

Supplementary Material

Exploring the Control of PARP1 Levels in High-Grade Serous Ovarian Cancer

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This Supplemental material contains:

Supplemental Table S1-S2 and Supplemental Figure S1--S3

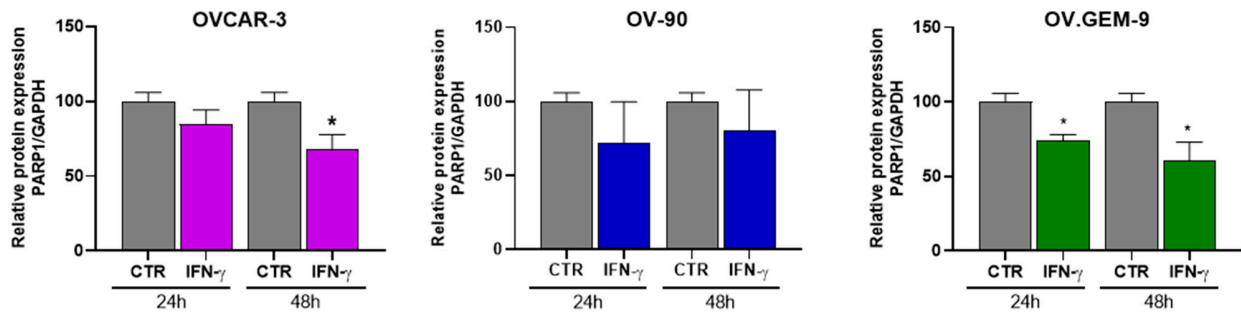
Supplementary Table S1. Primer sequences used for RT-qPCR.

Gene Symbol	Primer Forward	Primer Reverse	Amplicon Length (bp)
<i>STAT1</i>	ATGCTGGCACCAGAACGAA	GCTGGCACAATTGGGTTTCAA	84
<i>STAT3</i>	GAGAAGGACATCAGCGGTAA	CAGTGGAGACACCAGGATAT	177
<i>PA28α</i>	CCACACCAAGCTAGAAGGCT	AGCATTGCGGATCTCCATGAC	138
<i>PA28β</i>	CTTTTCCAGGAGGCTGAGGAAT	ATCATCCTTGGGTGGAGGGT	158
<i>PARP1</i>	GCCCTAAAGGCTCAGAACGA	CTACTCGGTCCAAGATCGCC	141
<i>GAPDH</i>	CCTGACCTGCCGTCTAGAAA	CTCAGTGTAGCCCAGGATGC	103

Supplementary Table S2. List of Antibodies used in Western Blot analysis.

Antibody name	Clone	Supplier
Phospho STAT1 (Tyr701)	Polyclonal	Santa Cruz Biotechnology (Santa Cruz, CA)
STAT1	Polyclonal	Cell Signaling Technology (Boston, MA)
PA28 α	AT12H3	Santa Cruz Biotechnology
PA28 β	G-10	Santa Cruz Biotechnology
PARP1	46D11	Cell Signaling Technology
Phospho STAT3 (Tyr705)	D3A7	Cell Signaling Technology
STAT3	124H6	Cell Signaling Technology
GAPDH	6C5	Abcam

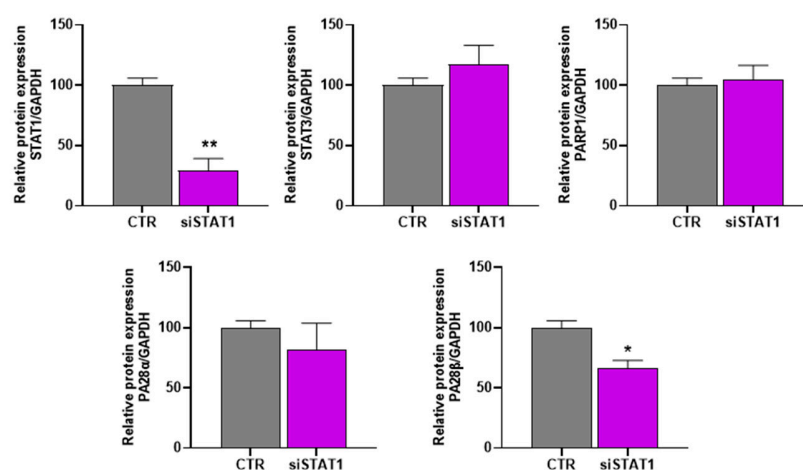
Supplementary Figure S1. Relative Western Blot quantification of PARP1 to GAPDH in OVCAR-3, OV-90 and OV.GEM-9, at the indicated time points and IFN- γ concentrations, as shown in figure 2B. Plots refer to three different experiments of which the more representative is shown in figure 2B.



Supplementary Figure S2. Relative Western Blot quantification of PARP1 to GAPDH in OVCAR-3 and OV-90, after 48 h of STAT1 silencing, as shown in figure 3A. Plots refer to three different experiments of which the more representative is shown in figure 3A.

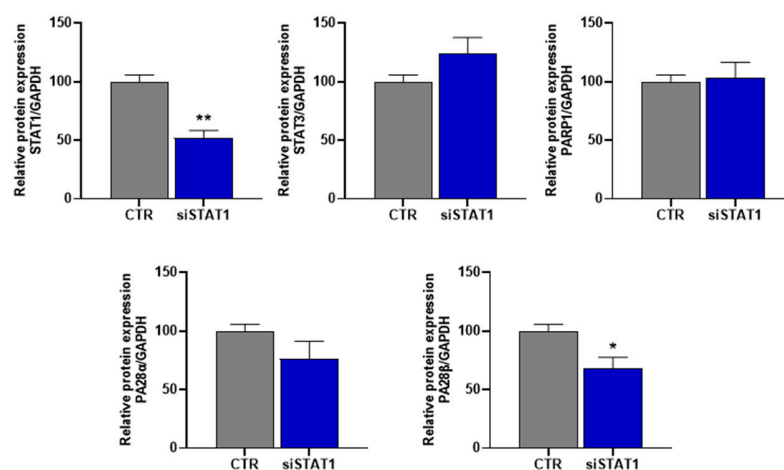
A

OVCAR-3



B

OV-90



Supplementary Figure S 3. STAT1 (alias ISGF-3) determines different clinical outcome in suboptimally or optimally debulked high-grade serous ovarian cancer (HGSOC) patients. The Kaplan–Meier Plotter was used to evaluate the prognostic value of STAT1 (i.e. ISGF-3) (Affymetrix ID 200887_s_at) expression in serous ovarian cancer patients, selected for grade 2 and 3 carcinoma, stage 3 and 4; debulk: (A) suboptimal; n=316 for PFS (Progression-free survival) and n=326 for OS (Overall Survival); (B) optimal; n=472 for PFS and n=495 for OS. P-value in the plot represents the result of log-rank test.

