

**Supplementary table A. Datasets included in the meta-analysis**

Author	Cell lines	Genotype	Treatment	Time points	Array
Hissong, JG; GEO: GSE770 (Barrett, Troup et al. 2007)	LNCaP C4-2 Prostate adenocarcinoma cells	WT cells	IR- 10 Sv	0, 1, 2, 4, 6, 8, 12, 16, 20 & 24h	Affymetrix U95Av2
(Jen and Cheung 2003)	Lymphoblastoid cell lines	WT cells	IR - 3 or 10 Gy	0, 1, 2, 6, 12, & 24h	Affymetrix U95A
(Rieger, Hong et al. 2004)	Lymphoblastoid cell lines	* 14 patients with severe IR toxicity (RadS) * 13 patients with no sensitivity to IR (RadC) * 15 patients with skin cancer (SkCa) * 15 healthy controls (NoCa)	* IR - 5 Gy * UV - 10J/m <sup>2</sup> * Mock controls	IR - 4h UV- 24h	Affymetrix U95Av2
(Stankovic, Hubank et al. 2004)	Peripheral blood mononuclear cells (PBMCs) isolated from patients	16 patients with B-CLL: * 6 <i>ATM</i> -mutant * 5 <i>TP53</i> -mutant * 5 <i>ATM/TP53</i> WT	IR - 5 Gy	10h	Affymetrix U95Av2
Rashi-Elkeles (Unpublished results)	BJ1-hTert (foreskin fibroblasts)	WT cells	NCS - 200 ng/ml	* IR - 0, 2, 4, 6, 8 & 12h * 8h mock control	Affymetrix HG-U133A2
Rashi-Elkeles GEO: GSE30240. (current results)	5 different cell lines	* WT cells: Bj1- hTert, TK6 * Cancerous cell lines: G361, HepG2 & U2OS	IR - 5 Gy	* IR - 0, 3 & 6h * 3 & 6h mock controls	Affymetrix HG-U133A plus 2.0

Barrett, T., D. B. Troup, et al. (2007). "NCBI GEO: mining tens of millions of expression profiles-- database and tools update." *Nucleic Acids Res* 35(Database issue): D760-765.

Jen, K. Y. and V. G. Cheung (2003). "Transcriptional response of lymphoblastoid cells to ionizing radiation." *Genome Res* 13(9): 2092-2100.

Rieger, K. E., W. J. Hong, et al. (2004). "Toxicity from radiation therapy associated with abnormal transcriptional responses to DNA damage." *Proc Natl Acad Sci U S A* 101(17): 6635-6640.

Stankovic, T., M. Hubank, et al. (2004). "Microarray analysis reveals that TP53- and ATM-mutant B-CLLs share a defect in activating proapoptotic responses after DNA damage but are distinguished by major differences in activating prosurvival responses." *Blood* 103(1): 291-300.