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Dear Pharmacist

Lilly is refining its range of prefilled insulin pen devices. From September 21, 2010 Humulin® I, Humulin® M3, Humalog® and Humalog® mixtures will all be available in the KwikPen™ (our latest prefilled insulin device).

- **The older Humalog® and Humulin® prefilled Pens that were in the market prior to KwikPen™, will be discontinued over a 6 month period. KwikPen™ will be Lilly's only prefilled insulin device in the UK market from the 31st March 2011**.

- The launch of Humulin® I and Humulin® M3 KwikPen™ has been planned for the last 2 years. The subsequent removal of the older prefilled insulin pen was required as part of this launch.

- In the interest of continuity and insulin safety, Lilly believe that removing all older prefilled insulin pens from the UK market and having just one prefilled insulin device (the KwikPen™) will improve patient safety in the long-term.

- Humulin® I, Humulin® M3, Humalog®, Humalog® Mix 25™ and Humalog® Mix 50™ will continue to be available in a prefilled device – The KwikPen™. This will help reduce NHS medicines costs as the Humulin® KwikPens™ will be provided at a lower price than the older prefilled Humulin® Pens (please see Q&A 3in document attached).

The transition from the older prefilled insulin Pens to the KwikPen™ has already taken place in France, Spain and Italy with minimal patient impact. It is hoped that a majority of transitions will coincide as part of a patients regular review with their diabetes healthcare professional, and if implemented that their new KwikPen™ will be seen as an improvement compared to their older prefilled device.

Attached to this page is a question and answers section. Also included is a Safety Range Chart, Conversion leaflet and KwikPen™ user guide. If you have any further questions please don't hesitate to:

- contact your local representative,
- telephone 01256 315 000 or,
- visit www.lillydiabetes.co.uk

Regards

Ian Dane

Ian Dane
Senior Diabetes Director, Lilly Diabetes UK and ROI

HUMULIN* VIAL, CARTRIDGE, PEN, AND KWIKPEN

HUMULIN IS HUMAN INSULIN (PRB)

Presentation Humulin S is a sterile solution of 100IU/ml human insulin available as either 10ml vial or 3ml cartridge. Humulin I is a sterile suspension of 100IU/ml isophane human insulin available as either 10ml vial, 3ml cartridge, 3ml Pen, or 3ml KwikPen. Humulin M3 is a sterile suspension of 100IU/ml human insulin in the proportion of 30% soluble insulin and 70% isophane insulin available as either 10ml vial, 3ml cartridge, 3ml Pen, or 3ml KwikPen. **Uses** For the treatment of patients with diabetes mellitus who require insulin for the maintenance of glucose homeostasis. **Dosage and Administration** All Humulin preparations should be given by subcutaneous injection. Only Humulin S may be given intravenously. *Resuspension* Humulin S does not require resuspension. Humulin I and Humulin M3 require resuspension immediately before use. Please see Summaries of Product Characteristics or Patient Information Leaflets for details on how to do this. *Mixing of insulins (vials only):* Humulin S may be administered in combination with Humulin I. The shorter-acting insulin (Humulin S) should be drawn into the syringe first, to prevent contamination of the vial by the longer-acting preparation (Humulin I). It is advisable to inject immediately after mixing.

Prices (Humulin)

£15.68 - 1 X 10ml vials Humulin S
£19.08 - 5 X 3ml cartridges Humulin S
£15.68 - 1 X 10ml vials Humulin I
£19.08 - 5 X 3ml cartridges Humulin I
£28.44 - 5 X 3ml Humulin I Pens
£21.70 - 5 X 3ml Humulin I KwikPens
£15.68 - 1 X 10ml vials Humulin M3
£19.08 - 5 X 3ml cartridges Humulin M3
£28.44 - 5 X 3ml Humulin M3 Pens
£21.70 - 5 X 3ml Humulin M3 KwikPens

Product Licence Numbers

Humulin S:	00006/0216 and 0242
Humulin I:	00006/0228 and 0257
Humulin M3:	00006/0233 and 0260
Humulin I Pen:	00006/0338
Humulin I KwikPen:	00006/0338
Humulin M3 Pen:	00006/0341
Humulin M3 KwikPen:	00006/0341

*HUMULIN (human insulin [prb]) is a trademark of Eli Lilly and Company.

HUMALOG* VIAL, CARTRIDGE, PEN, AND KWIKPEN

HUMALOG IS INSULIN LISPRO (HUMAN INSULIN ANALOGUE)

Presentation Humalog is a sterile solution of 100U/ml insulin lispro available as either 10ml vial, 3ml cartridge, 3ml Pen, or 3ml KwikPen. **Uses** Treatment of adults and children with diabetes mellitus who require insulin for the maintenance of normal glucose homeostasis. Humalog is also indicated for the initial stabilisation of diabetes mellitus. **Dosage and Administration** Humalog may be given shortly before meals and, when necessary, soon after meals. Humalog should be given by subcutaneous injection or by continuous subcutaneous infusion pump. If necessary, Humalog may also be administered intravenously, for example, for the control of blood glucose levels during ketoacidosis, acute illness, or perioperatively. Humalog takes effect rapidly (approximately 15 minutes) and has a shorter duration of activity (2 to 5 hours) as compared with soluble insulin. **Warnings and Special Precautions** *Usage in pregnancy:* Data on a large number of exposed pregnancies do not indicate any adverse effect of insulin lispro on pregnancy or on the health of the foetus/newborn. Insulin lispro should be used in children only when an advantage is expected compared to soluble insulin, for example, in the timing of the injection in relation to meals.

Prices (Humalog)

£16.61 - 1 X 10ml vials
£28.31 - 5 X 3ml cartridges
£29.46 - 5 X 3ml Humalog Pens
£29.46 - 5 X 3ml Humalog KwikPens

Marketing Authorisation Numbers

Humalog vial:	EU/1/96/007/002
Humalog cartridge:	EU/1/96/007/004
Humalog Pen:	EU/1/96/007/015
Humalog KwikPen:	EU/1/96/007/031

*HUMALOG (insulin lispro) is a trademark of Eli Lilly and Company.

HUMALOG MIX25* VIAL, CARTRIDGE, PEN, AND KWIKPEN
HUMALOG MIX50* CARTRIDGE, PEN, AND KWIKPEN

HUMALOG IS INSULIN LISPRO (HUMAN INSULIN ANALOGUE)

Presentation Humalog Mix25 is a white, sterile suspension of 100U/ml 25% insulin lispro solution and 75% insulin lispro protamine suspension available as either 10ml vial, 3ml cartridge, 3ml Pen, or 3ml KwikPen. Humalog Mix50 is a white, sterile suspension of 100U/ml 50% insulin lispro solution and 50% insulin lispro protamine suspension available as either 3ml cartridge, 3ml Pen, or 3ml KwikPen. **Uses** Treatment of patients with diabetes mellitus who require insulin for the maintenance of normal glucose homeostasis.

Dosage and Administration Humalog Mix25 or Humalog Mix50 may be given shortly before meals and, when necessary, can be given soon after meals. Humalog Mix25 or Humalog Mix50 should only be given by subcutaneous injection. The rapid onset and early peak of activity of Humalog itself is observed following the subcutaneous administration of Humalog Mix25 or Humalog Mix50. The duration of action of the insulin lispro protamine suspension component is similar to that of a basal insulin. **Warnings and Special Precautions** *Usage in pregnancy:* Data on a large number of exposed pregnancies do not indicate any adverse effect of insulin lispro on pregnancy or on the health of the foetus/newborn. Administration of insulin lispro in children should be considered only in case of an expected benefit when compared to soluble insulin.

Prices (Mix25/Mix50)

£16.61 - 1 X 10ml Mix25 vial
£29.46 - 5 X 3ml Mix25 cartridges
£30.98 - 5 X 3ml Mix25 Pens
£30.98 - 5 X 3ml Mix25 KwikPens
£29.46- 5 X 3ml Mix50 cartridges
£30.98 - 5 X 3ml Mix50 Pens
£30.98 - 5 X 3ml Mix50 KwikPens

Marketing Authorisation Numbers

Humalog Mix25 vial:	EU/1/96/007/005
Humalog Mix25 cartridge:	EU/1/96/007/008
Humalog Mix50 cartridge:	EU/1/96/007/006
Humalog Mix25 Pen:	EU/1/96/007/016
Humalog Mix50 Pen:	EU/1/96/007/017
Humalog Mix25 KwikPen:	EU/1/96/007/033
Humalog Mix50 KwikPen:	EU/1/96/007/035

*HUMALOG MIX25 and HUMALOG MIX50 (insulin lispro) are trademarks of Eli Lilly and Company.

LILLY INSULINS GENERAL INFORMATION

See Summaries of Product Characteristics for additional information, including time-action profiles of all formulations.

Dosage and Administration (general) The dosage or type of insulin should be determined according to the requirements of the patient. The time course of action of any insulin may vary considerably in different individuals or at different times in the same individual. Vials are packed with instructions regarding dose preparation and administration, and these should be carefully followed. Lilly insulin cartridges are to be used with a CE marked pen according to the instructions provided by the device manufacturer. Patients should be advised to always keep a spare syringe and vial, or a spare pen and cartridge. Prefilled Pens are packed with instructions on how to use them. These directions should be followed carefully. Do not use if, after resuspension, the insulin remains at the bottom, if there are clumps in the insulin, or if solid white particles stick to the bottom or wall giving the container a frosted appearance. **Contra-indications** Hypersensitivity to the active ingredient or to any of the excipients. Hypoglycaemia. **Warnings and Special Precautions (general)** *Usage in pregnancy:* Insulin requirements usually fall during the first trimester and increase during the second and third trimesters. Patients should be advised to inform their doctors if they are pregnant or contemplating pregnancy. Insulin requirements may be reduced in the presence of renal impairment or hepatic impairment. However, in patients with chronic hepatic impairment, an increase in insulin resistance may lead to increased insulin requirements. Insulin requirements may be increased during illness or emotional disturbances. Transferring a patient to another type or brand of insulin should be done under strict medical supervision. Changes in strength, brand, type, species, and/or method of manufacture may result in the need for a change in dosage. For fast-acting insulins, any patient also on basal insulin must optimise dosage of both insulins to obtain glucose control across the whole day, particularly nocturnal/fasting glucose control. Some patients taking human insulin may require a change in dosage from that used with animal-source insulins. If an adjustment is needed, it may occur with the first dose or during the first several weeks or months. Changes in early warning symptoms of hypoglycaemia may occur on transfer between different types of insulin products. The patient's ability to concentrate and react may be impaired as a result of hypoglycaemia. This may constitute a risk in situations where these abilities are of special importance (eg, driving a car or operating machinery). Treatment with human insulin may cause formation of antibodies, but titres of antibodies are lower than those to purified animal insulin. **Undesirable Effects** Hypoglycaemia is the most frequent undesirable effect of insulin therapy. Local allergy is common and usually resolves. Systemic allergy is rare but potentially more serious since severe cases may be life-threatening. Lipodystrophy is uncommon. *For full details of these and other side-effects, please see the Summary of Product Characteristics, which is available at http://emc.medicines.org.uk/.* **Legal Category** POM **Date of Preparation or Last Review** June 2010 **Full Prescribing Information is Available From** Eli Lilly and Company Limited, Lilly House, Priestley Road, Basingstoke, Hampshire, RG24 9NL Telephone: Basingstoke (01256) 315 000 E-mail: ukmedinfo@lilly.com Website: www.lillypro.co.uk

References: 1. Data on File. **2.** Ignaut et al J Diabetes Sci Techno. 2008; 2(3):553-537

UKDBT00596 September 2010

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Adverse events should also be reported to Eli Lilly and Company Limited (Tel No 0870 240 1125).

Question and Answer Document for Pharmacist

1. **Why is Lilly discontinuing their older prefilled insulin pens?**
   The launch of Humulin® I and Humulin® M3 KwikPen™ has been planned for the last 2 years. The subsequent removal of the older prefilled insulin Pen was as part of this launch. In the interest of continuity and insulin safety, Lilly felt removing all older prefilled insulin Pens and having just one prefilled insulin device (the KwikPen™) in UK market will improve patient safety in the long-term.

2. **What is the difference between the KwikPen and the older prefilled insulin Pen?**
   The KwikPen is designed for improved patient outcomes. It is simple to teach and easy to use[1]; has a low, smooth injection pressure[2] and enhanced colour coding for identification. It also has only two steps to inject instead of 4 steps; as well as many additional features.

3. **How much of a saving will the NHS benefit from the Humulin® KwikPen™?**
   The cost saving will vary depending on the formulation. Please see the table below.

	Cost		
Formulation	**Older prefilled insulin Pen**	**KwikPen™**	**KwikPen™ PIP Code**
Humalog®	£29.46	£29.46	339-1844
Humalog Mix25®	£30.98	£30.98	339-1828
Humalog Mix50®	£30.98	£30.98	339-1836
Humulin® I	£28.44	£21.70	350-8991
Humulin® M3	£28.44	£21.70	350-9015

4. **What is Lilly doing to ensure patients are trained on the KwikPen™?**
   - **For Healthcare professionals (HCP)**
     - Your local representative is available to demonstrate to HCPs how to use the KwikPen™.
     - Local Representative can deliver patient KwikPen™ user guides.
     - The patient KwikPen™ guide is also available as a download for HCPs in English, Polish, Urdu, Gujarati, Bengali and Punjabi. Visit www.lillydiabetes.co.uk

   - **For Patients**
     - Each KwikPen™ comes with a comprehensive user manual in the box.
     - Patients can telephone the free phone device helpline 24 hours a day on 0800 783 6764.
     - Or telephone Lilly on 01256 315 000.

5. **Is Lilly planning on discontinuing any other insulin devices?**
   Lilly has no plans to discontinue any other insulin devices. Lilly regularly reviews its product portfolio and makes decisions based on patient demand, the needs of our prescribing customers, as well as market conditions.

6. **How long will the older prefilled insulin Pen be available?**
   The older prefilled insulin Pens will cease to be available from the **31st March 2011**.

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Prices (Humulin)

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£19.08 - 5 X 3ml cartridges Humulin S
£15.68 - 1 X 10ml vials Humulin I
£19.08 - 5 X 3ml cartridges Humulin I
£28.44 - 5 X 3ml Humulin I Pens
£21.70 - 5 X 3ml Humulin I KwikPens
£15.68 - 1 X 10ml vials Humulin M3
£19.08 - 5 X 3ml cartridges Humulin M3
£28.44 - 5 X 3ml Humulin M3 Pens
£21.70 - 5 X 3ml Humulin M3 KwikPens

Product Licence Numbers

Humulin S:	00006/0216 and 0242
Humulin I:	00006/0228 and 0257
Humulin M3:	00006/0233 and 0260
Humulin I Pen:	00006/0338
Humulin I KwikPen:	00006/0338
Humulin M3 Pen:	00006/0341
Humulin M3 KwikPen:	00006/0341

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Prices (Humalog)

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£28.31 - 5 X 3ml cartridges
£29.46 - 5 X 3ml Humalog Pens
£29.46 - 5 X 3ml Humalog KwikPens

Marketing Authorisation Numbers

Humalog vial:	EU/1/96/007/002
Humalog cartridge:	EU/1/96/007/004
Humalog Pen:	EU/1/96/007/015
Humalog KwikPen:	EU/1/96/007/031

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HUMALOG MIX25* VIAL, CARTRIDGE, PEN, AND KWIKPEN
HUMALOG MIX50* CARTRIDGE, PEN, AND KWIKPEN

HUMALOG IS INSULIN LISPRO (HUMAN INSULIN ANALOGUE)

Presentation Humalog Mix25 is a white, sterile suspension of 100U/ml 25% insulin lispro solution and 75% insulin lispro protamine suspension available as either 10ml vial, 3ml cartridge, 3ml Pen, or 3ml KwikPen. Humalog Mix50 is a white, sterile suspension of 100U/ml 50% insulin lispro solution and 50% insulin lispro protamine suspension available as either 3ml cartridge, 3ml Pen, or 3ml KwikPen. **Uses** Treatment of patients with diabetes mellitus who require insulin for the maintenance of normal glucose homeostasis.

Dosage and Administration Humalog Mix25 or Humalog Mix50 may be given shortly before meals and, when necessary, can be given soon after meals. Humalog Mix25 or Humalog Mix50 should only be given by subcutaneous injection. The rapid onset and early peak of activity of Humalog itself is observed following the subcutaneous administration of Humalog Mix25 or Humalog Mix50. The duration of action of the insulin lispro protamine suspension component is similar to that of a basal insulin. **Warnings and Special Precautions** *Usage in pregnancy:* Data on a large number of exposed pregnancies do not indicate any adverse effect of insulin lispro on pregnancy or on the health of the foetus/newborn. Administration of insulin lispro in children should be considered only in case of an expected benefit when compared to soluble insulin.

Prices (Mix25/Mix50)

£16.61 - 1 X 10ml Mix25 vial
£29.46 - 5 X 3ml Mix25 cartridges
£30.98 - 5 X 3ml Mix25 Pens
£30.98 - 5 X 3ml Mix25 KwikPens
£29.46- 5 X 3ml Mix50 cartridges
£30.98 - 5 X 3ml Mix50 Pens
£30.98 - 5 X 3ml Mix50 KwikPens

Marketing Authorisation Numbers

Humalog Mix25 vial:	EU/1/96/007/005
Humalog Mix25 cartridge:	EU/1/96/007/008
Humalog Mix50 cartridge:	EU/1/96/007/006
Humalog Mix25 Pen:	EU/1/96/007/016
Humalog Mix50 Pen:	EU/1/96/007/017
Humalog Mix25 KwikPen:	EU/1/96/007/033
Humalog Mix50 KwikPen:	EU/1/96/007/035

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LILLY INSULINS GENERAL INFORMATION

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Dosage and Administration (general) The dosage or type of insulin should be determined according to the requirements of the patient. The time course of action of any insulin may vary considerably in different individuals or at different times in the same individual. Vials are packed with instructions regarding dose preparation and administration, and these should be carefully followed. Lilly insulin cartridges are to be used with a CE marked pen according to the instructions provided by the device manufacturer. Patients should be advised to always keep a spare syringe and vial, or a spare pen and cartridge. Prefilled Pens are packed with instructions on how to use them. These directions should be followed carefully. Do not use if, after resuspension, the insulin remains at the bottom, if there are clumps in the insulin, or if solid white particles stick to the bottom or wall giving the container a frosted appearance. **Contra-indications** Hypersensitivity to the active ingredient or to any of the excipients. Hypoglycaemia. **Warnings and Special Precautions (general)** *Usage in pregnancy:* Insulin requirements usually fall during the first trimester and increase during the second and third trimesters. Patients should be advised to inform their doctors if they are pregnant or contemplating pregnancy. Insulin requirements may be reduced in the presence of renal impairment or hepatic impairment. However, in patients with chronic hepatic impairment, an increase in insulin resistance may lead to increased insulin requirements. Insulin requirements may be increased during illness or emotional disturbances. Transferring a patient to another type or brand of insulin should be done under strict medical supervision. Changes in strength, brand, type, species, and/or method of manufacture may result in the need for a change in dosage. For fast-acting insulins, any patient also on basal insulin must optimise dosage of both insulins to obtain glucose control across the whole day, particularly nocturnal/fasting glucose control. Some patients taking human insulin may require a change in dosage from that used with animal-source insulins. If an adjustment is needed, it may occur with the first dose or during the first several weeks or months. Changes in early warning symptoms of hypoglycaemia may occur on transfer between different types of insulin products. The patient's ability to concentrate and react may be impaired as a result of hypoglycaemia. This may constitute a risk in situations where these abilities are of special importance (eg, driving a car or operating machinery). Treatment with human insulin may cause formation of antibodies, but titres of antibodies are lower than those to purified animal insulin. **Undesirable Effects** Hypoglycaemia is the most frequent undesirable effect of insulin therapy. Local allergy is common and usually resolves. Systemic allergy is rare but potentially more serious since severe cases may be life-threatening. Lipodystrophy is uncommon. *For full details of these and other side-effects, please see the Summary of Product Characteristics, which is available at http://emc.medicines.org.uk/.* **Legal Category** POM **Date of Preparation or Last Review** June 2010 **Full Prescribing Information is Available From** Eli Lilly and Company Limited, Lilly House, Priestley Road, Basingstoke, Hampshire, RG24 9NL Telephone: Basingstoke (01256) 315 000 E-mail: ukmedinfo@lilly.com Website: www.lillypro.co.uk

References: 1. Data on File. **2.** Ignaut et al J Diabetes Sci Techno. 2008; 2(3):553-537

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Adverse events should be reported. Reporting forms and information can be found at www.yellowcard.gov.uk.

Adverse events should also be reported to Eli Lilly and Company Limited (Tel No 0870 240 1125).