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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Type | Onset | Peak | | Duration | | Meal timing | Rx/ OTC | Expiration  once opened | Color |
| Rapid Acting   * Humalog® (lispro) * Humalog® U-200 * Novolog®  (aspart) * Apidra®  (glulisine) * Fiasp® (aspart) | 5-15 minutes  2 min (Fiasp) | 1-3 hours | | 3-5 hours | | Inject 5-15 minutes before meals OR at first bite. Glulisine & aspart (Fiasp®) are approved for use up to 20 minutes after meals. | Rx only | Pen: 28 days  Cartridge (Novolog, Humalog): 28 days  Vial: 28 days  Note: Humalog® U-200 is only available in a kwikpen | Clear |
| Short Acting   * Humulin R®  (regular) * Novolin R®   (regular) | 30-60 minutes | 2-4 hours | | 5-7 hours | | Instruct patient to take 30 (or 60) minutes before meals. | Rx/OTC | Humulin R vial:  31 days | Clear |
| Novolin R vial:  42 days  Novolin R Pen: 28 days |
| Intermediate Acting   * Humulin N®  (NPH) * Novolin N®  (NPH) * Humulin R U-500 | 2-4 hours  30 minutes | 4-8 hours  1-3 hours | | 8-12 hours  8-24 hours | | If used alone, patient can use with or without food.  Take 30 minutes before eating | Rx / OTC  Rx only | Humulin N pen:  14 days  Humulin N vial:  31 days  Novolin N vial:  42 days  Novolin N Pen: 28 days  Humulin R U-500 pen:  28 days  Humulin R U500 vials: 40 days | Cloudy  Clear  (U-500) |
| Long acting   * Lantus®, Basaglar®  (U-100 glargine) * Levemir®  (detemir) * Toujeo®  (U-300 glargine) * Tresiba® (U-100, U-200 degludec) | 1-2 hr  1-2 hr  6 hr  0.5-1.5 hr | No significant peak | | 22- 24 hr  14-24 hr  36 hr  ~ 42 hr | | Patient can use with or without food. | Rx only | Lantus, Basaglar  Pen: 28 days (Basaglar only available as pen)  Vial: 28 days | Clear |
| Levemir  Pen: 42 days  Vial: 42 days |
| Toujeo Pen: 42 days  Tresiba  Pen: 56 days |
| Pre-mixed insulin   * Novolog 70/30® * Humalog 75/25® * Humalog 50/50® * Novolin 70/30® * Humulin 70/30® | Onset, peak, duration and meal timing are dependent on the individual components. See above notes. | | | | | | Rx only | Novolog 70/30 Pen: 14 days Vial: 28 days | Cloudy |
| Humalog (75/25, 50/50)  Pen: 10 days Vial: 28 days |
| Novolin 70/30  Vial: 42 days |
| Humulin 70/30 Pen: 10 days  Vial: 31 days |
| Inhaled insulin   * Afrezza® (human insulin, inhaled) | Onset:  12-15 minutes | | Peak:  30 minutes | | Duration:  ~ 1.5 hours | | Rx only  \*\*Inhale at the beginning of the meal\*\* | Inhaler must be used within 15 days of 1st use. After 15 days, discard inhaler and replace with a new one.  Cartridges (in use OR at room temperature)  Sealed: 10 days  Opened strips: 3 days  \*Before use, cartridges should be at room temperature for 10 minutes | N/A (dry powder) |

***Non-insulin agents (GLP-1 agonists & Amylin analogs)***

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| Brand (generic) | Expiration once opened |
| Byetta® (exenatide) | 30 days |
| Bydureon® (exenatide ER) | 28 days |
| Victoza® (liraglutide) | 30 days |
| Trulicity® (dulaglutide) | 14 days |
| Ozempic® (semaglutide) | 56 days |
| Adlyxin (lixisenatide) | 14 days |
| Symlin® (pramlintide) | 30 days |