

Diabetes UK position on the withdrawal of bovine insulin

Updated: May 2018

Why have we produced this position statement

Bovine insulin preparations are being withdrawn from the end of 2017, due to limited availability of the active ingredient. Predicted stock depletion is as follows;

Description	Form	Predicted depletion date
Hypurin® Bovine Isophane	3ml Cartridges	December 2017 (Product Expiry)
Hypurin® Bovine Neutral	3ml Cartridges	June 2018
Hypurin® Bovine Neutral	10ml Vial	July 2018
Hypurin® Bovine Isophane	10ml Vial	December 2018
Hypurin® Bovine Lente (IZS)	10ml Vial	May 2019 (Product Expiry)
Hypurin® Bovine PZI	10ml Vial	August 2019

People treated with Bovine Insulin, will still continue to require insulin therapy and will therefore need to be changed to an alternative. They are in a **high risk group** as they are likely to be from an older population with longer duration of diabetes and therefore have absolute insulin deficiency. They will be at risk of impaired hypoglycaemia awareness, predisposing severe hypoglycaemia. Alternative insulins (porcine, human and analogues) are likely to lower glucose more than the same dose of bovine insulin making insulin dose titration difficult and unpredictable. Caution during transition of insulin treatment is paramount.

How did we develop this position?

The following recommendations have been formulated in consultation with experts working in the NHS.

What we say about this position

Recommendations for healthcare professionals

1. Supervision by a diabetes specialist multidisciplinary team during transition from bovine insulin to a safe, acceptable alternative is essential

2. Alternatives to Bovine insulin include; porcine insulin, human insulin, analogue insulin. The person with diabetes should be involved in the decision when choosing which type of insulin to use. Hypoglycaemia risk is also an important consideration
3. To ensure sustainability and minimise risk of a further insulin change, transition to human or analogue insulin may be preferred
4. When selecting an appropriate alternative insulin consider the duration of action, time to peak and device
5. Provide regular hypoglycaemia education to all people with diabetes, their families and carers. Provide appropriate oral glucose preparations and intramuscular glucagon kits before transition, with training for all relevant people
6. Consider insulin pump therapy (NICE TA151), for people with history of severe hypoglycaemia
7. Regularly review personalised treatment targets with each person with diabetes
8. Support people to self-monitor blood glucose frequently during transition and as required thereafter. Consider continuous glucose monitoring (NICE NG17), in people with history of severe hypoglycaemia or impaired hypoglycaemia awareness
9. An insulin dose reduction of 10% should be considered with initiation of the chosen replacement insulin preparation
10. Specialists may consider measurement of insulin auto-antibodies prior to transition
 - a. Where the anti-insulin antibody titre is detectable, a further dose reduction (e.g. between 10-15%) may be appropriate at transition
 - b. Where the anti-insulin antibody titre is very high, a greater initial dose reduction (>20%) should be considered

- c. The use of a small test dose of the new insulin, in a supervised environment, with frequent monitoring (for example a metabolic day ward) may be considered where there are patient or healthcare professional concerns around detectable anti-insulin antibodies.

Summary

Bovine insulin is being withdrawn from the end of 2017. Those people who used Bovine Insulin will continue to require insulin therapy and are considered to be in a high risk group. Caution should be taken during transition to an alternative.

References

1. Diabetes UK (2017) https://www.diabetes.org.uk/resources-s3/2017-10/Insert_Fact-File-32_SA6_HR.pdf
2. Wockhardt (2017) <http://www.wockhardt.co.uk/our-products/bovine-insulin-hcp-information.aspx>
3. Wockhardt (2017b) <http://www.wockhardt.co.uk/our-products/bovine-insulin-patient-information.aspx>
4. NICE (2015) NG17 Type 1 diabetes in adults
<https://www.nice.org.uk/guidance/ng17/resources/type-1-diabetes-in-adults-diagnosis-and-management-pdf-1837276469701>
5. NICE (2015) NG28 Type 2 diabetes in adults: management
<https://www.nice.org.uk/guidance/ng28/resources/type-2-diabetes-in-adults-management-pdf-1837338615493>