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Research Briefing

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ALPHA NORTESTOSTERONE

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This paper outlines issues surrounding the use of the growth-promoting hormone *Alpha Nortestosterone* in the farming industry in Northern Ireland.

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BACKGROUND

In 1988 the EU introduced a prohibition on the use of hormonal substances for animal growth production. Legislation prescribing the measures to monitor for residues and the actions to be taken on the finding of positive results was introduced (96/22/EU, 96/23/EU/, 2003/74/EC and 2005/34/EC). The use of anabolic agents is prohibited for a variety of reasons including possible adverse human health effects, consumer resistance, negative effects on animal welfare and the impact of residues in the environment¹.

Nortestosterone is a well known anabolic-androgenic steroid. It was first synthesised in the 1950s and initially it was believed to have no natural source. However, it was subsequently shown to occur naturally in boars, stallions, pregnant cows and veal calves¹.

Its presence in adult male bovines is currently deemed illegal under EU law.

ALPHA NORTESTOSTERONE IN NORTHERN IRELAND

Occurrences

On two occasions since January 2004 the hormone *Nortestosterone*, was identified in bottles, or syringes, on two separate farms in Northern Ireland.

On 10 March 2006 a urine sample was collected from an "On Farm Emergency Slaughter" (OFES) steer presented to ABP Newry, and it screened positive for *Alpha Nortestosterone* at a low level (1.05ppb).

In the light of these findings all Official Veterinary Surgeons (OVSs) were instructed to take samples for hormone testing from OFES animals.

DARD Response

Between April 2006 and March 2007 the Department of Agriculture and Rural Development (DARD) tested all male OFES cattle presented at meat plants for growth hormone *Alpha Nortestosterone*. More than 150 cattle tested positive for the hormone and were condemned, with the farmer incurring the financial loss.

¹ Professor Patrick Wall report http://www.dardni.gov.uk/wall_report.pdf

However, no evidence of illegal administration was found following on-farm investigations. Scientific evidence now supports the view that the hormone can occur naturally in male cattle².

The Minister for Agriculture and Rural Development, Michelle Gildernew MP MLA, met the farmers associated with the cases in June 2007 and said:

“The Department is required by law to remove any male bovine from the food chain that tests positive for Alpha Nortestosterone, regardless of whether evidence of illegal administration has been found, and it is permitted to do so without incurring legal liability to pay compensation”.

However, in recognition of the fact that farmers have lost animals without any evidence of wrongdoing on their part, she announced that farmers who have had OFES male cattle will be offered a goodwill payment³.

The full cost of these payments will be around £80,000⁴. These payments cover the value of the cattle removed from the food chain when the farmers were being investigated by DARD, and do not take account of loss of earnings when herd sales were suspended nor a potential loss of reputation. DARD insists it is under no obligation to offer compensation.

Ulster Farmers Union Response

The Ulster Farmers Union has welcomed the way the Minister has dealt with the issue swiftly after entering office but has urged DARD to deal with each case on an individual basis. Some farmers who were investigated at an early stage still have grievances over their treatment and the money they lost.

Some suffered financially because cattle prices dropped while herd sales were suspended. They had to pay feed costs for cattle they had been intending to sell, plus some animals passed the 30-months mark, dropping in price. No compensation has been offered for any of these costs.

“Our big issue is that it is all too easy for people to jump to the wrong conclusion. It just goes to prove that science can be wrong. A lot of people suffered traumatic episodes and stress over the head of this” Wesley Aston of the Ulster Farmers Union⁵.

² Houghton, E., Teale, P. and Dumasia, M.C. (2006) “Studies related to the origin of C18 neutral steroids isolated from extracts of urine from the male horse” *Analytica Chimica Acta* 586: 196-207.

³ Source from Northern Ireland Assembly Oral Answers to Question 11th June, 2007. <http://www.northernireland.gov.uk/news/news-dard/news-dard-070607-cattle-hormone-residues.htm>

⁴ “Agri-Business – Cattle farmers to be reimbursed” *Irish News* 12th June, 2007.

⁵ “Poor cows and innocent farmers are pilloried” *Belfast Telegraph* 15 June 2007.

On 11th June 2007, the Minister promised to undertake a review of the handling of the *Alpha Nortestosterone* issue and to consider what lessons can be learned. The outcome of that review is likely to be made public in autumn 2007⁶.

⁶ Source from Northern Ireland Assembly Oral Answers to Question 11th June, 2007.
<http://www.northernireland.gov.uk/news/news-dard/news-dard-070607-cattle-harmon-residues.htm>