

Nanoparticle Innovation in Cancer Surgery

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The talk will discuss the commercial potential of magnetic nanoparticles, the issues preventing the wide adoption of magnetic nanoparticles in medicine, and future innovations that could result in more widespread use.

Ferronova is developing magnetic nanoparticles for use in sentinel lymph node biopsy. Sentinel lymph node biopsy is a procedure used as part of cancer surgery, where nanoparticles are injected to trace the pathway of metastatic cancer to the first or sentinel lymph node. The procedure is routine in breast cancer, with one magnetic nanoparticle product on the market for this indication. New nanoparticle designs can broaden the indications to other cancers, such as melanoma, head and neck cancer, prostate cancer, and other solid tumours.