

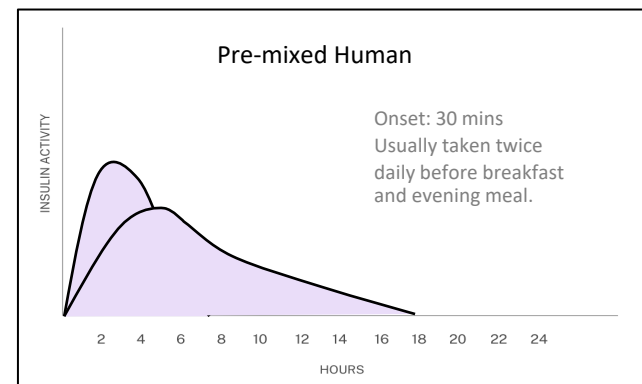
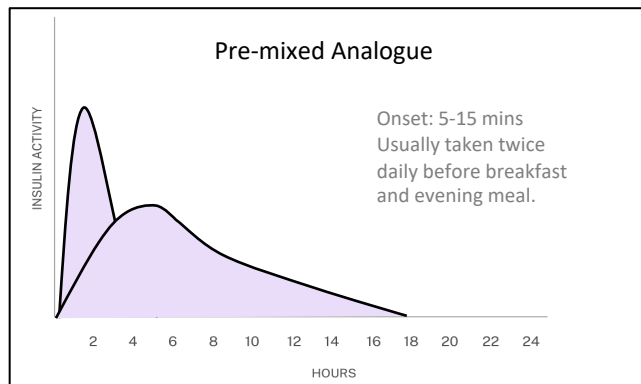
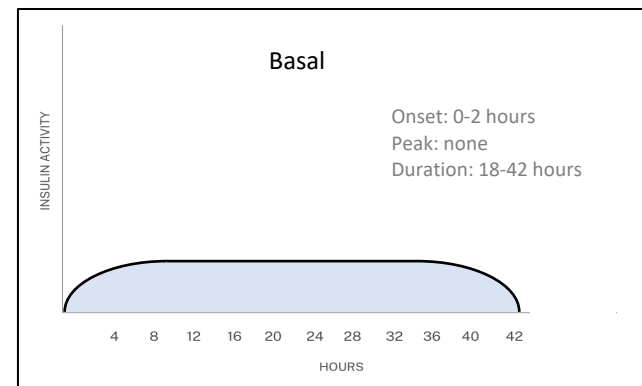
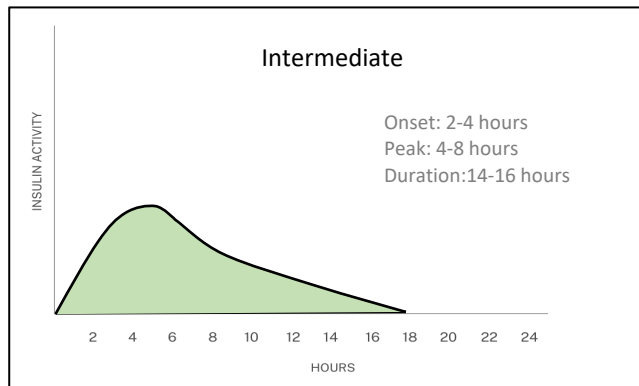
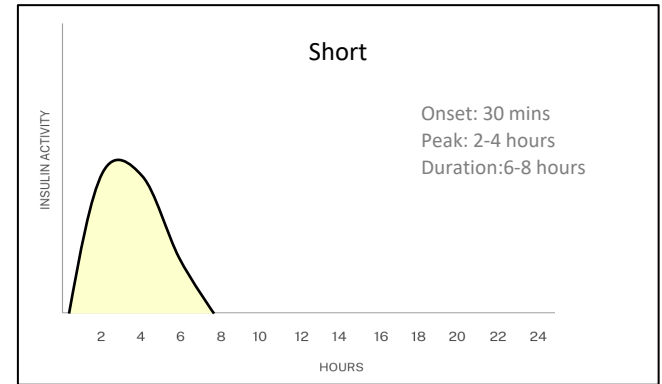
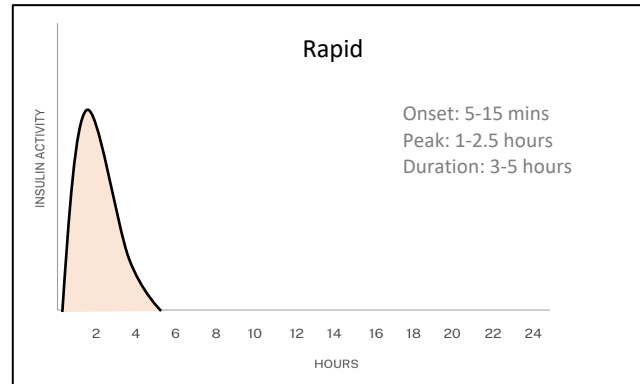
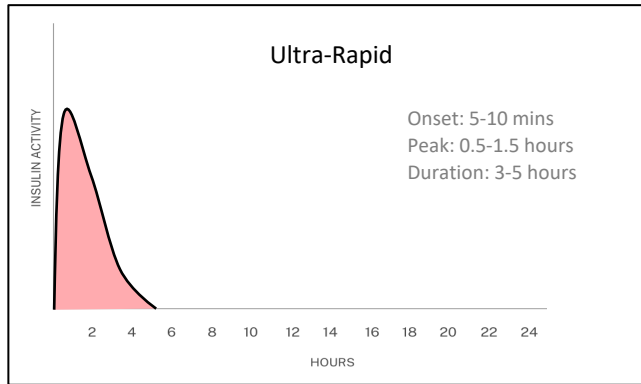
Insulin Types & Available Medicinal Forms in the UK

| Insulin action | Insulin brand name & manufacturer | Delivery device | *compatible re-usable cartridge pen device |
|--------------------|--|---|--|
| Ultra-Rapid | Fiasp (aspart) Manufacturer: Novo Nordisk | FlexTouch Pen 3ml Penfill cartridge* 10ml vial | NovoPen 6 NovoPen Echo Plus |
| | Lyumjev 100 units/ml (lispro) Manufacturer: Eli Lilly | KwikPen Junior KwikPen 3ml cartridge* 10ml vial | HumaPen Savvio |
| | Lyumjev 200 units/ml (lispro) Manufacturer: Eli Lilly | KwikPen | N/A |
| Rapid | Admelog (lispro) Manufacturer: Sanofi | SoloStar Pen 3ml cartridge* 10ml vial | All Star PRO Junior STAR |
| | Apidra (glulisine) Manufacturer: Sanofi | SoloStar Pen 3ml cartridge* 10ml vial | All Star PRO Junior STAR |
| | Humalog 100units/ml (lispro) Manufacturer: Eli Lilly | KwikPen Junior KwikPen 3ml cartridge* 10ml vial | HumaPen Savvio |
| | Humalog 200 units/ml (lispro) Manufacturer: Eli Lilly | KwikPen | N/A |
| | NovoRapid (aspart) Manufacturer: Novo Nordisk | FlexPen FlexTouch Pen 3ml Penfill cartridge* 10ml vial 1.6ml PumpCart | NovoPen 6 NovoPen Echo Plus |
| | Trurapi (aspart) Manufacturer: Sanofi | SoloStar Pen 3ml cartridge* 10ml vial | All Star PRO Junior STAR |
| | Actrapid (insulin soluble human) Manufacturer: Novo Nordisk | 10ml vial | N/A |
| Short | Humulin S (soluble human) Manufacturer: Eli Lilly | 3ml cartridge* 10ml vial | HumaPen Savvio |
| | Hypurin Porcine Neutral (soluble porcine) Manufacturer: Wockhardt | 3ml cartridge* 10ml vial | Autopen Classic |

* Re-usable cartridge pens can only be used with company specific insulin 3ml cartridges

| Insulin action | Insulin brand name & manufacturer | Delivery device | *compatible re-usable cartridge pen device | |
|--|---|--|--|--------------------------------|
| Intermediate | Humulin I (isophane human) Manufacturer: Eli Lilly | KwikPen 3ml cartridge* 10ml vial | HumaPen Savvio | |
| | Insulatard (isophane human) Manufacturer: Novo Nordisk | 3ml Penfill cartridge* 10ml vial | NovoPen 6 NovoPen Echo Plus | |
| | Hypurin Porcine Isophane (isophane porcine) Manufacturer: Wockhardt | 3ml cartridges 10ml vial | Autopen classic | |
| Basal | Abasaglar (glargine) Manufacturer: Eli Lilly | KwikPen 3ml cartridge* | HumaPen Savvio | |
| | Lantus (glargine) Manufacturer: Sanofi | SoloStar pen 3ml cartridge* 10ml vial | All Star PRO Junior STAR | |
| | Levemir (detemir) Manufacturer: Novo Nordisk | FlexPen 3ml Penfill cartridge* | NovoPen 6 NovoPen Echo Plus | |
| | Toujeo 300 units/ml (insulin glargine 300units/ml) Manufacturer: Sanofi | SoloStar DoubleStar | N/A | |
| | Tresiba 100 units/ml (degludec) Manufacturer: Novo Nordisk | FlexTouch Pen 3ml Penfill cartridge* | NovoPen 6 NovoPen Echo Plus | |
| | Tresiba 200 units/ml (degludec 200 units/ml) Manufacturer: Novo Nordisk | FlexTouch Pen | N/A | |
| | Semglee (glargine) Manufacturer: Viatrix | Pre-filed pen | N/A | |
| | Pre-mixed Analogues | NovoMix 30 (aspart protamine) Manufacturer: Novo Nordisk | FlexPen 3ml cartridge* | NovoPen 6 NovoPen Echo Plus |
| | | Humalog Mix 25 (lispro protamine) Manufacturer: Eli Lilly | KwikPen 3ml cartridge* 10ml vial | HumaPen Savvio |
| Humalog Mix 50 (lispro protamine) Manufacturer: Eli Lilly | | KwikPen 3ml cartridge* | HumaPen Savvio | |
| Pre-mixed Human | Humulin M3 (soluble/isophane human) Manufacturer: Eli Lilly | KwikPen 3ml cartridge* 10ml vial | HumaPen Savvio | |
| | Hypurin Porcine 30/70 Mix (soluble/isophane porcine) Manufacturer: Wockhardt | 3ml cartridge* 10ml vial | Autopen Classic | |

Insulin Time Action Profiles



Prefilled Disposable Pen Devices

| Manufacturer | Insulin | Device name | Min-max dose | Dose increments | Device capacity | Material | Recycle scheme | |
|----------------------|----------------------|----------------|--------------|-----------------|-----------------|----------|----------------|----------------|
| NovoNordisk | Fiasp | FlexTouch | 1-80 units | 1 unit | 300 units | Plastic | PenCycle | |
| | Levemir | FlexPen | 1-60 units | | | | | |
| | NovoMix 30 | FlexPen | 1-60 units | | | | | |
| | NovoRapid | FlexPen | 1-60 units | | | | | |
| | | FlexTouch | 1-80 units | | | | | |
| | Tresiba 100 units/ml | FlexTouch | 1-80 units | | | | | |
| Tresiba 200 units/ml | FlexTouch | 2-160 units | 2 units | 600 units | | | | |
| Sanofi | Admelog** | SoloStar | 1-80 units | 1 unit | 300 units | Plastic | RePen | |
| | Apidra | | | | | | | |
| | Lantus | | | | | | | |
| | Trurapi** | | | | | | | |
| | Toujeo 300 units/ml | SoloStar | 1-80 units | 1 unit | 450 units | | | |
| DoubleStar | | 2-160 units | 2 units | 900 units | | | | |
| Eli Lilly | Abasaglar** | KwikPen | 1-80units | 1 unit | 300 units | Plastic | No | |
| | Humalog 100 units/ml | KwikPen | 1-60 units | 1 unit | 300 units | | | |
| | | Junior KwikPen | 0.5-30 units | 0.5 units | 300 units | | | |
| | Humalog 200 units/ml | KwikPen | 1-60 units | 1 unit | 600 units | | | |
| | Humalog Mix25 | KwikPen | 1-60 units | 1 unit | 300 units | | | |
| | Humalog Mix50 | | | | | | | |
| | Humulin I | | | | | | | |
| | Humulin M3 | KwikPen | 1-60 units | 1 unit | 300 units | | | |
| | Lyumjev 100 units/ml | | | | | | | Junior KwikPen |
| Lyumjev 200 units/ml | | | | | | KwikPen | 1-60 units | 1 unit |
| Mylan | Semglee** | Pre-filled pen | 1-80 units | 1 unit | 300 units | Plastic | No | |

** Biosimilar insulins

Information about the PenCycle scheme can be found at <https://www.pen-cycle.co.uk>
 Information about the UK based pilot RePen scheme can be found at www.mysanofiinsulin.co.uk/repn

Re-usable Cartridge Pen Devices

| Manufacturer | Compatible Insulins (3ml cartridges) | Pen device | Min-Max dosage | Dose increments | Capacity | Colour | Material |
|--------------|---|--|----------------|-----------------|-----------|-------------------------|--------------------|
| NovoNordisk | Fiasp Insulatard Levemir NovoMix 30 NovoRapid Tresiba 100 units/ml | NovoPen 6 Smart pen | 1-60 units | 1 unit | 300 units | Blue Silver | Metal & plastic |
| | | Novopen Echo Plus Smart Pen | 0.5-30 units | 0.5 units | 300 units | Teal Red | |
| Sanofi | Admelog** Apidra Lantus Trurapi** | AllStar PRO | 1-80 units | 1 unit | 300 units | Blue Silver | Plastic |
| | | Junior STAR | 0.5-30 units | 0.5 units | 300 units | Red Blue Silver | |
| Eli Lilly | Abasaglar** Humalog 100 units/ml Humalog Mix 25 Humalog Mix 50 Humulin I Humulin M3 Humulin S Lyumjev 100 units/ml | HumaPen Savvio | 1-60 units | 1 unit | 300 units | Blue Graphite Red | Metal |
| Wockhardt | Porcine Neutral Porcine Isophane Porcine 30/70 Mix | Owen Mumford Autopen Classic 1-unit pen | 1-21 units | 1 unit | 300 units | Dark green | Plastic |
| | | Owen Mumford Autopen Classic 2-unit pen | 2-42 units | 2 units | 300 units | Dark blue | |

** Biosimilar insulins

All re-usable cartridge pens can be prescribed via FP10, a spare pen device should always be available in case of loss or breakage.