

Showcasing research from Prof. Caracciolo's group at the NanoDelivery Lab, Sapienza University of Rome, Italy.

Nanoparticle-protein corona enhances accuracy of Ca-19.9-based pancreatic cancer classification

A synergistic approach combining Carbohydrate Antigen 19-9 (CA 19-9) levels with a graphene oxide (GO)-based blood test has been implemented as a non-invasive diagnostic tool for the early detection of pancreatic ductal adenocarcinoma. This technique relies on the analysis of the personalized protein corona formed on GO sheets once they are embedded in human blood plasma. Pairing CA 19-9 values with GO protein patterns significantly enhanced the ability to distinguish between non-oncological and pancreatic cancer patients. Created in BioRender. Digiacomo, L. (2025) https://BioRender.com/e03n068.

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