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Perflubutane Microbubble

National Cancer Institute

Source

National Cancer Institute. *Perflubutane Microbubble*. NCI Thesaurus. Code C128488.

A phospholipid-stabilized suspension composed of microbubbles containing the gas perfluorobutane (perflubutane, PFB) with an outer layer of hydrogenated egg phosphatidylserine (HEPS), which can be used as an ultrasound imaging contrast agent. Upon administration, the PFB microbubbles enhance echo differences between various tissues, which enhances the visualization of images during ultrasound. In particular, the PFB microbubbles seem to preferentially target the reticuloendothelial system (RES); they are taken up by macrophages in the spleen and liver (Kupffer cells), and are taken up in lymph nodes. This may aid in the detection and diagnosis of cancer and liver disease, and may improve imaging of the lymphatic and vascular systems. The microbubbles provide increased stability during ultrasound imaging.