

Methods for Imaging the Lymphatic System Using Dendrimer-Based Contrast Agents

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Technology description

Summary

Available for licensing are methods for lymphatic system imaging using 4D Magnetic Resonance lymphography and a 240kD contract agent based on generation-6 polyamidoamine dendrimer (G6). The disclosed methods are applicable to the imaging of all lymphatic structures, but in particular embodiments are particularly suited for imaging specific parts of the lymphatic system such as lymph nodes or lymphatic vessels. The methods permit the assessment of abnormal conditions within the lymphatic system, such as lymphoma/lymphoproliferative disease, inflammation, and cancer metastasis. The dendrimer also may be used to identify and locate sentinel lymph nodes into which lymph fluid flows from a tumor. The conventional clinically approved MRI contract agent, Gd-[DTPA]-dimeglumine (<1kD) was unable (in murine models) to depict lymphatics when used in conjunction with the same imaging system. Thus, the present dendrimer provides a novel method to visualize lymphatic drainage that has not been previously reported.

Institution

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联系我们



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