

Researchers Identify Heparin Chemical Contaminant

Researchers said the tainted heparin killed at least 81 patients and forced a widespread recall of the commonly used blood-thinner. It also caused a diplomatic squabble between U.S. and Chinese officials.

Many patients in the United States and Europe who got the contaminated heparin suffered immediate allergic reactions, with plummeting blood pressure, swelling of the larynx and other severe symptoms.

The researchers freeze-dried the heparin and used a combination of nuclear magnetic resonance imaging and liquid chromatography-mass spectrometry to analyse its structure.

In addition to a known impurity of heparin called dermatan sulfate, they found that contaminated lots contain a molecule that looks similar to heparin and showed it was almost certainly oversulfated chondroitin sulfate.

Oversulfated chondroitin sulfate is derived from a popular supplement used to treat arthritis, among other things. It can resemble heparin's active ingredient but is much cheaper, leading some experts to suspect it was added deliberately.

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