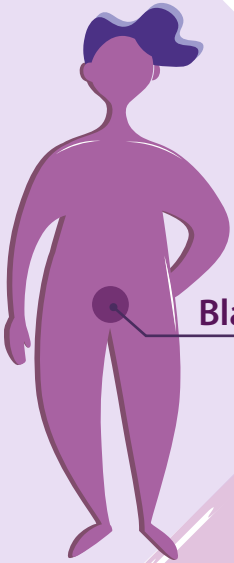
Amplitude



Bladder cancer

Investigating biologically relevant metabolic markers of bladder cancer using 3D cell models that represent different grades and stages of bladder cancer and label free microscopy and spectroscopy

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Amplitude Project

Tampere University

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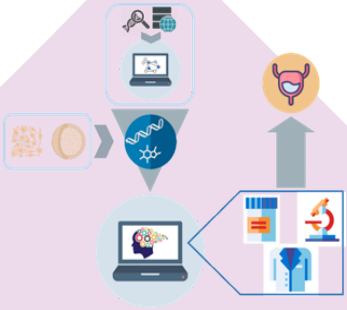
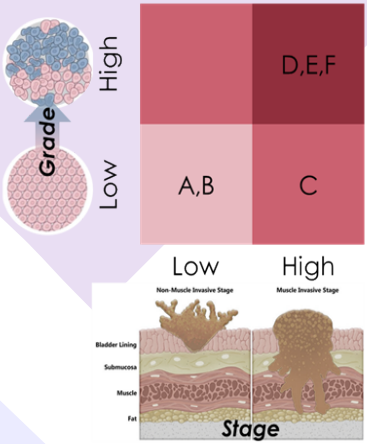
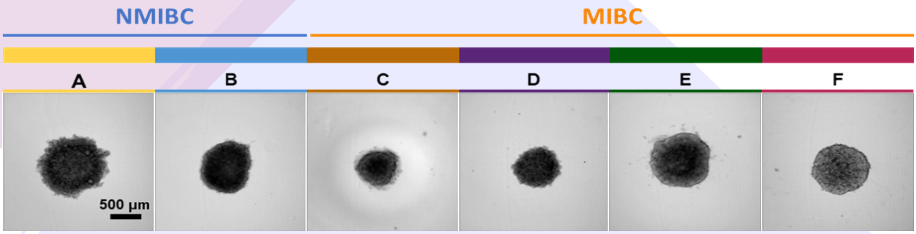
Spheroids representing different grades and stages of bladder cancer



Amplitude developed bespoke 3D cell models, from bladder cancer cell lines, to study biochemical and metabolic changes at different stages of cancer and identify specific markers that indicate cancer progression





Metabolomic analysis of the models found that spheroids prepared from cells of different cancer stages differ in their ability to metabolize lipids. Allowing us to differentiate between non-invasive and invasive stages of bladder cancer. The difference can also be detected using Raman spectroscopy, which is promising for the future translation of lipid metabolism as a marker of invasive bladder cancer.

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