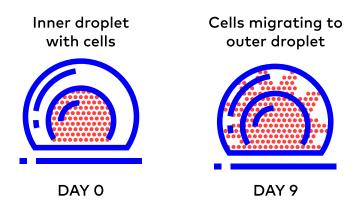
## **3D APPLICATIONS**

## Cancer Invasion

MATERIAL: TeloCol-6 , TeloCol-4 CELL LINE: MDA-MB-231 CONSTRUCT TYPE: Droplet-in-Droplet VESSEL TYPE: 96 well-plate INNER DROPLET: 1 µL OUTER DROPLET: 5 µL

## **CELLINK PROTOCOL**

Understand what causes cancer cells to migrate from diseased to healthy tissue. The droplet-in-droplet method, made possible by 3D biodispensing, enables researchers to create models to understand cancer invasion mechanics. In this proof of concept cancer cells embedded in TeloCol-6 were deposited and then a subsequent droplet of TeloCol-4 was dispensed around to surround the first drop and create a cancerous core.



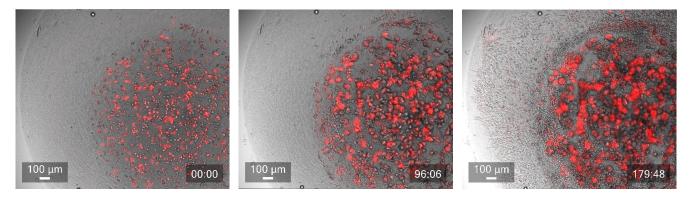


MDA-MB-231 (mCherry): 4x10<sup>6</sup> cells/mL

TeloCol: 6 mg/mL

	CARTRIDGE 1	Pre-dispensing					
	CARTRIDGE 2				DAY 0	D	AY 9
Ē	TeloCol: 4 mg/mL	<u>@</u>	Inner droplet dispensing: 1 µL	<u>)</u>	Outer droplet dispensing: 5 µL		
000	88 96-well plate	101.2	Thermal crosslink: 15 min	*	Thermal crosslink: 15 min	<u></u>	Data analysis
			(	<b>@</b>	Cell medium and Incubation at 37° C		

**FIGURE 1:** General workflow for TeloCol-10 biodispensing of cancer cell invasion (droplet-in-droplet) model and analysis capable on systems like the BIO CELLX.



**FIGURE 2:** Droplet-in-droplet model for cancer cell migration. The live cancer cells in red are embedded in the inner droplet at day 1 and migrated out to the outer layer during the 9 days incubation time.



MORE DETAILS ABOUT THE TUMOR SPHEROIDS Read more in the full application note

