IRISH MEDICINES BOARD

Notice Information: Human Medicines - Warning 28 April 2008

Part 1. Product Information

a)	Title:	Important Information Regarding Heparin Containing Products including Low Molecular Weight Heparins
b)	Product Name/Type:	Heparin

Part 2. Target Audience

a)	Target Audience:	Healthcare professionals & patients

Part 3. Problem/Issue

a)	Problem/Issue:	Heparin is an anti-coagulant agent contained in many intravenous medicinal products authorised in Ireland and in some medical devices available on the Irish market. These include heparin sodium solutions for injection and infusion and also the low molecular weight heparins, enoxaparin sodium, bemiparin sodium and tinzaparin. In February 2008 an increasing trend in adverse reactions reported in the US with certain heparin sodium multi-dose products was observed. These adverse reactions involved allergic/anaphylactoid type symptoms including profound hypotension, bronchospasm and gastrointestinal symptoms. Some of these cases were extremely serious, and a small number resulted in a fatal outcome. The products associated with the occurrence of these adverse reactions were recalled from the marketplace in the US. Similar adverse reactions have also been reported in Germany, resulting in the recall of relevant products there. Investigations have shown that the batches associated with these adverse reactions contain an impurity which has been identified as over-sulphated chondroitin sulphate (OSCS). This impurity is similar in structure to heparin but it does not occur naturally or as a result of any manufacturing processes. Manufacturers of intravenous heparin products have been testing their products for the presence of this OSCS and a small number of units, which were supplied to Ireland through the exempt medicinal product route have been recalled as a precautionary measure. Recently, the IMB has learned that some batches of the enoxaparin-containing product marketed as Clexane contain low levels of OSCS. There is no evidence that these low levels are associated with any increased risk to patients and as such, it was considered that enoxaparin products should continue to be used where required. Healthcare professionals are advised to avoid intravenous/intra-arterial administration where possible, and to closely monitor patients during and after treatment, particularly for signs of allergic or hypotensive reactions. Healthcare professionals are advised that intravenous heparin sodium and other low molecular weight heparins can continue to be used as appropriate, with this issue highlighted primarily for information and to recommend vigilance when administering any heparin containing products. Any suspected adverse reactions observed during or after administration should be reported to the IMB in the usual way. In addition, as heparin is used in the manufacture of some medical devices e.g. medical devices coated in heparin and some in vitro diagnostic devices, the IMB has advised Irish manufacturers of Medical Devices of the issue. To date, there have been no reported incidents relating to such medical devices. The IMB is continuing to closely monitor this issue and any further recommendations will be communicated, as appropriate.

Part 4. Keywords

a)	Keywords:	heparin