Immunobiology of naïve and genetically modified HLA-class-I-knockdown human embryonic stem cells

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There were errors published in *J. Cell Sci.* 2011 **124**, 3029–3037.

The names of the following people were listed but should have been omitted from the list of authors:

Neil Phillips, Andrew Fire, Dolly Tyan, Mark Kay

Fig. 2 contains the following errors:

(a) An incorrect image of panel was published.
(b) Instead of eight, a total of ten animals made up both control groups that lead to the data shown in the graph.
(c) An incorrect image of panel c has been published.
(d) Balb/c cellular immune activation on the same day was significantly weaker after hESC^{KD} rather than hESC transplantation. Spot frequencies of IFN-γ and IL-4 (P=0.001 and P<0.001, respectively) were significantly lower after hESC^{KD} transplantation (d) when compared with hESCs.

The correct Fig. 2 is shown below.

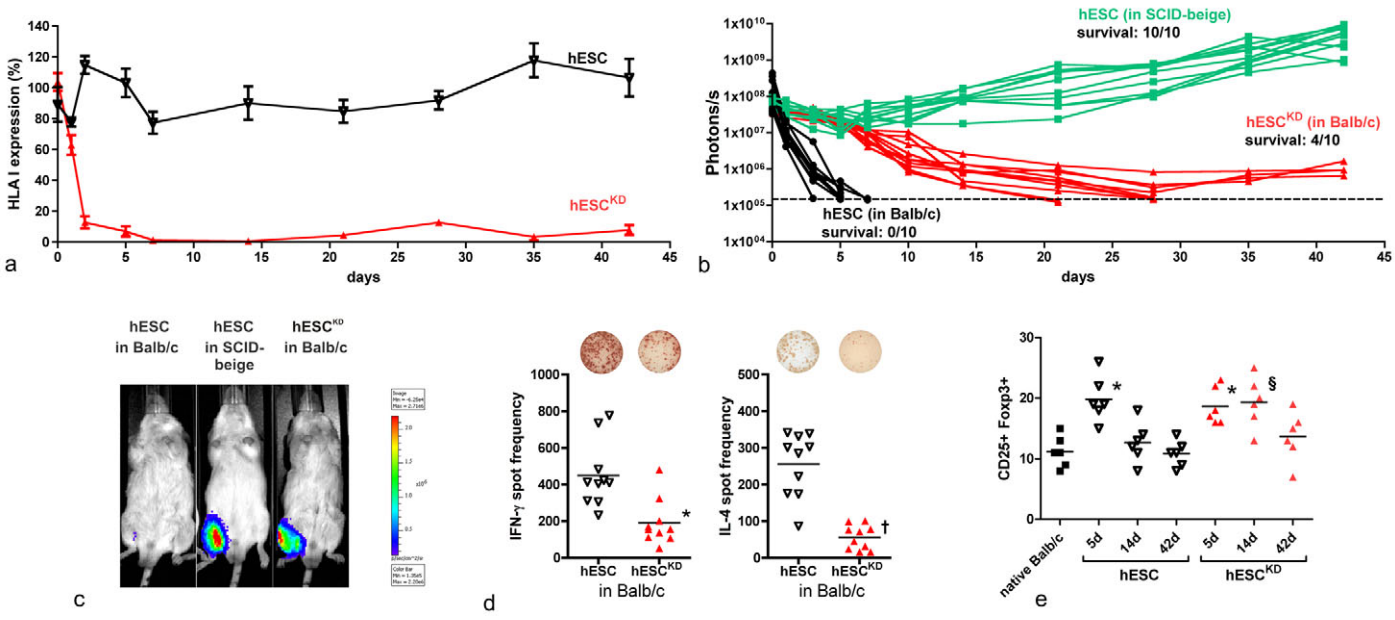

Fig. 2. Transplantation of hypoantigeneic hESC. (**a**) HLA I knockdown in hESC^{KD} was followed by flow cytometry and showed levels between 1% and 12% of those of naïve hESC between days 7 and 42 (means ± s.e.m.). (**b**) A total of 10^6 hESCs or hESC^{KD} were transplanted into the gastrocnemius muscle of either immunocompetent Balb/c or severely immunocompromised SCID-beige mice. All ten Balb/c mice rapidly rejected the hESC transplants, whereas the cells survived in ten SCID-beige recipients. Rejection of hESC^{KD} was markedly attenuated and four out of ten hESC^{KD} grafts achieved long-term survival. (**c**) On day 5, BLI signals from hESCs in SCID-beige and hESC^{KD} in Balb/c were similarly strong, whereas signals from hESCs in Balb/c were negligible. (**d**) Balb/c cellular immune activation on the same day was significantly weaker after hESC^{KD} rather than hESC transplantation with significantly lower IFN-γ (*P=0.001) and IL-4 spot frequencies ($^{\dagger}P$<0.001). (**e**) The percentage of Treg cells (CD25+ Foxp3+ cells) among the CD4+ population in inguinal lymph nodes was monitored over time. The Treg fraction increased after both hESC and hESC^{KD} transplantation (*P<0.05 compared with native Balb/c) but remained elevated only in the hESC^{KD} group ($^{\S}P$<0.05 compared with hESC after 14 days).

Fig. 5 contains the following errors:

(a, b) After incubation with CD3+ CD56– lymphocytes, hESCs (P<0.001 and P=0.005) but not hESC^{KD} (P=1.0 and P=0.708) significantly increased the spot frequencies for IFN-γ (**a**) and IL-4 (**b**), respectively, compared with resting responder lymphocytes.

The correct Fig. 5 is shown below.

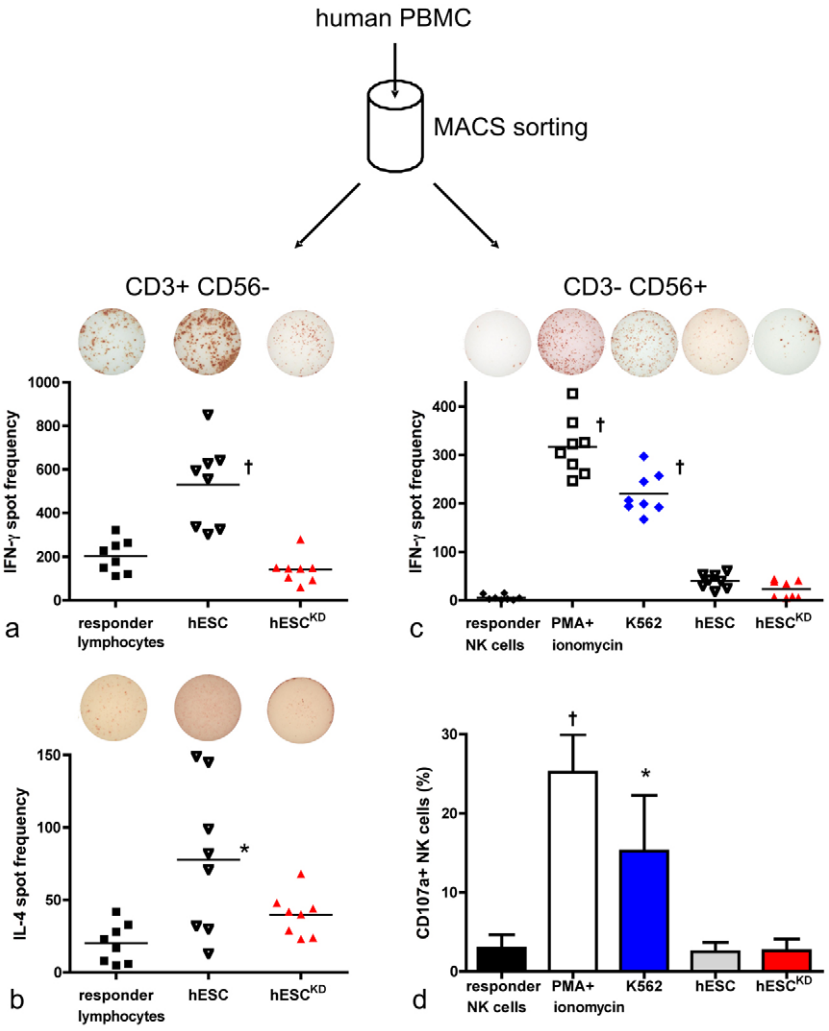

Fig. 5. Allogeneic cytotoxic killing of hESC. Human PBMCs were separated into lymphocytes (CD3+ CD56–) and NK cells (CD3– CD56+). IFN-γ (**a**) and IL-4 (**b**) Elispot assays revealed that only hESCs (†P<0.001 and $*P$=0.005), and not hESC^{KD} (P=1.0 and P=0.708), significantly induced allogeneic lymphocyte activation in vitro compared with responder lymphocytes. NK cell activation (**c**) and CD107a surface expression (**d**) were provoked by either PMA plus ionomycin stimulation or K562 incubation. $*P$<0.05 and $^{\dagger}P$<0.001 compared with responder NK cells. Both hESCs and hESC^{KD} did not induce significant NK cell activation.

The funding section has been accidentally omitted and should read:

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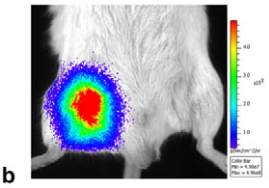
In supplementary material Fig. S2, the BLI image of the hind limb (panel b) is incorrect. The published legend is correct.

The correct panel b is shown below.



The first author apologises for these errors.