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Evaluation of drug sensitivity in patient-derived MTSs

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Zhe Zhao¹

¹CAS Key Laboratory of Nano-Bio Interface, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, Jiangsu, 215123, China.

MTS



Guangli Suo

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We use this protocol and it's working

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Abstract

The detailed process of using the MTS model for drug susceptibility testing.

Materials

96-well plate, SG-Medium, Celltiter-Glo reagent (Vazyme), Synergy plate reader (BioTek)

Evaluation of drug sensitivity in patient-derived MTSS

- 1 Fifty collected MTSSs were aliquoted into each well of a 96-well plate. Based on the *SR_{70%} cutoff value for each individual chemotherapy drug and clinical chemotherapy regimens, the MTSSs were treated with control vehicles, single chemotherapy drugs, or drug combinations (e.g., E-T: 0.1 μ M Epirubicin + 10 nM Docetaxel; EC-T: 0.1 μ M Epirubicin + 0.56 μ M Palifosfamide + 10 nM Docetaxel; EC-THP: 0.1 μ M Epirubicin + 0.56 μ M Palifosfamide + 10 nM Docetaxel + 10 μ g/mL Trastuzumab and Pertuzumab; TCbHP: 10 nM Docetaxel + 3.16 μ M Carboplatin + 10 μ g/mL Trastuzumab and Pertuzumab) in a volume of SG-Medium (50 μ L).*
- 2 After three days of incubation, 50 μ L Celltiter-Glo reagent (Vazyme) was added to each well to test the MTSS survival rate (*_SR_*). The MTSSs were incubated at room temperature for 10 min, followed by acquiring viability readings using a Synergy plate reader (BioTek).