CORRECTION

Correction to: Ionizing radiation-induced NF-κB activation requires PARP-1 function to confer radioresistance

Stephany J. Veuger, Jill E. Hunter and Barbara W. Durkacz

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Figure 1 of the original publication manuscript 'Ionizing radiation-induced NF-κB activation requires PARP-1 function to confer radioresistance' contained some areas of high similarity that may have resulted from an error while copy/pasting individual blots used to prepare the figure. The data in Figure 1 do not directly relate to or affect the interpretation of the data that underpin the key finding of the manuscript which is to show that potentiation of IR-induced cytotoxicity by the PARP inhibitor AG14361 is mediated solely by inhibition of NF-κB activation. All the blots in Figure 1 are there for completion only; for example, to repeat previously published work by others (Fig. 1a, b), demonstrate knockout status (1a for PARP in $PARP^{-/-}$ cells and p65 in $p65^{-/-}$ cells) or to demonstrate the efficiency of a technique (e.g., siRNA) (Fig. 1c). The corrected version of Figure 1 is presented in this correction. The authors would like to apologise to the readers for these errors.

Results

Characterisation of cell lines

$P65^{-/-}$ MEFs lacked p65, but showed similar levels of PARP-1 to the $p65^{+/+}$ cells (Fig. 1A). PARP-$1^{-/-}$ MEFs lacked PARP-1 but showed bands of similar intensity to the PARP-$1^{+/+}$ cells for p65. The two breast cancer cell lines contained similar levels of PARP-1 and p65. There was very little nuclear p50 or p65 in the PARP-$1^{+/+}$, PARP-$1^{-/-}$, $p65^{+/+}$ and $p65^{-/-}$ MEFs (data not shown). MDA cells are reported to have higher levels of p50 and p65 in the nucleus and a lower level of IκBβ compared to T47D cells (Nakshatri et al., 1997). We also found higher nuclear levels of p65 in the MDA cells (Fig. 1B), but no difference in the levels of IκBα (Fig. 3A) or IκBβ (Data not shown). Transient transfection of p65 siRNA resulted in knockdown of p65 protein, and this was maximal (95% reduction) by 48 h (Fig. 1C), and persisted up to 72 h. Fig. 1D shows that PARP activity was very similar in all the cell lines. We have previously shown that PARP activity is very low (<5%) in the PARP-1-/- MEFs used here (Veuger et al., 2003).

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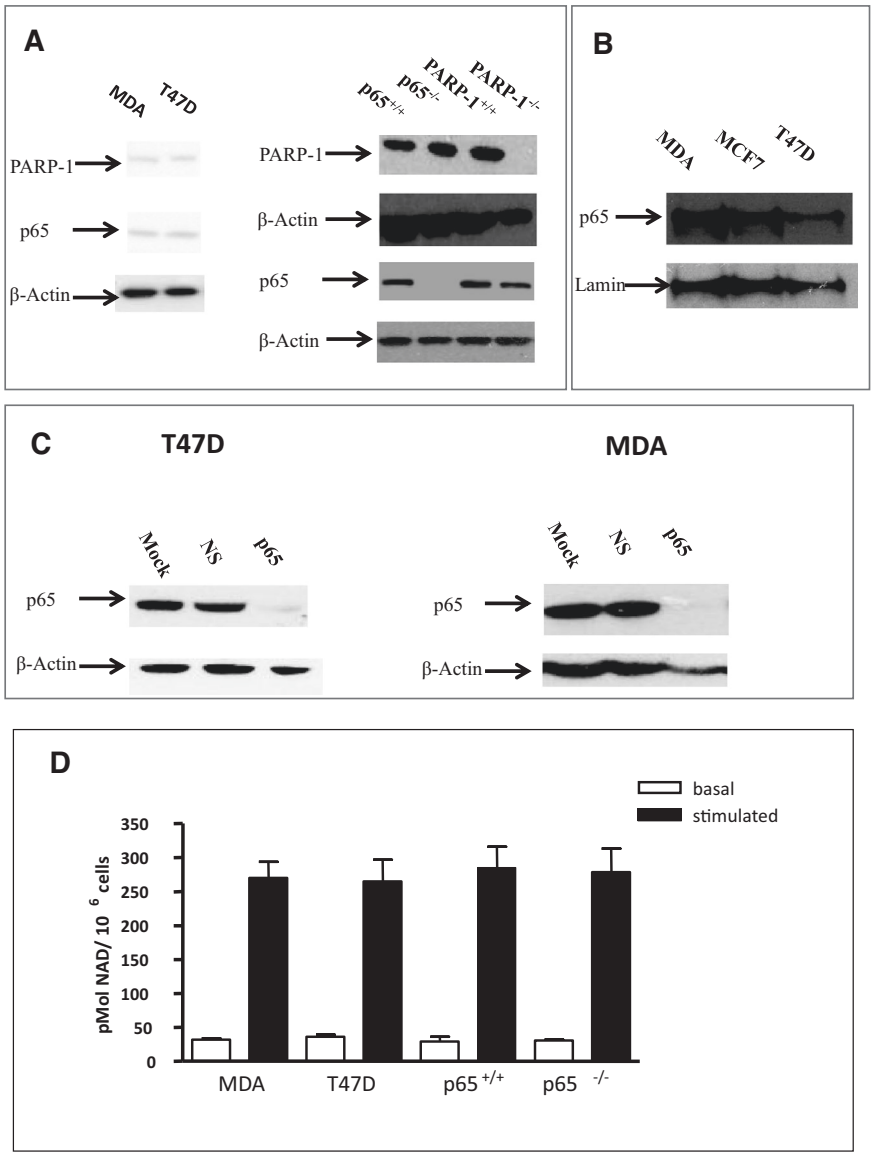

Fig. 1 Characterization of cell lines (**A**) Western blots of whole cell extracts from untreated cells. Blots were probed for PARP-1, p65 and actin. (**B**) Western blots of nuclear extracts from untreated cells. Blots were probed for p65 and lamin. (**C**) Western blots of whole cell extracts of MDAMB-231 and T47D at 48 h following transfection with vehicle alone, non-specific siRNA or p65 siRNA. (**D**) PARP-1 activity. Open bars, basal activity in the absence of oligonucleotide; closed bars, oligonucleotide-stimulated activity. Results are the mean of three replicates from three independent experiments ± SE.