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# Ferumoxides Injectable Solution

National Cancer Institute

## Source

National Cancer Institute. *Ferumoxides Injectable Solution*. NCI Thesaurus. Code C85477.

An injectable, aqueous colloid solution containing a non-stoichiometric magnetite core of superparamagnetic iron oxide (SPIO) coated with dextran administered as a magnetic resonance imaging (MRI) contrast media. Upon intravenous administration, ferumoxides accumulates in phagocytic reticuloendothelial system (RES) cells of the liver (Kupffer cells). When exposed to a strong external magnetic field, ferumoxides exhibits enhanced T2 relaxation, resulting in signal loss in normal tissues (image darkening) on mid T1/T2 or strongly T2-weighted images. Tissues with decreased RES function such as metastases, primary liver cancer, cysts and various benign tumors, adenomas, and hyperplasia, retain their native signal intensity, consequently the contrast between normal tissue (with image darkening) and abnormal tissue is increased.