

Erratum

Silencing miR-454 suppresses cell proliferation, migration and invasion via directly targeting MECP2 in renal cell carcinoma: Am J Transl Res. 2020; 12(8): 4277-4289

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In this article published in AJTR, we found several misspellings, annotations missing and several images were mixed, resulting in incorrect words and images mistakenly shown in **Figures 2, 3, 5 and 6**. We would like to publish this Erratum to reflect this change. The authors confirm that all the published results and conclusions of the paper remain unchanged, as

well as the figure legends. The authors express regrets for the mistakes. The new figures are as following:

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miR-454 targets MECP2 in RCC

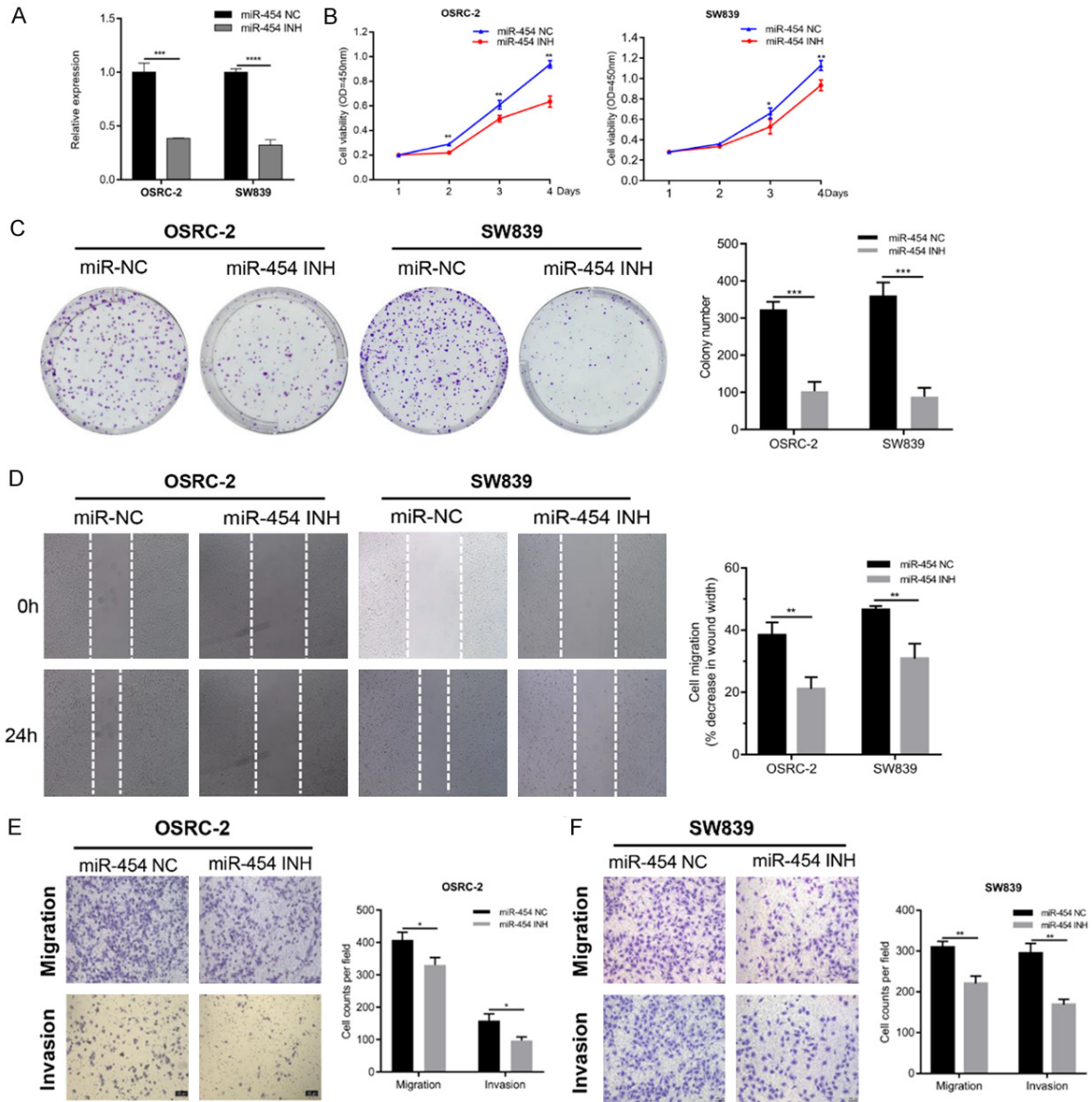


Figure 2. Inhibition of miR-454 suppresses proliferation, migration and invasion of RCC cells. A. The expression of miR-454 was detected by qRT-PCR in RCC cells transfected with miR-454 inhibitor or NC. B. CCK-8 assay of RCC cells after transfection with miR-454 inhibitor or NC. C. Colony formation assay of RCC cells after transfection with miR-454 inhibitor or NC. D. Wound healing analysis of RCC cells after transfection with miR-454 inhibitor or NC. E, F. Transwell assays of RCC cells after transfection with miR-454 inhibitor or NC. Data indicate mean \pm SD of three experiments (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, **** $P < 0.0001$).

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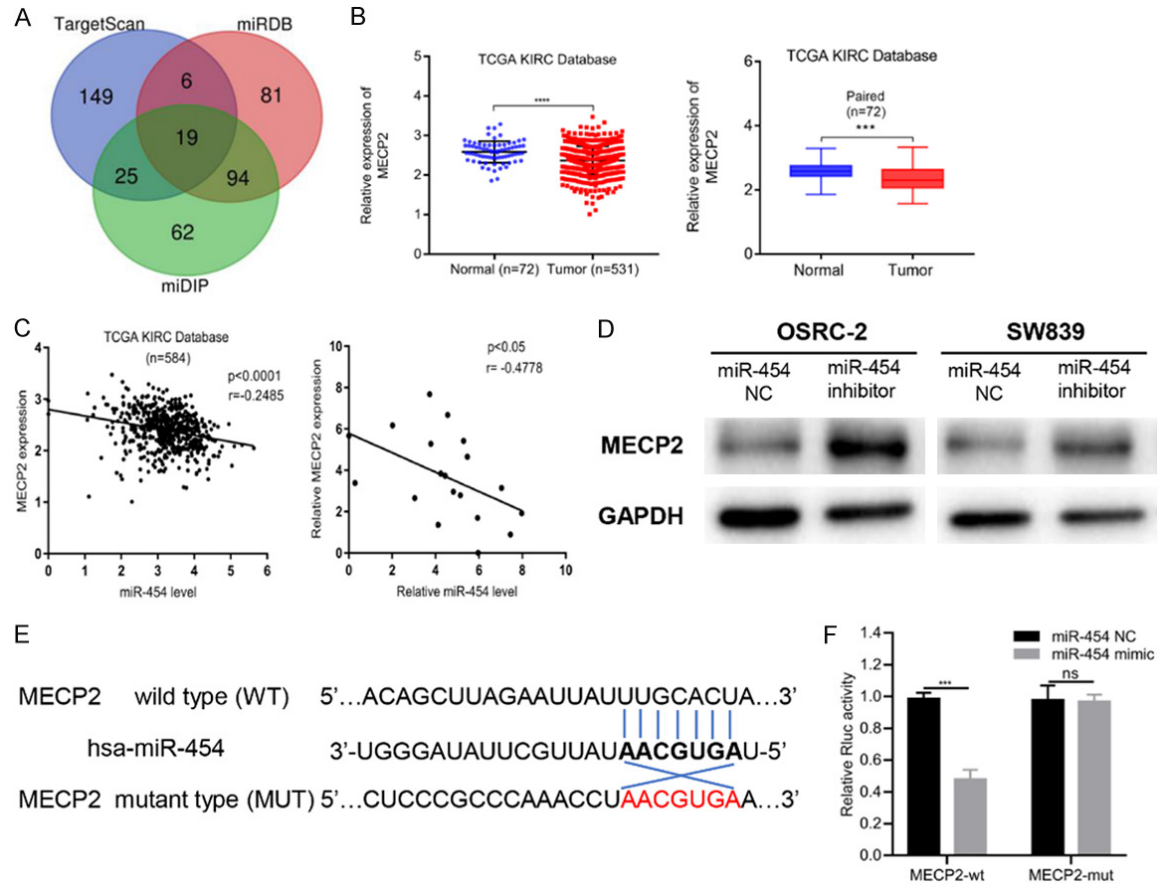


Figure 3. MiR-454 directly targets downstream gene MECP2. **A.** The diagram of miR-454 potential target genes predicted by TargetScan, miDIP and miRDB databases. **B.** Relative expression of MECP2 in un-paired or paired RCC tissues based on TCGA database. **C.** The expression of MECP2 was inversely correlated with miR-454 level in TCGA KIRC and our clinical samples. **D.** MECP2 protein level was assessed by western blot after transfecting miR-454 mimics or NC into RCC cells. **E.** Schematic of MECP2 wild-type (WT) and mutant (Mut) luciferase reporter vectors. **F.** Relative luciferase activity measured by luciferase assays in HEK293T cells co-transfected with miR-454 mimics or NC. Data indicate mean \pm SD of three experiments ($*P < 0.05$, $**P < 0.01$, $***P < 0.001$, $****P < 0.0001$).

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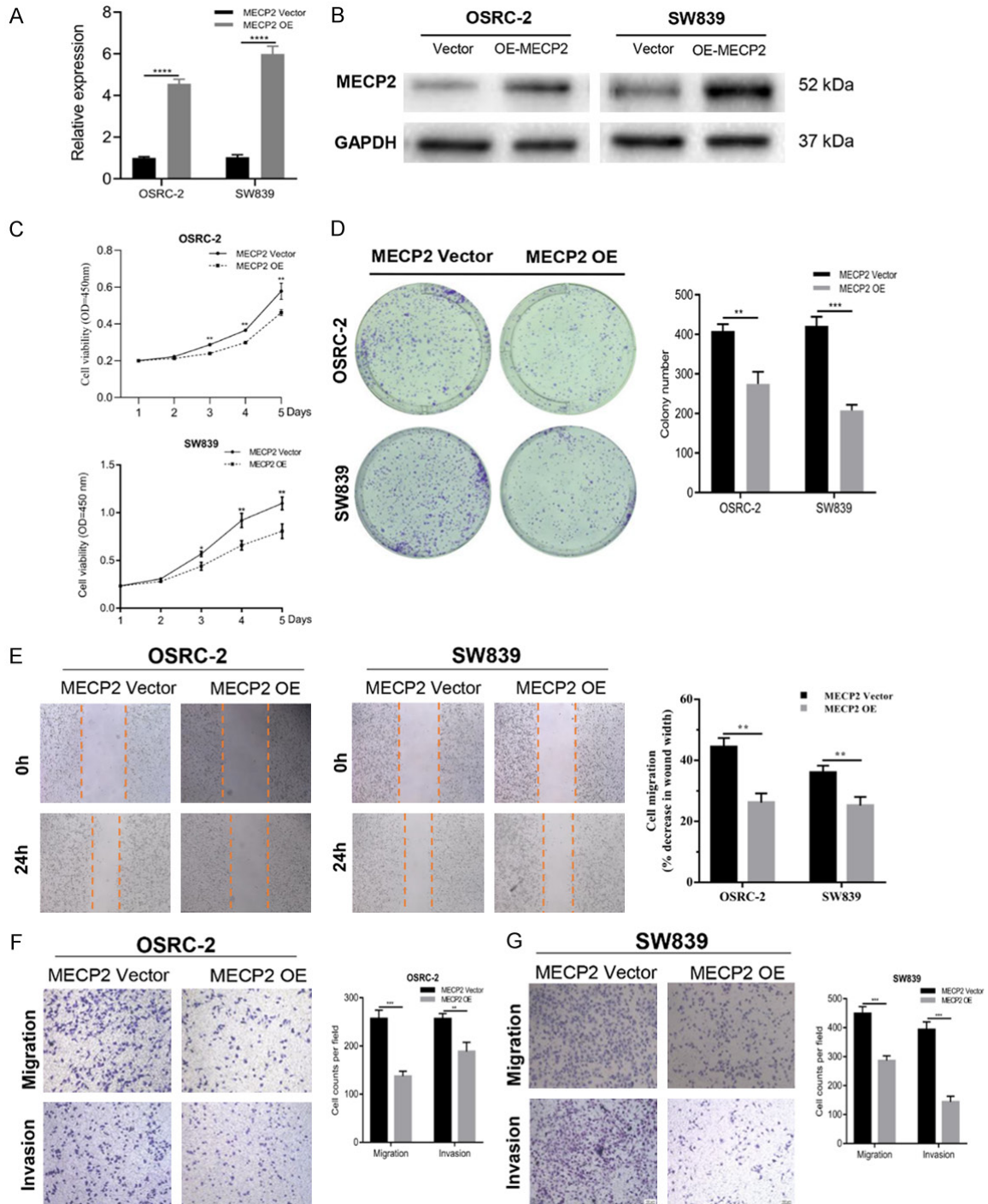


Figure 5. MECP2 inhibits the proliferation, migration and invasion capacity of RCC cells. A, B. The efficacy of MECP2 overexpressed plasmid was validated by qRT-PCR and western blot. C-G. CCK-8, colony formation, wound healing and transwell assays of RCC cells after transfection with MECP2 overexpressed plasmid or vector. Data indicate mean \pm SD of three experiments (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$).

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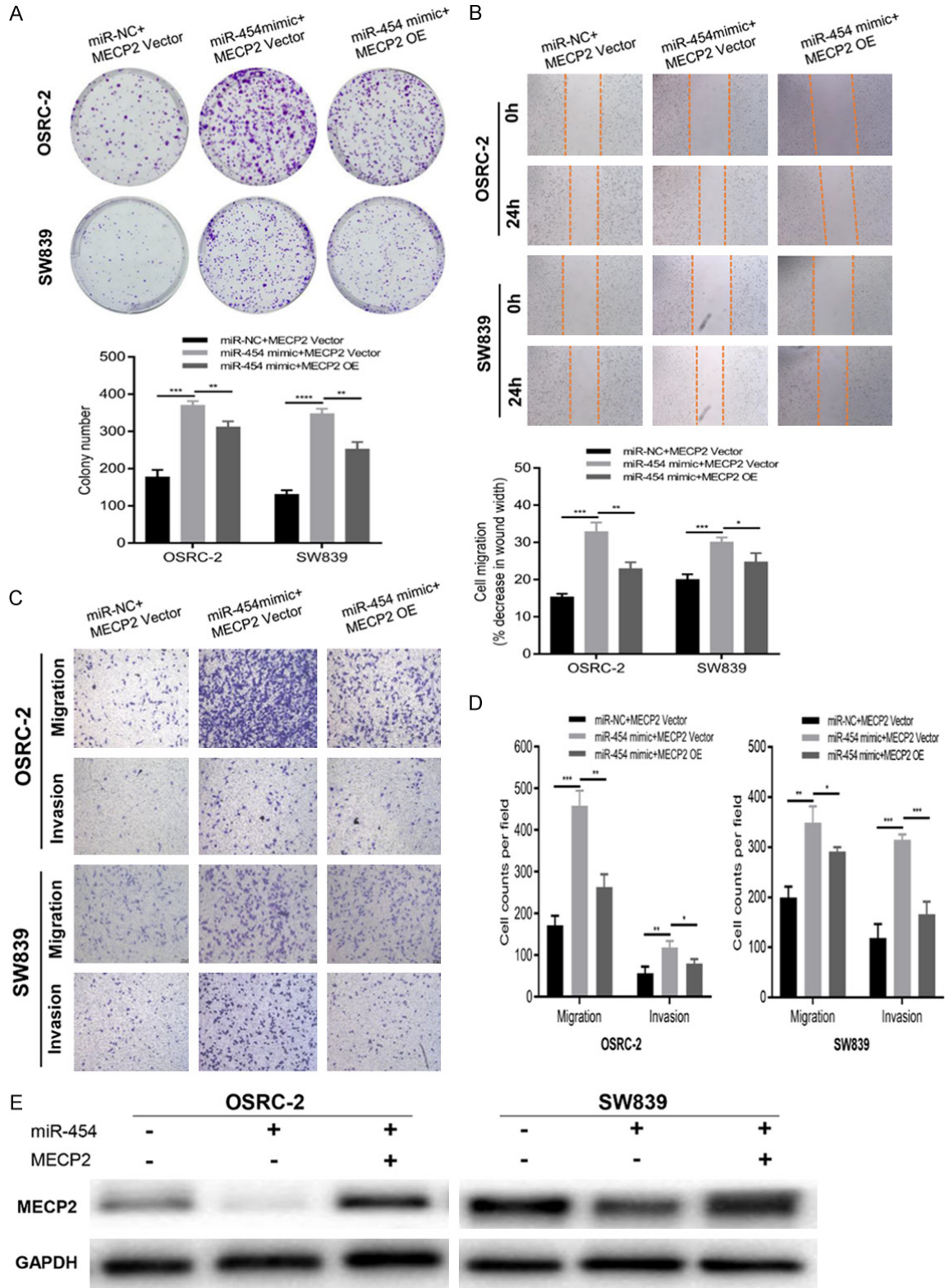


Figure 6. MECP2 restoration reverses the effect of miR-454 in RCC cells. A-D. Colony formation, wound healing and transwell assays of RCC cells co-transfected with miR-454 mimics and MECP2 overexpressed plasmids. E. The protein level of MECP2 in RCC cells co-transfected with miR-454 mimics and MECP2 overexpressed plasmids (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$).