3D tumor spheroids

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Abstract

Open collaborative writing with Manubot 1

Introduction

Pancreatic tumor microenvironment

In Pancreatic ductal adenocarcinoma (PDAC), the major components of the tumor microenvironment are a complex population of fibroblasts forming the bulk of the stroma, vasculature, inflammatory and immune cells 2. PDAC is associated with evolving alterations in the tumor microenvironment, including increasing fibrosis and extracellular matrix deposition (desmoplasia). Increasing desmoplasia accompanies progressive disease and creates intratumoral pressure that compresses the vasculature, resulting in limited blood flow to the tumor and consequent hypoxia and low nutrient delivery 3.

2D and 3D cell cultures

The structure of multicellular spheroids.

Methods for the generation of MCS

MCS and PDA

References

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