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## **Microbubble and its biomedical application**

Nguyen Phuc Nghia, Trinh Phuong Thao, Bui Thi Van  
*Hanoi University of Pharmacy*

**Summary:** *Microbubbles have gained great attention over the last few years, due to their wide applications in many fields of science and technology. Their unique ability to respond to ultrasound makes them excellent ultrasound imaging contrast agents and useful targeted drug delivery systems. This review first provides some general information about the microbubble: microbubble shell composition, their stabilized gas core and physicochemical properties. Then, two main recent pharmaceutical applications of microbubbles will be discussed. Microbubbles are used as diagnostic agents in combination with ultrasound for cardiac and vascular imaging. They are also proposed for drug and gene delivery to targeted regions.*