

Cellular morphology-mediated proliferation and drug resistance of breast cancer cells

Ryota Domura,[†] Rie Sasaki,[†] Yuma Ishikawa,[†] Masami Okamoto,^{†,*}

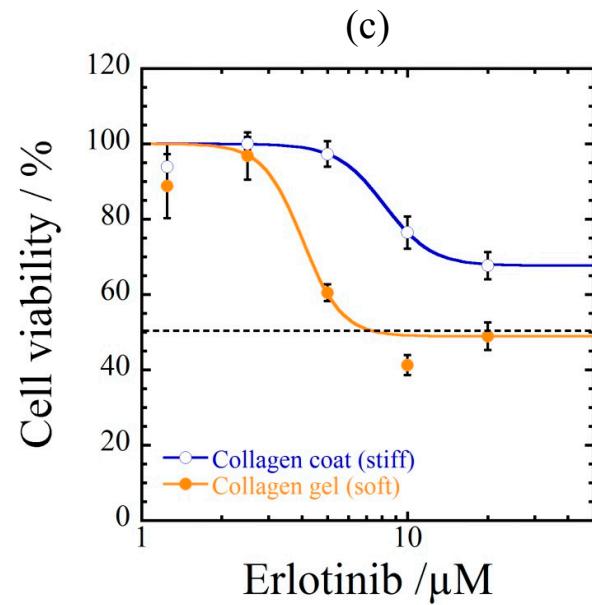
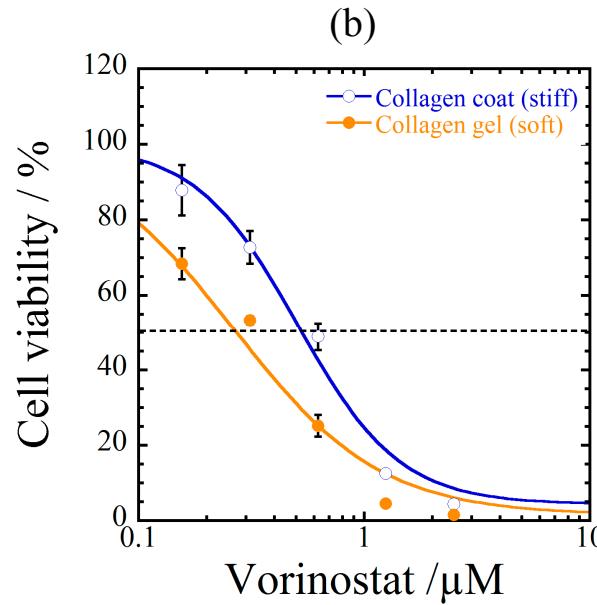
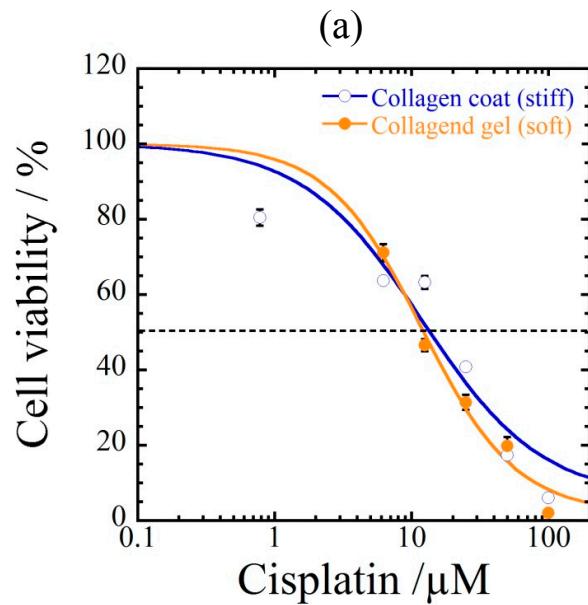
[†]Advanced Polymeric Nanostructured Materials Engineering, Graduate School of Engineering, Toyota Technological Institute, 2-12-1 Hisakata, Tempaku, Nagoya 468 8511, Japan

Supplementary data: Table S1, Figures S1, S2.

Table S1. Morphological parameters, tensile properties and degree of crystallinity of polymeric fiber-based substrates.

| Substrates | Fiber diameter / μm | FWHW / $^\circ$ | Elastic modulus / GPa | Fracture stress / MPa | Ultimate strain / % | Crystallinity / % |
|------------|--------------------------------|-----------------|-----------------------|-----------------------|---------------------|-------------------|
| F-PLLA | - | - | - | | | - |
| A-PLLA | 1.48 ± 0.31 | 44.33 | 4.1 | 112 | 20 | 53.7 |
| R-PLLA | 1.54 ± 0.29 | - | 2.1 | 91 | 78. | 42.8 |
| F-PCL | - | - | - | | | - |
| A-PCL | 1.37 ± 0.49 | 55.22 | 0.75 | 67 | 48 | 32.4 |
| R-PCL | 1.86 ± 0.62 | - | 0.15 | 25 | 209 | 31.4 |

MDA-MB-231



MCF-7

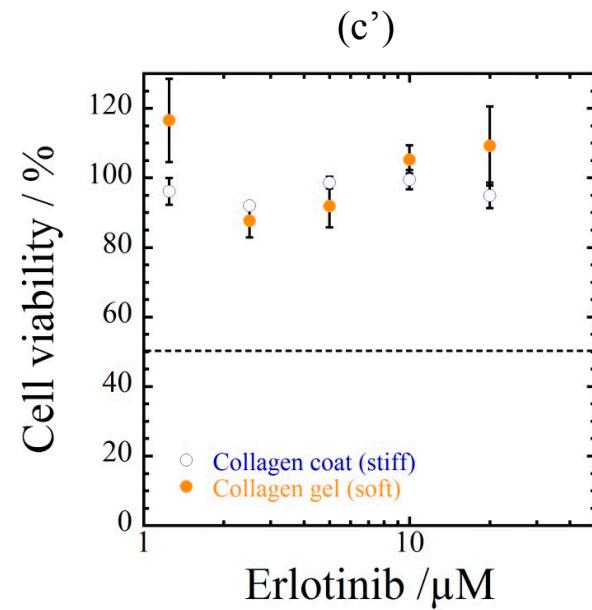
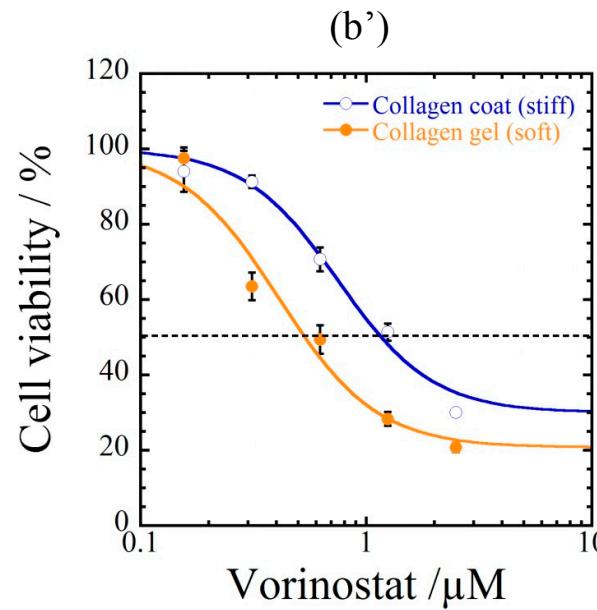
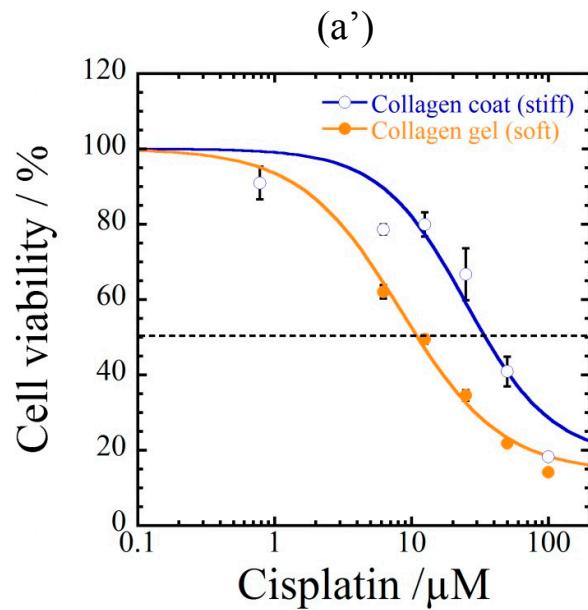


Fig. S1. Cell viability as measured by WST-8 assay using ((a)–(c)) MDA-MB-231 and ((a')–(c')) MCF-7 cells incubated on collagen coat and gel substrates after 72 h of incubation with (a, a') cisplatin, (b, b') vorinostat, and (c, c') elotinib of different concentrations.

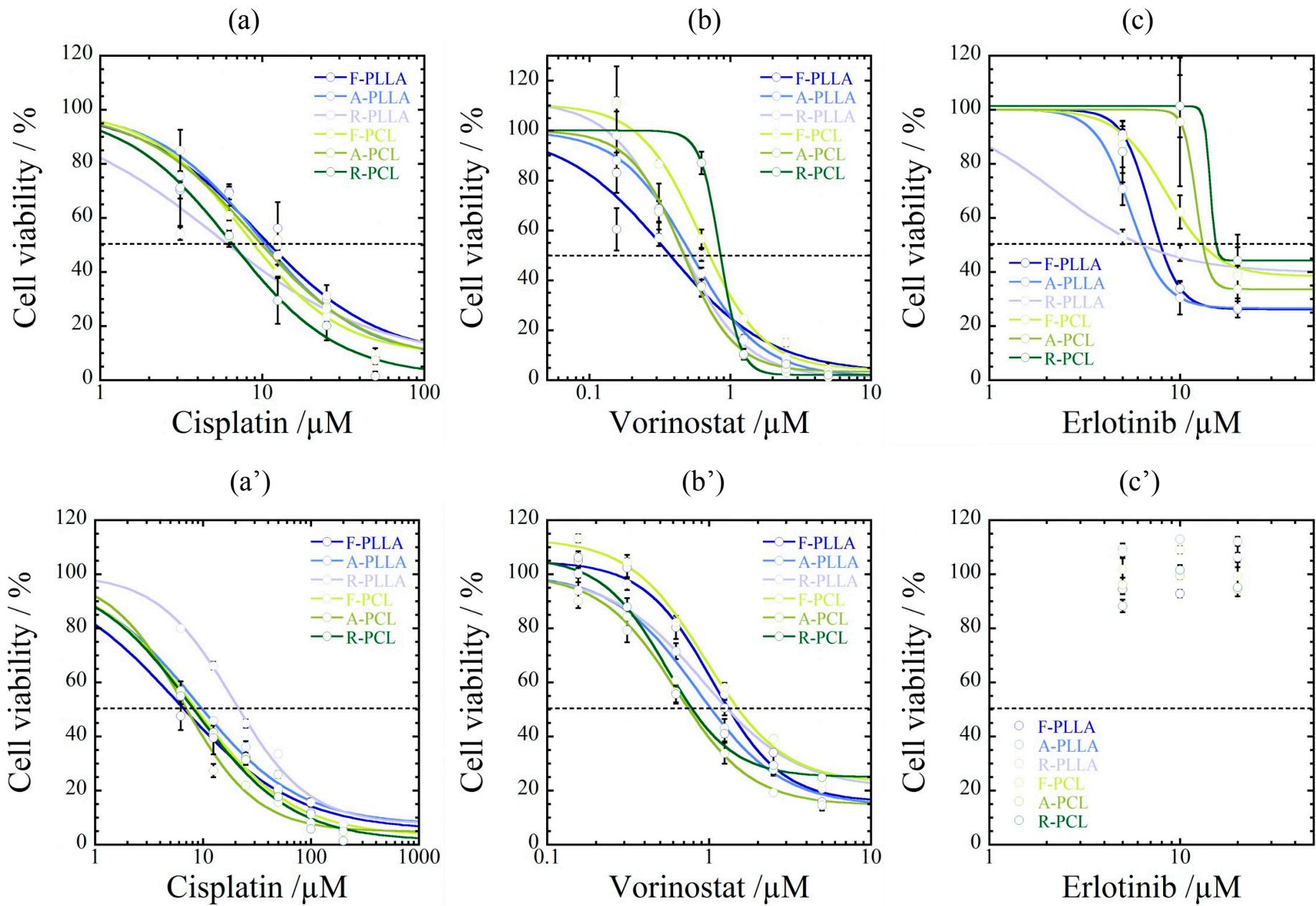


Fig. S2. Cell viability as measured by WST-8 assay using ((a)–(c)) MDA-MB-231 and ((a')–(c')) MCF-7 cells incubated on F-, A-, and R-PLLA and/or F-, A-, and R-PCL substrates after 72 h of incubation with (a, a') cisplatin, (b, b') vorinostat, and (c, c') elotinib of different concentrations.