Telomerase abrogates aneuploidy-induced telomere replication stress, senescence and cell depletion

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Correction to *The EMBO Journal* (2015) 34: 1371–1384. DOI: 10.15252/emboj.201490070 Published online 27 March 2015

The authors state that errors occurred during formatting of Fig 2B and Supplementary Fig 3C during the submission process of the original manuscript. The histogram of Fig 2B was mistakenly duplicated in Supplementary Fig S3C. The corrected histogram of Supplementary Fig S3C is shown below. In addition, Fig 2B contains two labeling errors of *P*-values, originating from mistakes in the labeling during the graphical assembly of the figure: The *P*-value for OSBPL3-shRNA vs. scrambled shRNA should read 0.0218 instead of 0.0216, and the *P*-value for GJB3-shRNA vs. scrambled shRNA should read 0.0011 instead of 0.0012. The corrected Fig 2B is shown below. For the experiments shown in Fig 2B and Supplementary Fig S3C, a total number of 74–174 cells was analyzed in 3–14 vision fields per cell line.

Further, γ H2AX staining of IMR90 cells mentioned in the results section (page 1373, last sentence "... telomerase-negative BJ and IMR90 fibroblasts exhibited a strong accumulation of DNA damage (staining positive for both γ H2AX and 53BP1) at early passage after shRNA transduction (Fig 2A, C and D, Supplementary Fig S3A and B)...") was not depicted in the paper, and the 53BP1 staining was performed only on the BJ cells. To correct for this mistake, the text and data presentation of the result section on the description of DNA damage foci (page 1373, last sentence, and page 1374, first paragraph) is specified as follows: "The experiments on IMR90 cells were conducted only for γ H2AX staining. These results are now provided in Supplementary Fig S8".

The description and presentation of Western blot results in Fig 1D (page 1372, first paragraph on the right column) is corrected as follows: The depicted analyses of p-p53, p-p38, and GAPDH in Fig 1D (see also the corresponding Source Data file in the original article) were all analyzed from the same blot. A repeat of the p-p53 Western blot was run on a separate gel using the same protein lysates and loading buffer (see Source data for Figure 1D below).

The Western blot for p21 in Fig 1D and the corresponding beta-actin control were run in parallel with the same protein lysates and the same loading on 2 separate gels; the gel probed for beta-actin was not shown in the original source data file of Fig 1D. The gel was also used to repeat the analysis of p-p38 expression (see Source data for Figure 1D below). Results of p21 induction were confirmed by immunofluorescence analysis (see Fig 1E and Supplementary Fig S2H–K of the original manuscript).

The corrections do not affect the original conclusions presented. The authors apologize for the mistakes and any inconvenience they might have caused.

Editorial Note

These changes were based on the results of an investigation by the Leibniz Association. All authors agree with this correction.

Figure 2B. Corrected figure.

Supplementary Figure S3C. Corrected figure.

Supplementary Figure S8. γ -H2AX-staining in IMR90 and IMR90-hTERT cells.

Early passages of IMR90 and IMR90-TERT fibroblasts were infected with aneuploidy-inducing shRNAs or a scrambled shRNA. Quantification of nuclear γ -H2AX foci: comparison of scrambled shRNA vs. aneuploidy-inducing shRNAs in (A) IMR90 and (B) IMR90-TERT fibroblasts. Total numbers of 133–450 cells were analyzed in 6–18 vision fields per cell line.

Source data are available online for this figure.

Source data for Figure 1D. Extended depiction of Western blots related to Fig 1D.

(A) Repeat Western blot of phospho-p53 run on the same lysates but on a separate gel as the blot on p-p53, p-p38, and GAPDH shown in Fig 1D. The dashed line indicates that three unrelated lanes on the right were cut off. (B) Top: Western blot controlling the expression of beta-actin. The Western blot was run on the same lysates but on a separate gel as the blot for p21 shown in Fig 1D, but the beta-actin blot was not shown. The same blot was used to repeat the analysis of the expression of phosphorylated p38 protein (bottom). Please note that this blot contained one additional scrambled shRNA as a control (left of the dashed line). This was cut out for depiction of p21 expression in Fig 1D. PeqGOLD protein marker V (PeqLab, Erlangen, Germany) was loaded on all gels to assign the right protein size in kDa.