Author Correction: Locoregional delivery of CAR T cells to the cerebrospinal fluid for treatment of metastatic medulloblastoma and ependymoma

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In the version of this article initially published, a corresponding author (Nabil Ahmed) was not identified as such. The correct citation should include an ‘envelope’ icon that links to the following email address: nmahmed@texaschildrens.org.

There were 49 duplication or placement errors in BLI images (Figs. 1, 3 and 4 and Supplementary Figs. 2, 3, 4, 6, 7, 10, 13 and 15) and H&E images (Supplementary Figs. 1, 2, 4, 7 and 15). The correct images are now provided, and a complete list of the images that were corrected is included in the table here. These errors happened during the preparation of the final version of the figures, which comprised over 2,500 BLI and H&E image panels, and did not affect the results of the paper, as quantification was done using primary data acquired at the same time as the imaging and was independent of images presented in the figures.

Figure	Panel (treatment group)	Column	Row
Figure 1c	Medulloblastoma: Med114FH → TRI CARs	1	2
Figure 3c	Ependymoma: Ep612 → HER2 CARs	4	3
Figure 3c	Ependymoma: Ep612 → HER2 CARs	5	2
Figure 4c	Medulloblastoma: Med114FH → i.v. T cell	3	1
Figure 4c	Medulloblastoma: Med114FH → i.v. T cell	4	3
Figure 4c	Medulloblastoma: Med114FH → i.v. TRI CARs	3	2
Figure 4c	Medulloblastoma: Med114FH → i.v. TRI CARs	1	3
Supplementary Figure 1b	Medulloblastoma: Med114FH → T cell controls	1	5
Supplementary Figure 1b	Medulloblastoma: Med114FH → T cell controls	3	5
Supplementary Figure 2	Medulloblastoma: Med411FH → T cell controls	6	5
Supplementary Figure 2	Medulloblastoma: Med411FH → EPHA2 CARs	5	5
Supplementary Figure 2	Medulloblastoma: Med411FH → EPHA2 CARs	5	2
Supplementary Figure 2	Medulloblastoma: Med411FH → EPHA2 CARs	2	4
Supplementary Figure 3	Medulloblastoma: Med411H Two rounds of T cells	1	4
Supplementary Figure 4	Medulloblastoma: Med114FH Two rounds of TRI-CARs	4	5
Supplementary Figure 4	Medulloblastoma: Med114FH Two rounds of TRI-CARs	7	1
Supplementary Figure 4	Medulloblastoma: Med114FH Two rounds of TRI-CARs	2	1
Supplementary Figure 4	Medulloblastoma: Med114FH Two rounds of EPHA2 CARs	3	2
Supplementary Figure 4	Medulloblastoma: Med114FH Two rounds of EPHA2 CARs	7	1
Supplementary Figure 4	Medulloblastoma: Med114FH Two rounds of EPHA2 CARs	6	1
Supplementary Figure 6a	Ependymoma: MDT-PFA5 → TRI CARs	1	1
Supplementary Figure 6a	Ependymoma: MDT-PFA5 → TRI CARs	2	1
Supplementary Figure 6a	Ependymoma: MDT-PFA5 → TRI CARs	2	2
Supplementary Figure 6a	Ependymoma: MDT-PFA5 → TRI CARs	3	1
Supplementary Figure 6a	Ependymoma: MDT-PFA5 → TRI CARs	3	2
Supplementary Figure 6a	Ependymoma: MDT-PFA5 → TRI CARs	4	1

Figure	Panel (treatment group)	Column	Row
Supplementary Figure 6a	Ependymoma: MDT-PFA5 → TRI CARs	4	2
Supplementary Figure 6b	Ependymoma: MDT-PFA4 → HER2 CARs	1	3
Supplementary Figure 6b	Ependymoma: MDT-PFA4 → HER2 CARs	2	3
Supplementary Figure 6b	Ependymoma: MDT-PFA4 → HER2 CARs	3	3
Supplementary Figure 7a	Medulloblastoma: Med411H IV versus IT single round TRI CARs	5	2
Supplementary Figure 7b	Medulloblastoma: MDT-MMB: IV versus IT single round T cells	1	5
Supplementary Figure 7b	Medulloblastoma: MDT-MMB: IV versus IT single round TRI-CARs	2	1
Supplementary Figure 10a	Medulloblastoma: Med114FH → Lateral Ventricle 2.5×10 ⁶ TRI CARs	1	3
Supplementary Figure 10a	Medulloblastoma: Med114FH → Lateral Ventricle 2.5×10 ⁶ TRI CARs	2	3
Supplementary Figure 13b	Medulloblastoma: Med411FH T cells + Azacytidine	4	2
Supplementary Figure 13b	Medulloblastoma: Med411FH EPHA2 CARs + Azacytidine	2	4
Supplementary Figure 13b	Medulloblastoma: Med411FH EPHA2 CARs + Azacytidine	2	5
Supplementary Figure 15a	Ependymoma: MDT-PFA4 → HER2 CARs + Azacytidine	7	2
Supplementary Figure 15a	Ependymoma: MDT-PFA4 → HER2 CARs + Azacytidine	4	3
Supplementary Figure 15a	Ependymoma: MDT-PFA4 → TRI CARs + Azacytidine	6	1
Supplementary Figure 15a	Ependymoma: MDT-PFA4 → TRI CARs + Azacytidine	1	2
Supplementary Figure 15a	Ependymoma: MDT-PFA4 → TRI CARs + Azacytidine	2	2
Supplementary Figure 15a	Ependymoma: MDT-PFA4 → TRI CARs + Azacytidine	3	2
Supplementary Figure 15a	Ependymoma: MDT-PFA4 → TRI CARs + Azacytidine	3	4
Supplementary Figure 15b	Ependymoma: Ep612 → TRI CARs + Azacytidine	6	2
Supplementary Figure 15b	Ependymoma: Ep612 → HER2 CARs + Azacytidine	2	4
Supplementary Figure 15b	Ependymoma: Ep612 → T cells + Azacytidine	3	4

The legends to Figs. 2b, 4b, 5b and 6b did not acknowledge that data from experimental groups first shown in Fig. 1 had been replotted for comparison purposes. The correct panel legends end as follows, to include information about which experimental groups were replotted: “Data from experimental groups ‘no treatment, ‘single treatment non-transduced T-cells, ‘single treatment TRI CAR T-cells’ and ‘single treatment EPHA2 CAR T-cells’, first plotted in Fig. 1, were replotted in Fig. 2 as experimental comparisons” (Fig. 2b); “Data from experimental groups ‘no treatment, ‘single treatment non-transduced T-cells, ‘single treatment TRI CAR T-cells’ and ‘single treatment EPHA2 CAR T-cells’, first plotted in Fig. 1, were replotted in Fig. 4 as experimental comparisons” (Fig. 4b); “Data from experimental groups ‘no treatment, ‘single treatment non-transduced T-cells, ‘single treatment TRI CAR T-cells’ and ‘single treatment EPHA2 CAR T-cells’, first plotted in Fig. 1, were replotted in Fig. 5 as experimental comparisons” (Fig. 5b); and “Data from experimental groups ‘no treatment, ‘single treatment non-transduced T-cells, ‘single treatment TRI CAR T-cells’ and ‘single treatment EPHA2 CAR T-cells’, first plotted in Fig. 1, were replotted in Fig. 6 as experimental comparisons” (Fig. 6b).

In Extended Data Fig. 2d,f, the H score in the bottom right corner of each image was incorrect. The original and corrected images are provided here.

In Extended Data Fig. 4g, the label for the bottom row (‘Normal Paediatric Thalamus Tissue’) was incorrect; the correct label is ‘Normal Paediatric Thalamus Opticus’.

The following subsection of the Methods section was missing, immediately after the subsection ‘Orthotopic injection of tumor cells and bioluminescent imaging’:

Multiplex cytokine analysis

Soluble serum and CSF cytokines from animals treated with 2.5×10^6 , 5.0×10^6 and 10×10^6 EPHA2 CAR T-cells, TRI CAR T cells or non-transduced T cells, delivered intraventricularly via the lateral ventricle, or intravenously via the tail vein, were quantified using the human magnetic Luminex 18-Plex Assay (LXSAHM - MCP-1, MIP-1 α , GM-CSF, IFN- γ , IL-1 β , IL-2, IL-4, IL-5, IL-6, IL-7, IL-8, IL-10, IL-12p70, IL-13, IL-15, IL-17A, IL-23, TNF α) and the mouse magnetic Luminex 6-Plex Assay (LXSAMSM - GM-CSF, IFN- γ , IL-1 β , IL-6, LIX, TNF α) according to the manufacturer’s instructions (R&D Systems). Briefly, 25 μ l and 10 μ l (made to 50 μ l with diluent) of serum and CSF, respectively, were incubated in a 96-well plate with capture magnetic beads overnight at 4 °C on a microplate shaker. The following day, 50 μ l of diluted biotin-antibody cocktail was added to the wells and incubated at room temperature for an hour. The assay was developed by adding 50 μ l of diluted Streptavidin-PE and data acquired on a Luminex-200 instrument with xPONENT 4.3 software. Analysis was performed using R-studio and two-sided one-way analysis of variance (ANOVA) followed by Tukey post hoc test.

All errors have been corrected in the HTML and PDF versions of the article.

Extended Data Fig. 2 | Original and corrected.

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