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Title:High-sensitivity in vivo THz transmission imaging of early human breast cancer in a subcutaneous xenograft mouse model

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Abstract:We performed in vivo THz transmission imaging study on a subcutaneous xenograft mouse model for early human breast cancer detection. With a THz-fiber-scanning transmission imaging system, we continuously monitored the growth of human breast cancer in mice. Our in vivo study not only indicates that THz transmission imaging can distinguish cancer from the surrounding fatty tissue, but also with a high sensitivity. Our in vivo study on the subcutaneous xenograft mouse model will encourage broad and further investigations for future early cancer screening by using THz imaging system.

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