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Correction: Unveiling the NEFH+ malignant cell subtype: insights from single-cell RNA sequencing in prostate cancer progression and tumor microenvironment interactions

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A Correction on

Unveiling the NEFH+ malignant cell subtype: Insights from single-cell RNA sequencing in prostate cancer progression and tumor microenvironment interactions

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There was a mistake in Figure 1 and Figure 7I as published. This error occurred because placeholder images were used during the typesetting process to maintain layout consistency. Due to an oversight, the first placeholder image in the upper left corner of Figure 7I was not replaced with the correct image in time. In addition, since the Figure 1 includes a schematic diagram of this figure, it also needs to be updated accordingly. The corrected Figure 1 and Figure 7 appears below.

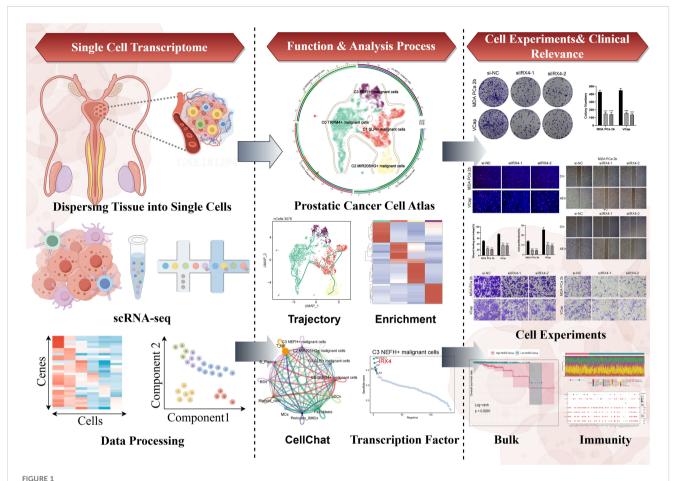
The original version of this article has been updated.

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Graphical abstract. The analysis workflow for this research. We performed single-cell sequencing analysis on the GSE181294 dataset and identified a distinct C3 NEFH+ malignant cells subtype. Through pseudotime analysis, enrichment analysis, cell communication, and transcription factor regulation analysis, we revealed the significance of this subtype and confirmed the important role of the key TF (IRX4) through in vitro experiments. Prognostic and immune analyses provided guidance for clinical intervention and treatment.

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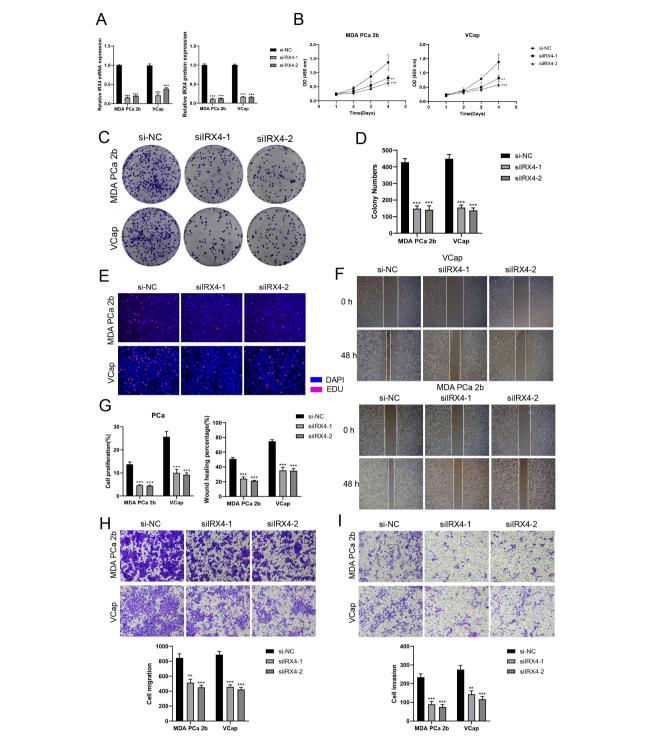


FIGURE 7
In vitro experiments confirmed the effects of IRX4 knockdown. (A) Decreased mRNA and protein expression levels after IRX4 knockdown. (B) CCK-8 assay showed a significant decrease in cell viability after IRX4 knockdown compared to the control group. (C, D) Colony formation assay demonstrated a significant decrease in colony numbers after IRX4 knockdown. (E) EDU staining experiment confirmed the inhibitory effect of IRX4 knockdown on cell proliferation. (F) Wound healing assay showed that IRX4 knockdown inhibited cell migration. (G) Bar graph displayed a significant decrease in cell proliferation and migration abilities after IRX4 knockdown. (H, I) Transwell assay showed that IRX4 knockdown suppressed the migration and invasion abilities of tumor cells in MDA PCA 2b and VCap cell lines. **P<0.01, ***P<0.001.