

CORRECTION

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# Correction: Bispecific aptamer-decorated and light-triggered nanoparticles targeting tumor and stromal cells in breast cancer derived organoids: implications for precision phototherapies

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**Correction: J Exp Clin Cancer Res 43, 92 (2024)**  
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Following publication of the original article [1], the authors identified an error Figure 7A, middle panel immunohistochemical EGFR staining. The incorrect image for M41 case was included due to mislabeling.

The original article can be found online at <https://doi.org/10.1186/s13046-024-03014-x>.

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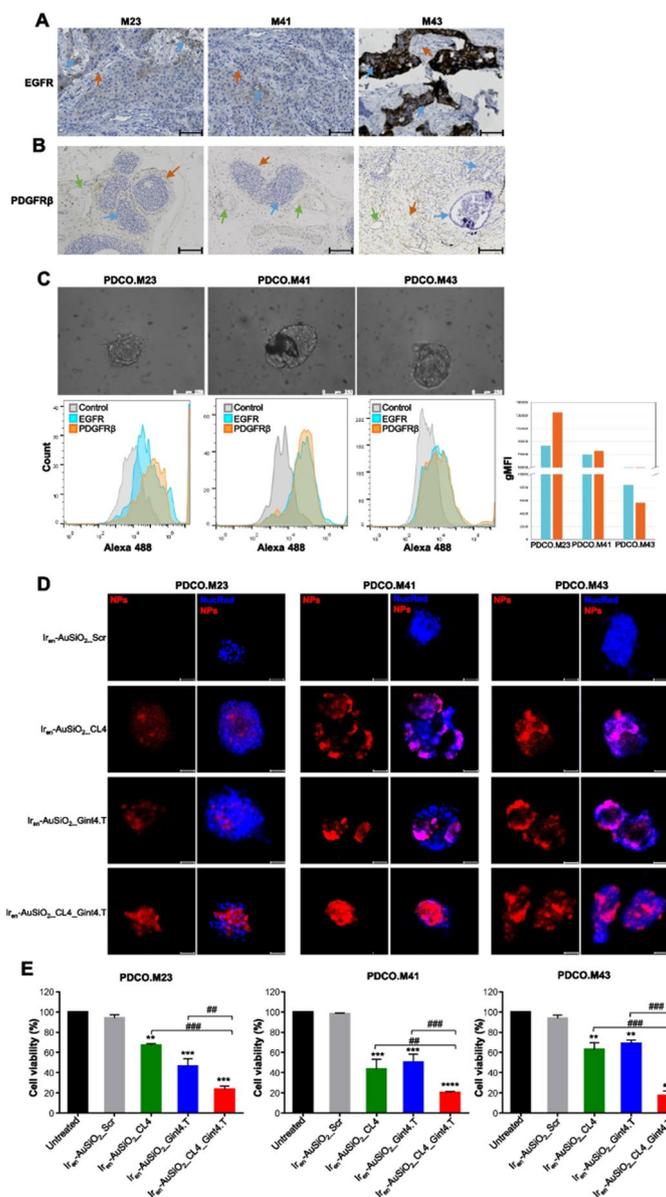
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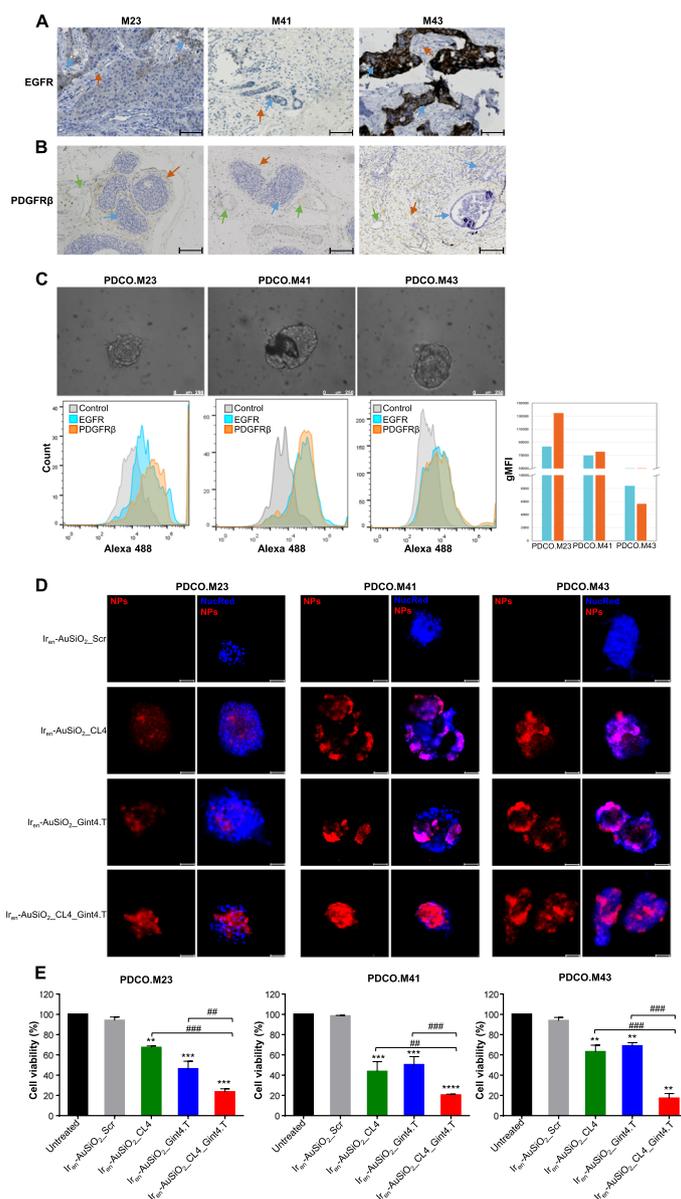
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**Incorrect Figure 7**



**Fig. 7** Anticancer activity of Ir<sub>en</sub>-AuSiO<sub>2</sub> Aptamer nanoplateforms on 3D patient-derived breast cancer organoids. Representative images of three breast cancer samples (M23, M41 and M43) stained for **A** EGFR and **B** PDGFRβ. In **A**, the blue arrows indicate EGFR-positive neoplastic cells (M23, moderate membrane expression; M41, mild membrane expression; M43, strong membrane expression); the red arrows indicate EGFR-negative peritumoral stromal cells. Magnification: 10×, scale bar = 100 μm. In **B**, the blue arrows indicate PDGFRβ-negative neoplastic cells; the orange arrows indicate PDGFRβ-positive peritumoral stromal cells (M23 and M41, mild cytoplasmic expression; M43, moderate cytoplasmic expression); the green arrows indicate the endothelial cells of vessels (red blood cells are visible inside) positive for PDGFRβ. Magnification: 5×, scale bar = 50 μm. **C** (upper) Representative phase-contrast microscopy images of PDCOs obtained by M23, M41 and M43 tumor samples, magnification: 20×, scale bar = 250 μm; (lower) flow cytometry analyses to confirm the expression of EGFR and PDGFRβ in the three PDCOs. The histogram indicates the geometric mean fluorescence intensity (gMFI) of EGFR and PDGFRβ expressed on PDCOs, calculated using FlowJo software. **D** Representative confocal images of PDCO.M23, PDCO.M41 and PDCO.M43 incubated with Iren-AuSiO<sub>2</sub>\_CL4, Ir<sub>en</sub>-AuSiO<sub>2</sub>\_Gint4.T, Ir<sub>en</sub>-AuSiO<sub>2</sub>\_CL4\_Gint4.T or untargeted Iren-AuSiO<sub>2</sub>\_Scr for 24 h at 37 °C. Nanoparticles and nuclei are displayed in red and blue, respectively. Magnification: 10×, 2.0× digital zoom, scale bar = 50 μm. All digital images were captured under the same settings to enable a direct comparison of staining patterns. **E** Cell viability assay on PDCO.M23, PDCO.M41 and PDCO.M43 treated as indicated. Bars depict mean ± SD of two independent experiments performed in triplicate. \*\*p < 0.01, \*\*\*p < 0.001, \*\*\*\*p < 0.0001 relative to Ir<sub>en</sub>-AuSiO<sub>2</sub>\_Scr; ##p < 0.01, ###p < 0.001, ####p < 0.0001. No statistically significant variations among Ir<sub>en</sub>-AuSiO<sub>2</sub>\_Scr and untreated were obtained

Correct Figure 7



**Fig. 7** Anticancer activity of Ir<sub>en</sub>-AuSiO<sub>2</sub> Aptamer nanoplateforms on 3D patient-derived breast cancer organoids. Representative images of three breast cancer samples (M23, M41 and M43) stained for **A** EGFR and **B** PDGFRβ. In **A**, the blue arrows indicate EGFR-positive neoplastic cells (M23, moderate membrane expression; M41, mild membrane expression; M43, strong membrane expression); the red arrows indicate EGFR-negative peritumoral stromal cells. Magnification: 10×, scale bar = 100 μm. In **B**, the blue arrows indicate PDGFRβ-negative neoplastic cells; the orange arrows indicate PDGFRβ-positive peritumoral stromal cells (M23 and M41, mild cytoplasmic expression; M43, moderate cytoplasmic expression); the green arrows indicate the endothelial cells of vessels (red blood cells are visible inside) positive for PDGFRβ. Magnification: 5×, scale bar = 50 μm. **C** (upper) Representative phase-contrast microscopy images of PDCOs obtained by M23, M41 and M43 tumor samples, magnification: 20×, scale bar = 250 μm; (lower) flow cytometry analyses to confirm the expression of EGFR and PDGFRβ in the three PDCOs. The histogram indicates the geometric mean fluorescence intensity (gMFI) of EGFR and PDGFRβ expressed on PDCOs, calculated using FlowJo software. **D** Representative confocal images of PDCO.M23, PDCO.M41 and PDCO.M43 incubated with Ir<sub>en</sub>-AuSiO<sub>2</sub>\_CL4, Ir<sub>en</sub>-AuSiO<sub>2</sub>\_Gint4.T, Ir<sub>en</sub>-AuSiO<sub>2</sub>\_CL4\_Gint4.T or untargeted Ir<sub>en</sub>-AuSiO<sub>2</sub>\_Scr for 24 h at 37 °C. Nanoparticles and nuclei are displayed in red and blue, respectively. Magnification: 10×, 2.0× digital zoom, scale bar = 50 μm. All digital images were captured under the same settings to enable a direct comparison of staining patterns. **E** Cell viability assay on PDCO.M23, PDCO.M41 and PDCO.M43 treated as indicated. Bars depict mean ± SD of two independent experiments performed in triplicate. \*\*p < 0.01, \*\*\*p < 0.001, \*\*\*\*p < 0.0001 relative to Ir<sub>en</sub>-AuSiO<sub>2</sub>\_Scr; ##p < 0.01, ###p < 0.001, ####p < 0.0001. No statistically significant variations among Ir<sub>en</sub>-AuSiO<sub>2</sub>\_Scr and untreated were obtained

The original article [1] has been corrected.

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#### Reference

1. Camorani S, Caliendo A, Morrone E, et al. Bispecific aptamer-decorated and light-triggered nanoparticles targeting tumor and stromal cells in breast cancer derived organoids: implications for precision phototherapies. *J Exp Clin Cancer Res*. 2024;43:92. <https://doi.org/10.1186/s13046-024-03014-x>.