

Erratum

PAK2 promotes migration and proliferation of salivary gland adenoid cystic carcinoma: Am J Transl Res. 2016; 8(8): 3387-3397

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A few minor errors were found in the published article AJTR0031234. Specifically, the representative hematoxylin-eosin (HE) image and immunohistochemistry (IHC) image of “Tubular AdCC-Patient #1” in **Figures 1A** and **2A** were incorrect. In **Figure 4A**, the wound healing assay of siRNA-1 of SACC-83 was placed incorrectly. The representative immunofluorescence image of “PAK2 siPAK2-1 of SACC-LM” in **Figure 5C** and “PAK2 Control of SACC-LM” in **Figure 6C** were mistakenly used. These errors do not affect the conclusions of the study. The authors sincerely apologize for the inadvertent misplacement of images. The corrected **Figures 1, 2, 4-6** are shown below.

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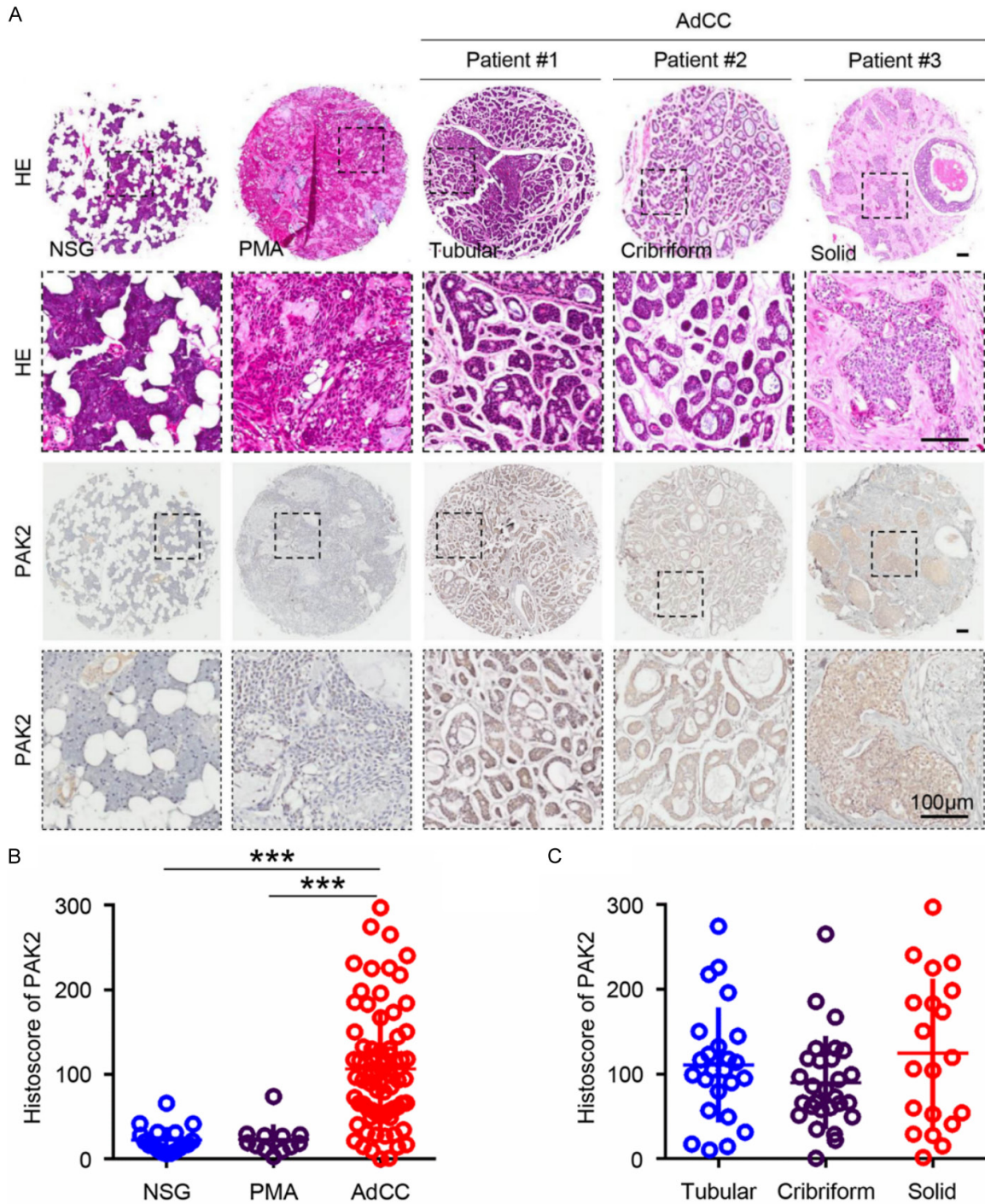


Figure 1. The expression of PAK2 is up-regulated in adenoid cystic carcinoma (AdCC). A. Serial sections of paraffin-embedded AdCC tissue microarray were stained with HE (upper panel) for orientation and immunohistochemistry for PAK2 (lower panel). Image from representative samples, including normal salivary glands (NSG), polymorphic adenoma (PMA), tubular AdCC (Patient #1), cribriform AdCC (Patient #2) and solid AdCC (Patient #3), were captured at the same low and high magnification. Scale bar =100 µm. B. Quantification of histoscore of PAK2 in NSG (n=18), PMA (n=12) and AdCC (n=72). Data are shown as mean ± SEM. *** $P < 0.001$. C. Quantification of histoscore of PAK2 in tubular AdCC (n=24), cribriform AdCC (n=28) and solid AdCC (n=20) show no significance.

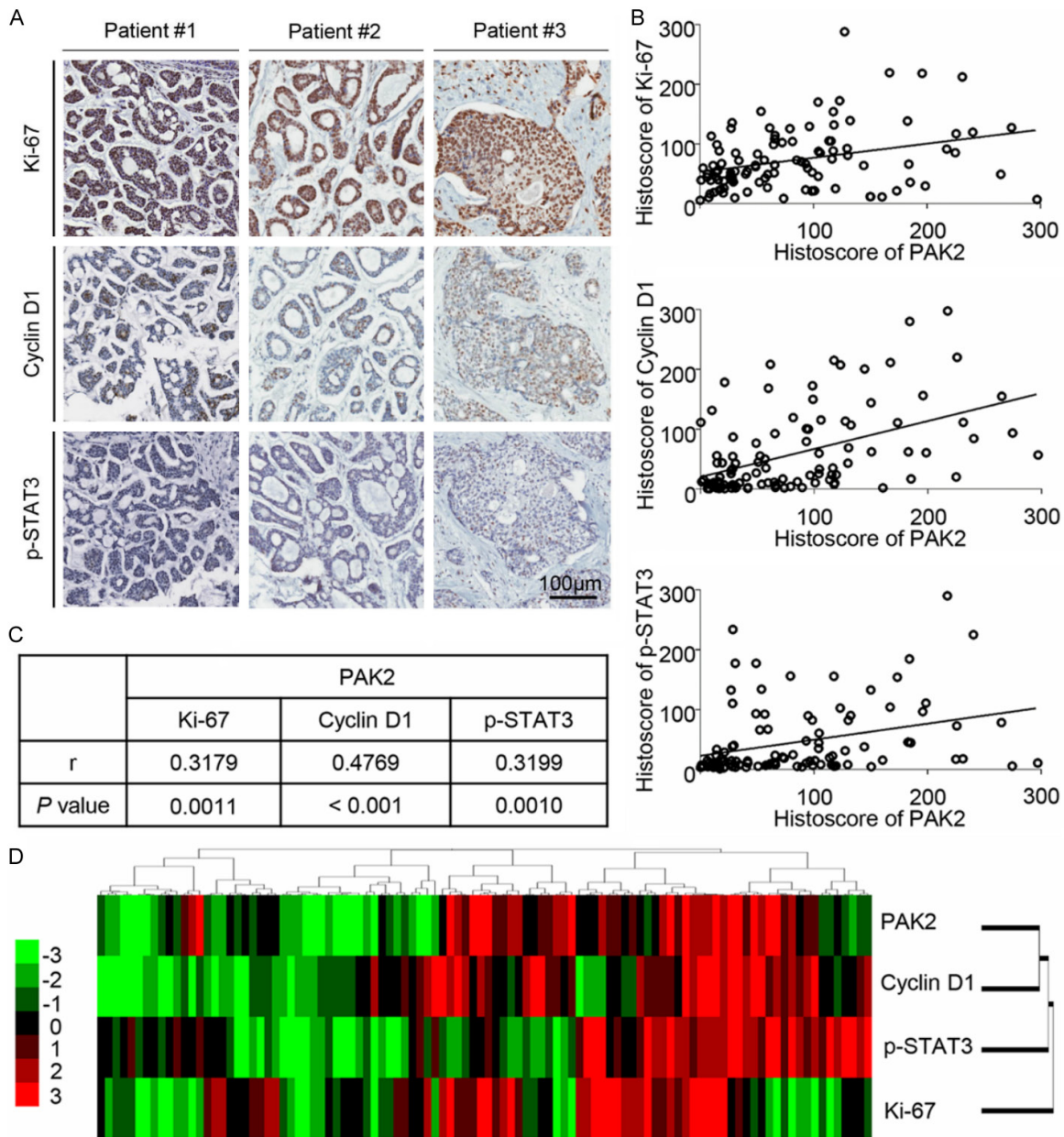


Figure 2. The expression of PAK2 is correlated with Ki-67, Cyclin D1 and p-STAT3. **A.** The typical immunohistochemical staining for Ki-67, Cyclin D1 and p-STAT3 in tubular AdCC (Patient #1), cribriform AdCC (Patient #2) and solid AdCC (Patient #3). Scale bar =100 μm. **B.** The PAK2 expression in NSG, PMA and AdCC correlated with Ki-67, Cyclin D1 and p-STAT3. A Pearson correlation was used to analyze the linear correlation between two variables. Data presented as dot plot of each specimen, statistics including NSG (n=18), PMA (n=12) and AdCC (n=72). **C.** The *P* value and correlation coefficient between PAK2 and Ki-67, Cyclin D1, p-STAT3 by the Pearson correlation analyses and linear tendency test. **D.** Hierarchical clustering of histoscore of PAK2, Ki-67, Cyclin D1 and p-STAT3 in NSG, PMA and AdCC (total n=102).

PAK2 promotes migration and proliferation in AdCC

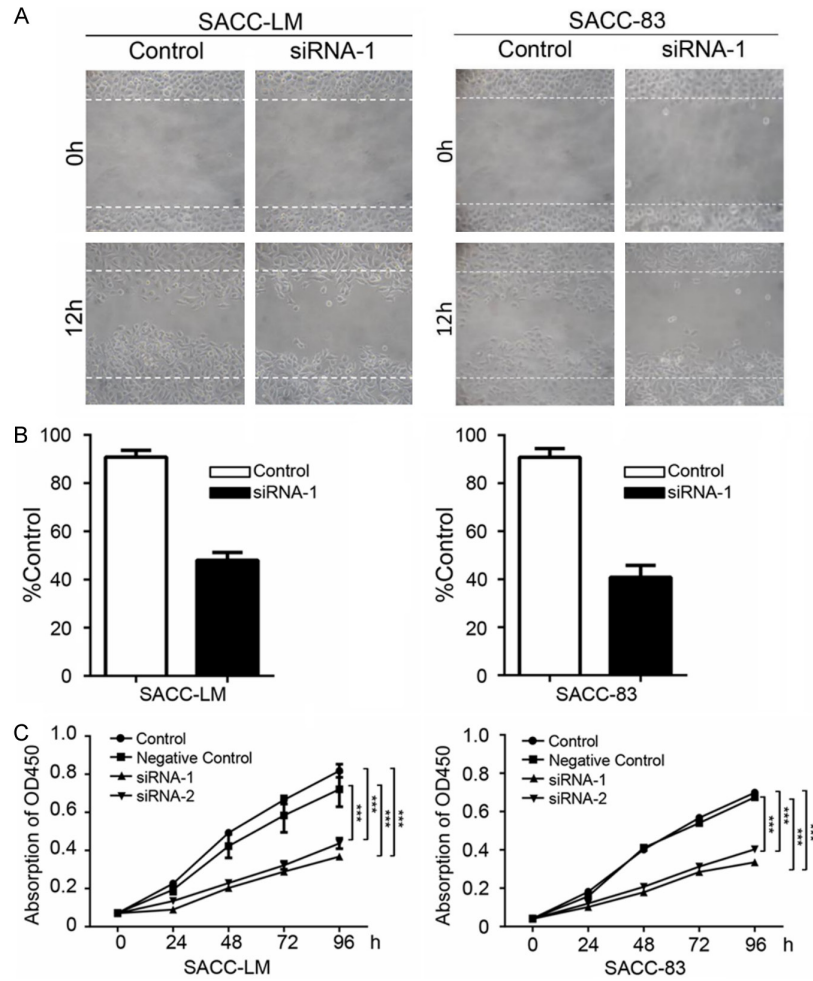


Figure 4. PAK2 knockdown inhibits SACC-LM and SACC-83 cells migration and proliferation. A. Wound healing assay in PAK2 siRNA-1 transfected SACC-LM and SACC-83 cells. B. Quantification of cell numbers indicates the statistical significance between PAK2 siRNA-1 and control. The cell number was calculated with Image J “Cell Counter” module. Mean $\pm$ SD. Unpaired *t* test with GraphPad 6.0. ****P*<0.001. C. CCK8 proliferation assays with SACC-LM and SACC-83 cells transfected with PAK2 siRNA1, PAK2 siRNA2 and negative control compared with control. The absorption of OD450 was measured at 0, 24, 48, 72 and 96 hours. ****P*<0.001.

PAK2 promotes migration and proliferation in AdCC

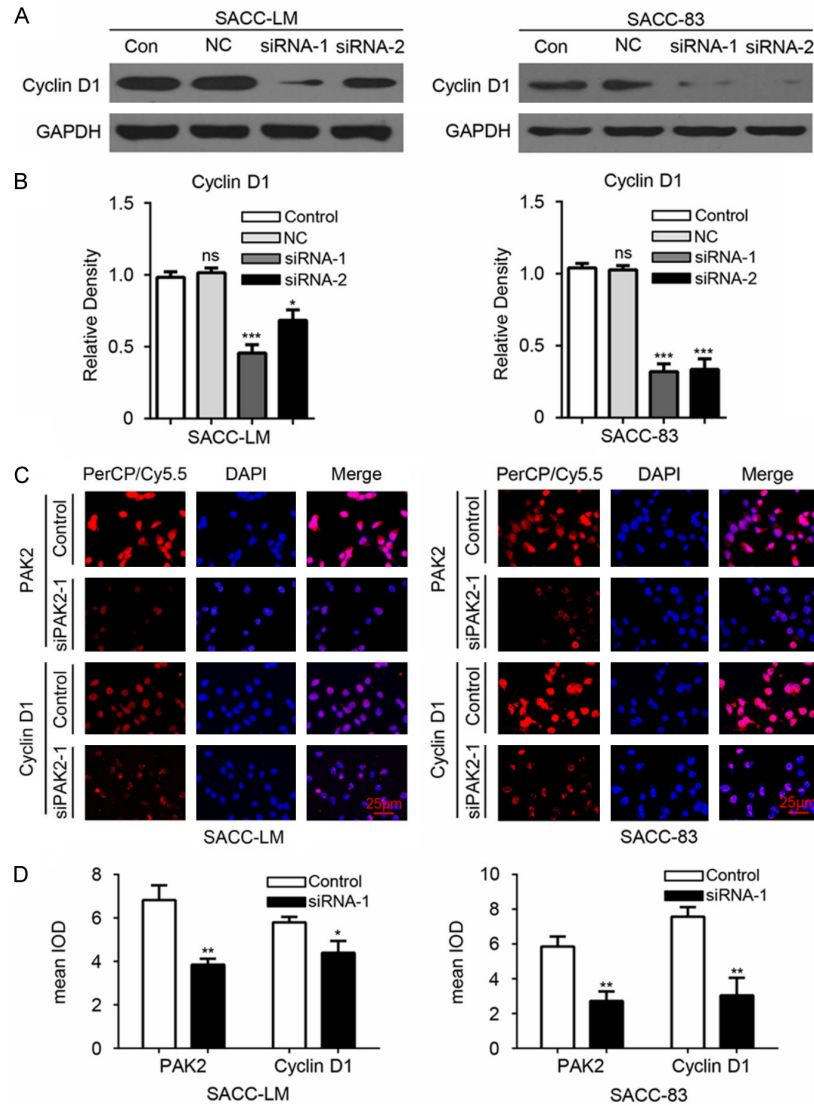


Figure 5. PAK2 knockdown reduces the expression of Cyclin D1 in SACC-LM and SACC-83 cells. **A.** Western blot shows the alteration of the protein level of Cyclin D1 in SACC-LM and SACC-83 cells. Control (Con), Negative Control (NC). **B.** The densitometric values were qualified with Image J software and the relative density (compared with control group) of the Western blot of Cyclin D1 in SACC-LM and SACC-83 cells was calculated. The result was analyzed with One-way ANOVA by Graphpad 6.0 and the data are shown as mean $\pm$ SEM of three independent experiments. * $P < 0.05$; *** $P < 0.001$; ns, no significance. **C.** Immunofluorescence shows knockdown of PAK2 with PAK2 siRNA1 decreases the expression of PAK2 and Cyclin D1 in SACC-LM and SACC-83 cell line. Scale bar = 25 μ m. **D.** The mean integrated optical density (IOD) of immunofluorescence of SACC-LM and SACC-83 cells was qualified with Image J software and analyzed with unpaired t test by Graphpad 6.0. * $P < 0.05$; ** $P < 0.01$.

PAK2 promotes migration and proliferation in AdCC

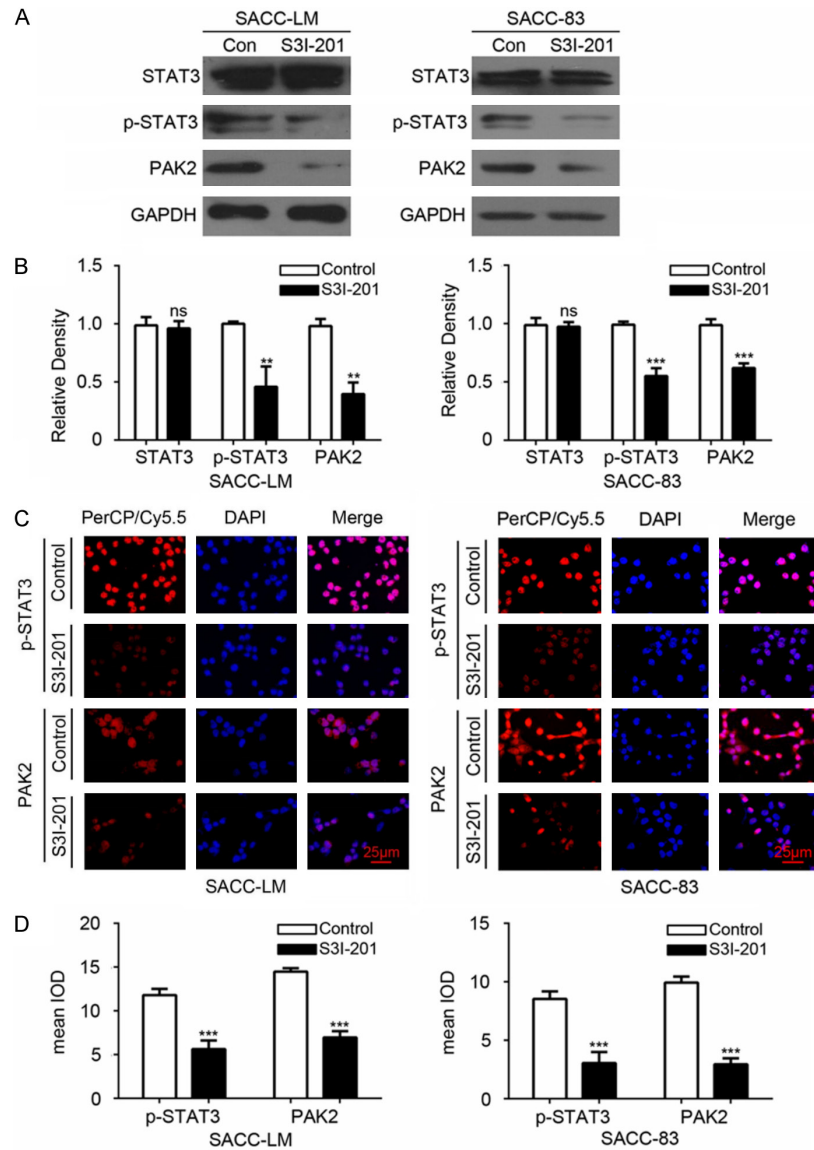


Figure 6. The inhibition of STAT3 reduced the protein level of PAK2 in SACC-LM and SACC-83 cells. A. Western blot shows that SACC-LM and SACC-83 cells treated with S3I-201 (100 μ M) reduced the expression of p-STAT3 and PAK2. B. Qualification of the result of Western blot with Image J shows the protein level of p-STAT3 and PAK2 significantly decreased in SACC-LM and SACC-83 cells treated with S3I-201 compared with control group. The data were analyzed with One-way ANOVA by Graphpad 6.0 and shown as mean $\pm$ SEM of three independent experiments. ** P <0.01. C. Representative immunofluorescence shows p-STAT3 and PAK2 were decreased in SACC-LM and SACC-83 cells after treatment with S3I-201. Scale bar =25 μ m. D. Quantification of immunofluorescence with Image J software and analyzed with unpaired t test in SACC-LM and SACC-83 cells. Data are shown as mean $\pm$ SEM. *** P <0.001.