Application Note

CELLFLOAT

Data courtesy of Fukushima Medical University
Translational Research center
Prof. Motoki Takagi

Publication Date: November 12, 2020

F-PDO fragmentation/anticancer drug evaluation using CellPet FT

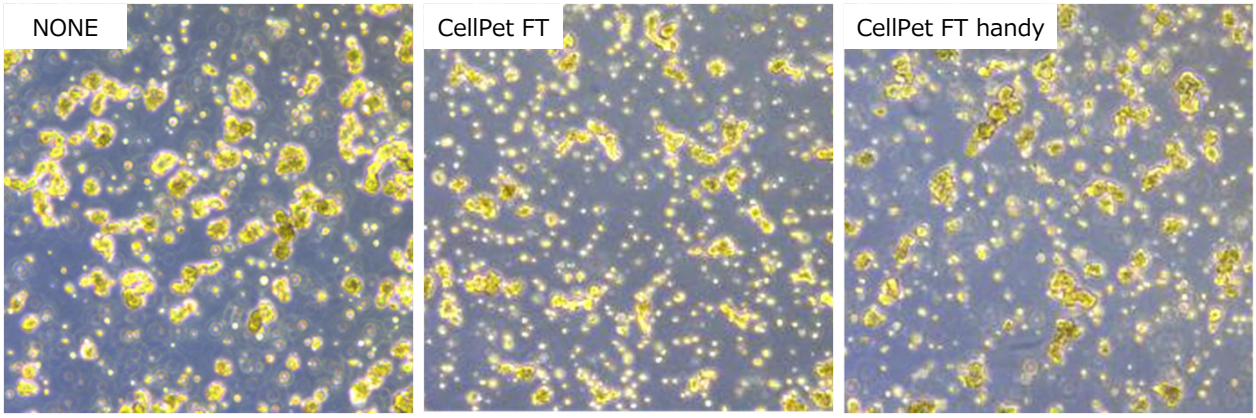
Cell type: RLUN7-2 (F-PDO; Translational Research Center, Fukushima Medical University)
See website: https://www.fmu.ac.jp/home/trc/en/contract-research-provision/f-pdo/

		RLUN7-2 (CTR#30040)		
Fragmentation conditions		NONE	CellPet FT	CellPet FT handy
Culture medium		MammoCult		
Filter size		-	70	70
Dilution ratio		10		
Number of compounds		8		
Processing time(h)		144		
CV Value	0Hours	23.5%	19.5%	20.6%
	After culture	5.2%	5.8%	3.4%
Cell growth	Solvent	1.96	1.52	1.72
	Untreated	1.37	2.11	1.93

Anticancer drug used
- Mitomycin C
- Paclitaxel
- Afatinib
- Lapatinib
- Erlotinib
- Gefitinib
- Osimertinib
- Rociletnib

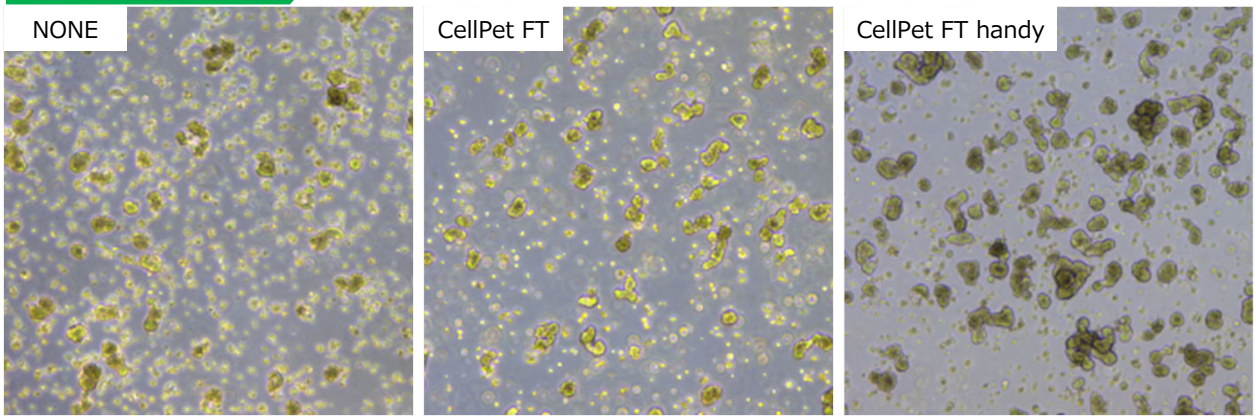
Immediately after processing

70 μm mesh filter used



After the fragmentation treatment, they were finer than without treatment.
There was no difference in cell mass size between FT and FT handy.

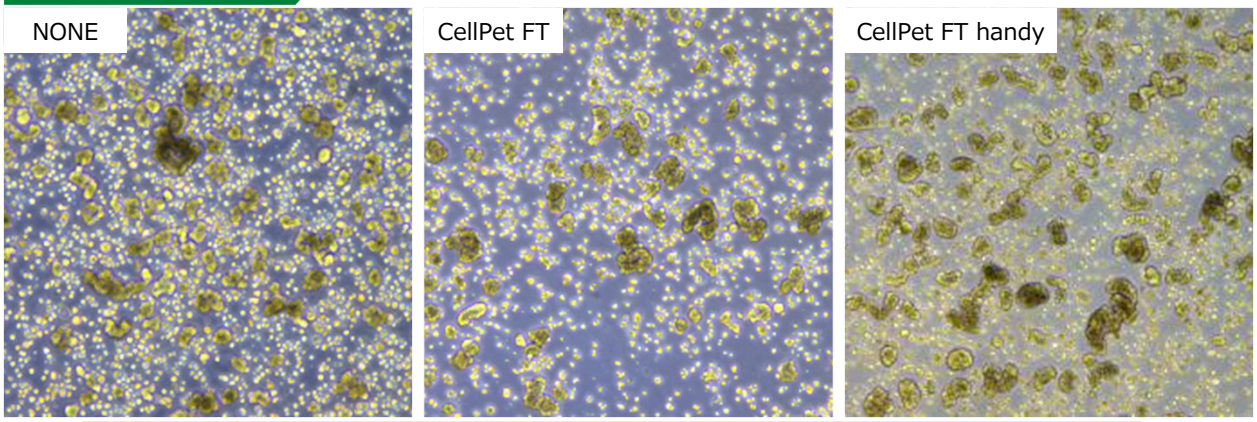
Culture day 3



All cellular quantity were comparable.

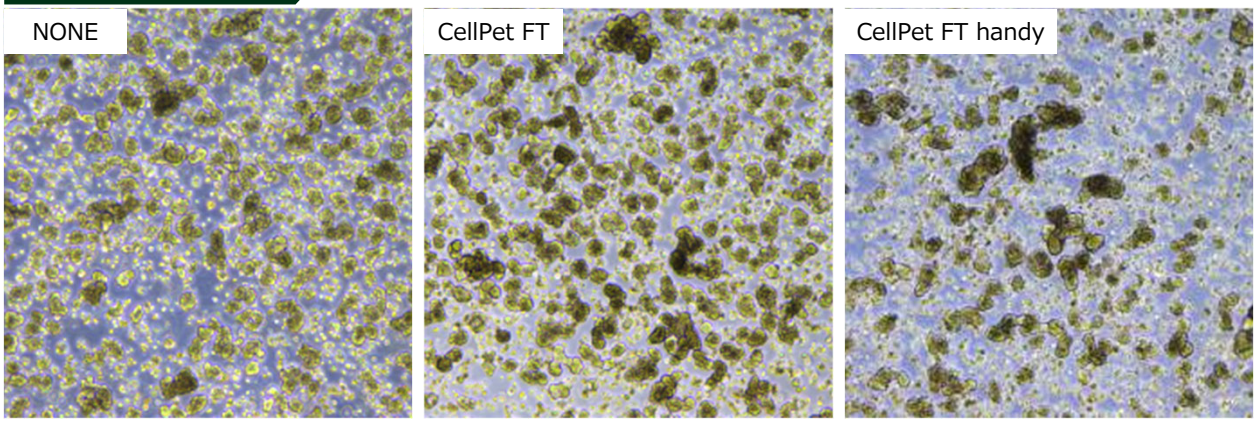
Application Note

Culture day 9



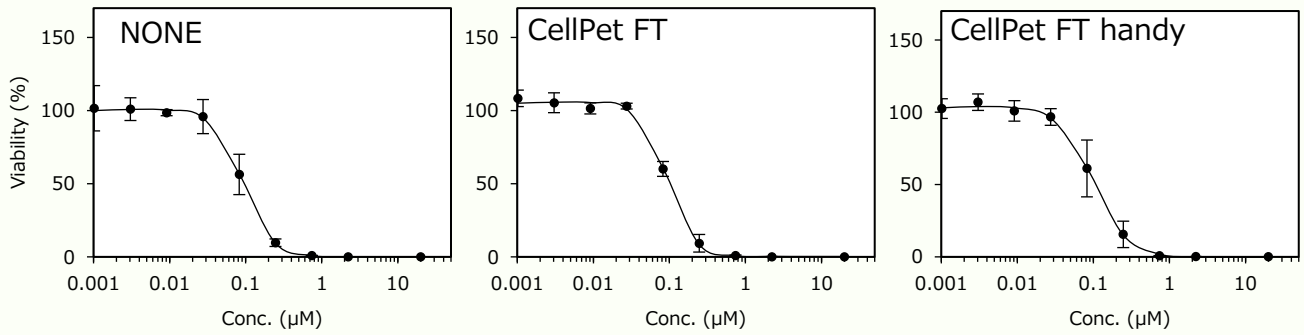
Cell quantities were all comparable, and cell mass size differed little.

Culture day 13

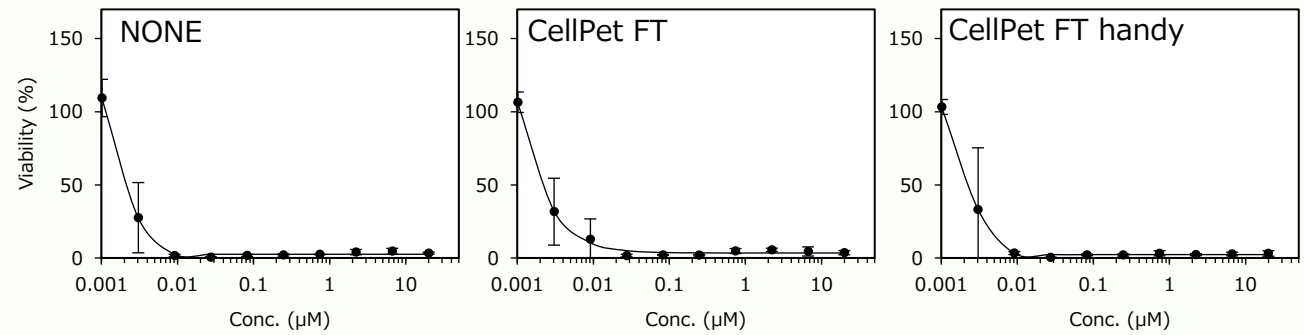


Proliferation rate did not differ between untreated, FT, and FT handy.
The appearance of the cells also did not differ from that of the untreated cells.

Mitomycin C



Paclitaxel



There was no difference in IC50 values among the 8 anticancer agents used (representative of the 2 cases above) due to differences in the conditions of fragmentation.

JTEC CORPORATION
2-5-38 Saito-Yamabuki, Ibaraki, Osaka 567-0086, Japan
Contact
Phone: +81-72-655-2786
Mail: info@j-tec.co.jp