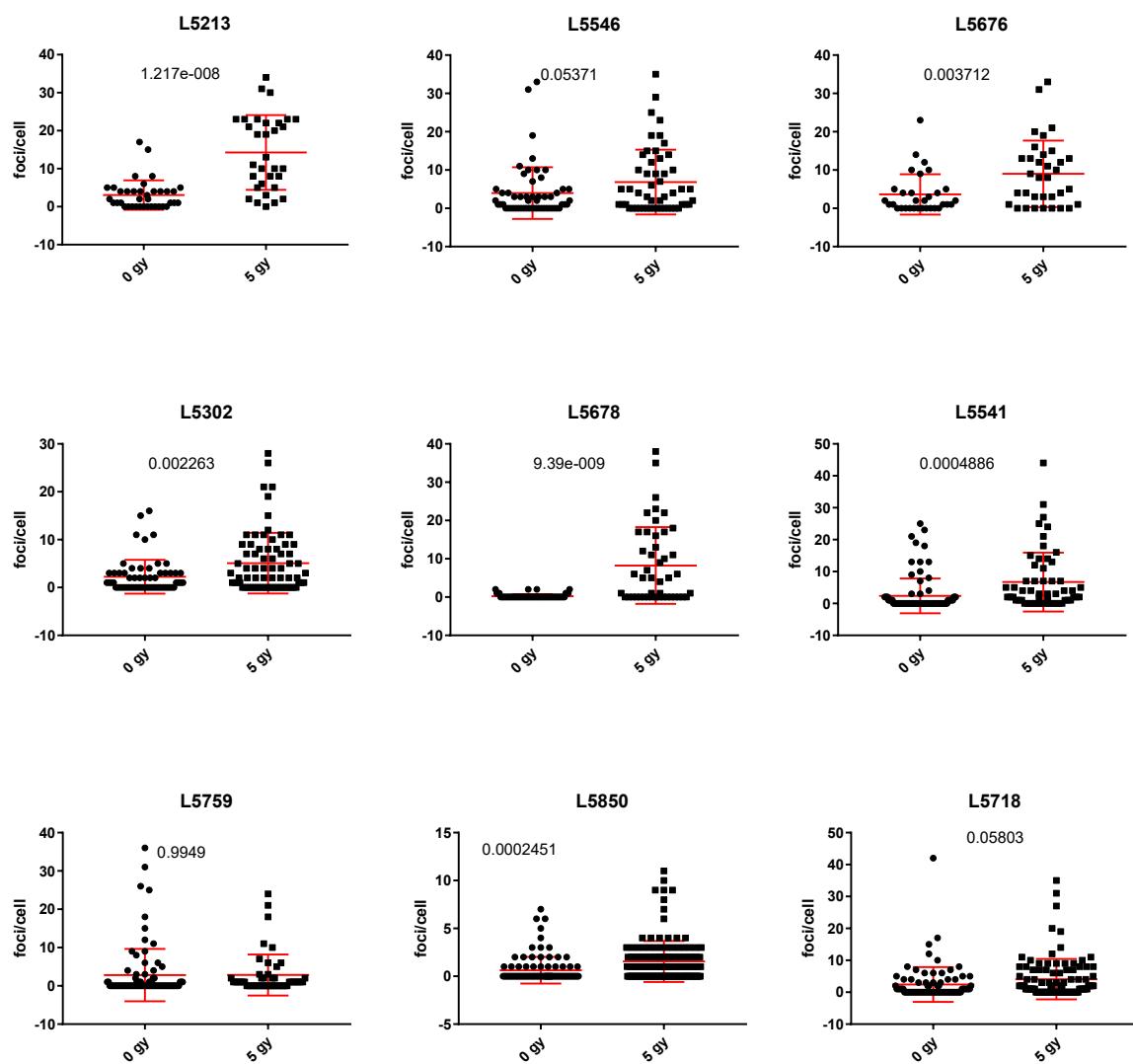
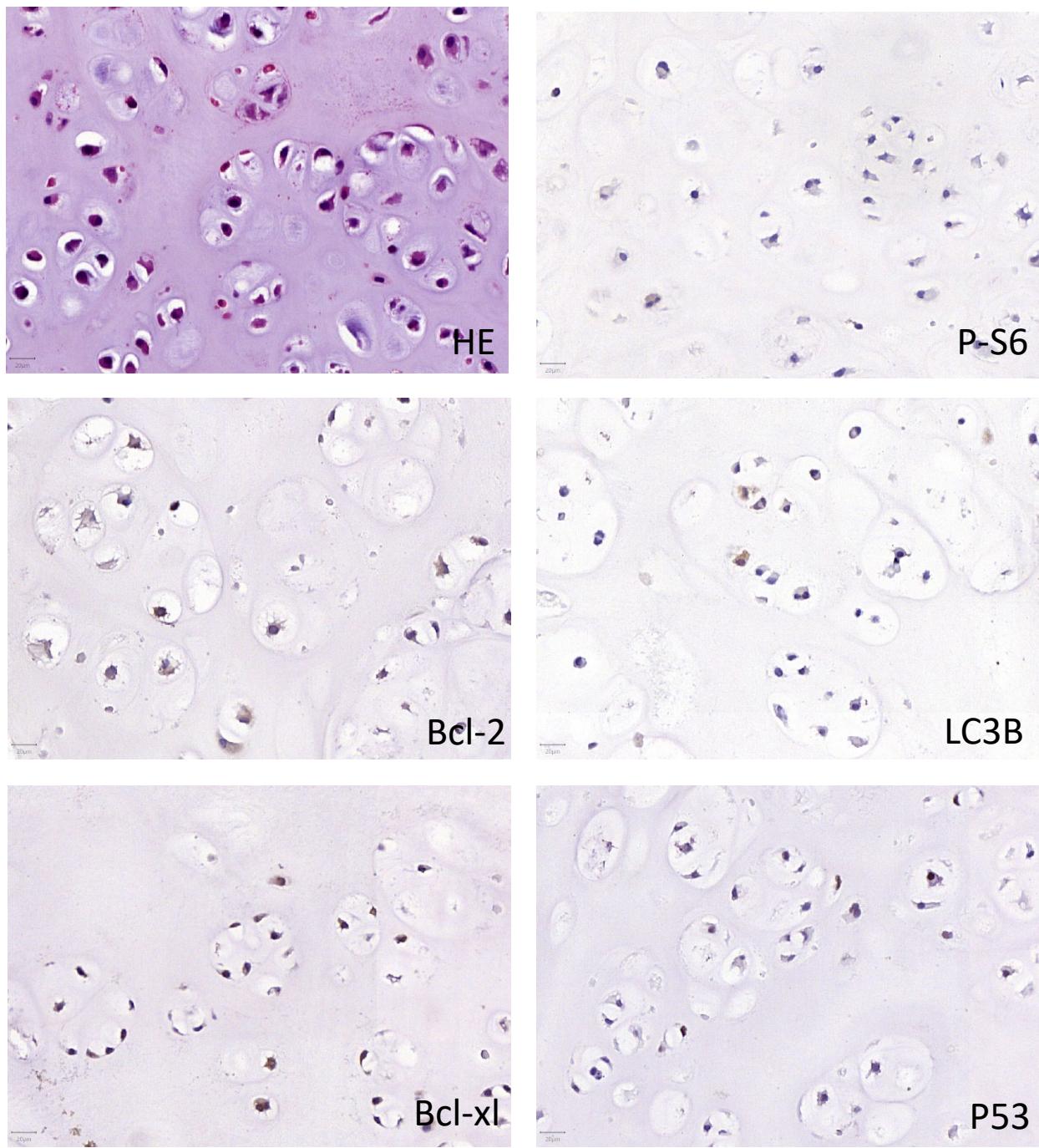


**Additional file 1: Figure S1 1. No relation between *IDH* mutation and radiosensitivity in chondrosarcoma cell lines** **A)** clonogenic assay of JJ012 cells with or without 10  $\mu$ M mutant IDH1 inhibitor AGI-5198. **B)** normalized cell index of JJ012 cells treated with 0, 2 or 4 Gy radiation in combination with 10  $\mu$ M mutant IDH1 inhibitor AGI-5198 or DMSO as a control. Black indicates 0 Gy, Red 0 Gy + AGI-5198, blue 2 Gy, Purple 2 Gy + AGI-5198, green 4 Gy, Orange 4 Gy + AGI-5198. **C)**

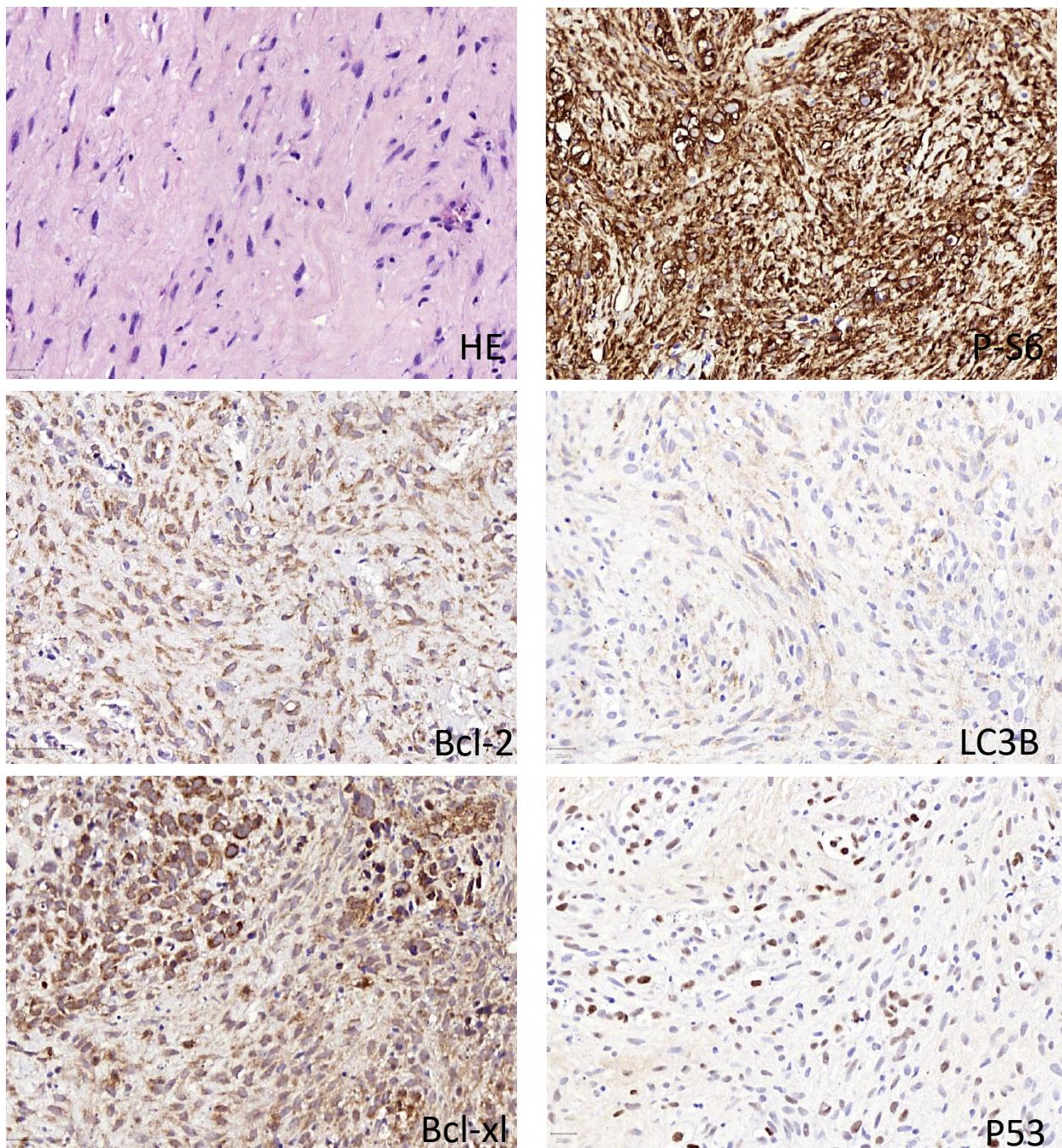
Amount of  $\gamma$ H2ax foci in CH2879, JJ012 and SW1353 after 2 and 24h of treatment with 5 Gy radiation with and without 10  $\mu$ M AGI-5198 or 250  $\mu$ M D-2HG **D)** glutathione levels of chondrosarcoma cells treated with 10  $\mu$ M AGI-5198 or 250  $\mu$ M D-2HG measured 1h after radiation.



**Additional file 1: Figure S2.**  $\gamma$ -H2ax staining quantification of chondrosarcoma patient samples treated with 5 Gy radiation. Significance was assessed by performing a T-test



**Additional file 1: Figure S3A L5847**



**Additional file 1: Figure S3B L5541**

**Additional file 1: Table S1.** Conditions of Immunohistochemical staining on chondrosarcoma tissue

Protein	Dilution	Blocking	Antigen Retrieval	Positive control	Manufacturer and clone
Bcl-2	1:100	-	Tris-EDTA	Tonsil	Dako clone 124
Bcl-xl	1:400	5% Milk	Citrate	Prostate	Cell signalling clone 54H6
Survivin	1:100	-	Citrate	Placenta	Cell signalling clone 71G4B7
P-S6	1:800	-	Citrate	Melanoma	Cell signalling clone D57.2.2E
P53	1:800	-	Citrate	Tonsil	Dako clone DO-7
LC3B	1:40000	5% Milk	Citrate	Cerebral cortex	Cell signalling Clone D11

**Additional file 1: Table S2.** Mutation analysis of chondrosarcoma cell lines. Results on *IDH* and *TP53* mutation status were published previously (de Jong et al. 2016).

	<i>IDH1</i>	<i>IDH2</i>	<i>TP53</i>	<i>CDKN2A</i>	<i>KRAS</i>	<i>PTEN</i>
SW1353	-	R172S	V203L	9:21971209 A-C*	G12C	-
JJ012	R132G	-	G199V	-	-	-
CH2879	-	-	S366A R273C#	-	-	R233Ter

# only found in 17% of cells

\* mutation found in splice site of intron