diabetes. *Pharmacist's Letter/Prescriber's Letter*. January 2014.
7. Rosenstock J, Davies M, Home PD, et al. A randomised, 52-week, treat-to-target trial comparing insulin detemir with insulin glargine when administered as add-on to glucose-lowering drugs in insulin-naïve people with type 2 diabetes. *Diabetologia* 2008;51:408-16.
8. Product information for *Humalog*. Eli Lilly and Company. Indianapolis, IN 46285. November 2015.
9. Product information for *Apidra*. Sanofi-Aventis U.S. LLC. Bridgewater, NJ 08807. February 2015.
10. Product information for *NovoLog*. Novo Nordisk Inc. Princeton, NJ 08540. April 2015.
11. Professional Resource, Comparison of Insulins and Injectable Diabetes Meds. *Pharmacist's Letter/Prescriber's Letter*. March 2015.
12. Product information for *Basaglar*. Eli Lilly and Company. Indianapolis, IN 46285. July 2016.
13. Product information for *Humalog Mix 75/25*. Eli Lilly and Company. Indianapolis, IN 46285. February 2015.
14. Product information for *Toujeo*. Sanofi-Aventis U.S. LLC. Bridgewater, NJ 08807. September 2015.
15. Product information for *Afrezza*. MannKind Corporation. Danbury, CT 06810. April 2016.
16. Sanofi-Aventis U.S. LLC. *Toujeo*. Dosing and administration. <https://www.toujeopro.com/dosing-and-administration>. (Accessed October 27, 2016).
17. European Medicines Agency. CHMP post-authorization summary of positive opinion for *Toujeo*. February 26, 2015. [http://www.ema.europa.eu/docs/en\\_GB/document\\_library/Summary\\_of\\_opinion/human/000309/WC500183282.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/Summary_of_opinion/human/000309/WC500183282.pdf). (Accessed October 27, 2016).
18. Personal communication (written). Fairclough JP, Pharm.D., Senior Manager, Metabolism Medical Information Services. Sanofi-Aventis U.S. Bridgewater, NJ 08807. March 24, 2015.
19. Product information for *Tresiba*. Novo Nordisk Inc. Plainsboro, NJ 08536. June 2016.
20. Product information for *Ryzodeg 70/30*. Novo Nordisk Inc. Plainsboro, NJ 08536. June 2016.
21. Vora J, Cariou B, Evans M, et al. Clinical use of insulin degludec. *Diabetes Res Clin Pract* 2015;109:19-31.
22. Switching from analogue insulin in type 2 diabetes. Centre for Primary Care and Public Health. Barts and the London School of Medicine and Dentistry. September 2013. <http://www.blizard.qmul.ac.uk/ceg-resource-library/clinical-guidance/clinical-guidelines/352-switching-from-analogue-insulin-in-type-2-diabetes-clinical-guideline-september-2013/file.html>. (Accessed October 27, 2016).
23. Professional Resource, Tips to Improve Insulin Safety. *Pharmacist's Letter/Prescriber's Letter*. April 2016.
24. Product information for *Soliqua*. Sanofi-Aventis. Bridgewater, NJ 08807. November 2016.
25. Product information for *Xultophy*. Novo Nordisk. Plainsboro, NJ 08536. November 2016.

**Cite this document as follows:** *Professional Resource, How to Switch Insulin Products. Pharmacist's Letter/Prescriber's Letter. December 2016.*



pharmacist's letter™

*Evidence and Recommendations You Can Trust...*



prescriber's letter™

3120 West March Lane, Stockton, CA 95219 ~ TEL (209) 472-2240 ~ FAX (209) 472-2249

Copyright © 2016 by Therapeutic Research Center

Subscribers to the *Letter* can get professional resources, like this one, on any topic covered in any issue by going to **PharmacistsLetter.com**, **PrescribersLetter.com**, **PharmacyTechniciansLetter.com**, or **NursesLetter.com**