Supplementary Materials: CD44 Targeted Nanomaterials for Treatment of Triple-Negative Breast Cancer

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MDA-MB-231		CFM-4.16				
		0.7	1.5	3.12	6.25	12.5
Momelotinib	0.7	0.31	0.44	0.87	1.71	0.24
	1.5	0.91	1.39	3.44	5.2	0.58
	3.12	1.21	1	1.63	1.65	0.25
	6.25	0.86	0.88	1.41	1.94	0.38
	12.5	0.99	1.11	1.1	1.33	0.52

MDA-MB-468		CFM-4.16				
		0.7	1.5	3.12	6.25	12.5
Momelotinib	0.7	0.38	0.98	2.37	7.28	0.2
	1.5	0.7	1.04	1.9	2.71	0.19
	3.12	0.7	0.84	0.94	1.51	0.31
	6.25	1.02	1.17	1.29	1.41	0.56
	12.5	1.55	1.64	1.6	1.59	1.04

< 0.9 Synergism

0.9 -1.1 Additive

> 1.1 Antagonism

Figure S1. Combination Index (CI) analysis by COMPUSYN software. The tables show the CI values of the 25 points of momelotinib +CFM-4.16 combination in both MDA-MB-231 and MDA-MB-468.

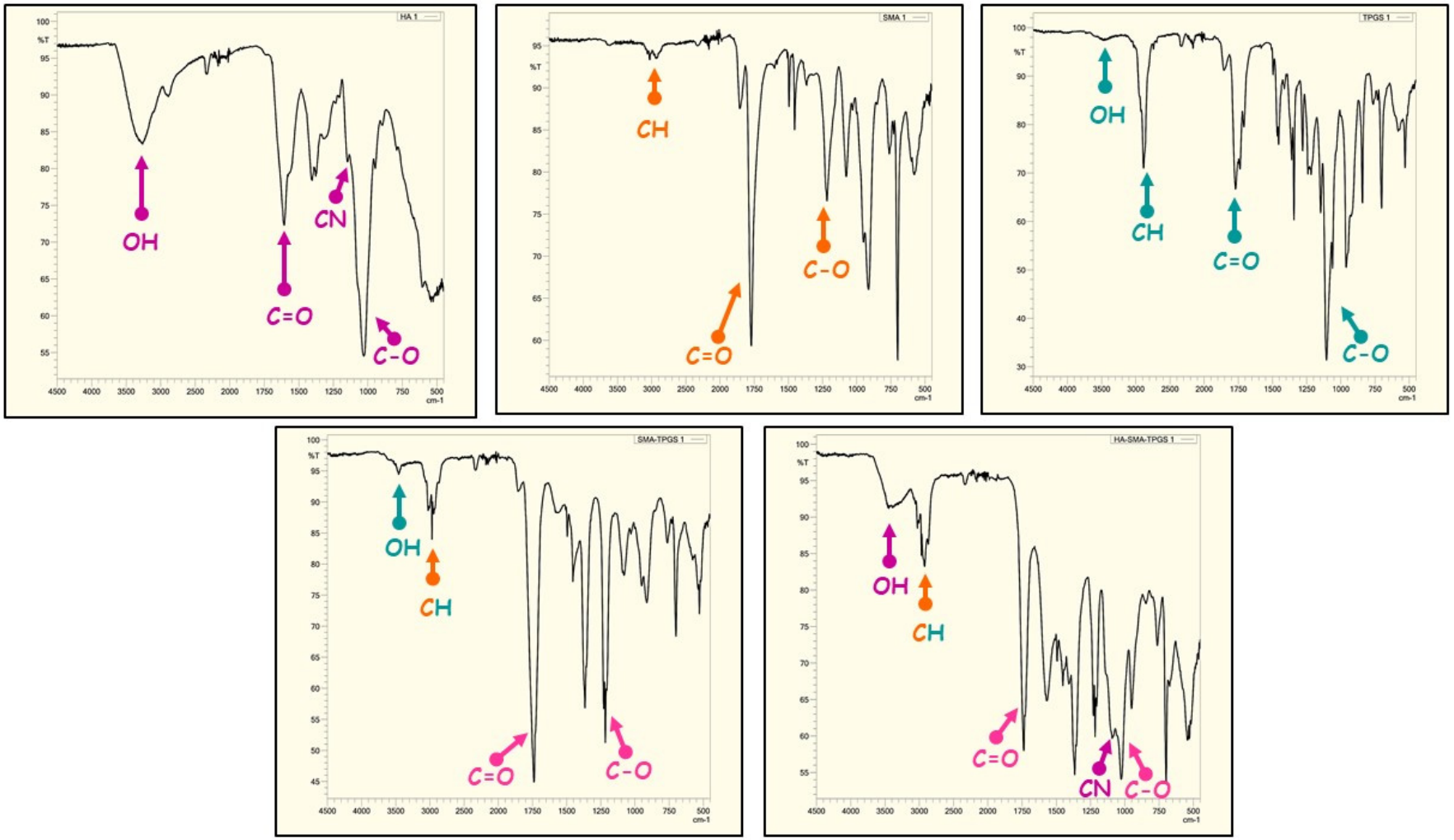

Figure S2. Carriers Chemical Characterization. Characterization of HA, SMA, TPGS, SMA-TPGS, and HA-SMA-TPGS by Fourier transform infrared spectroscopy (FTIR).

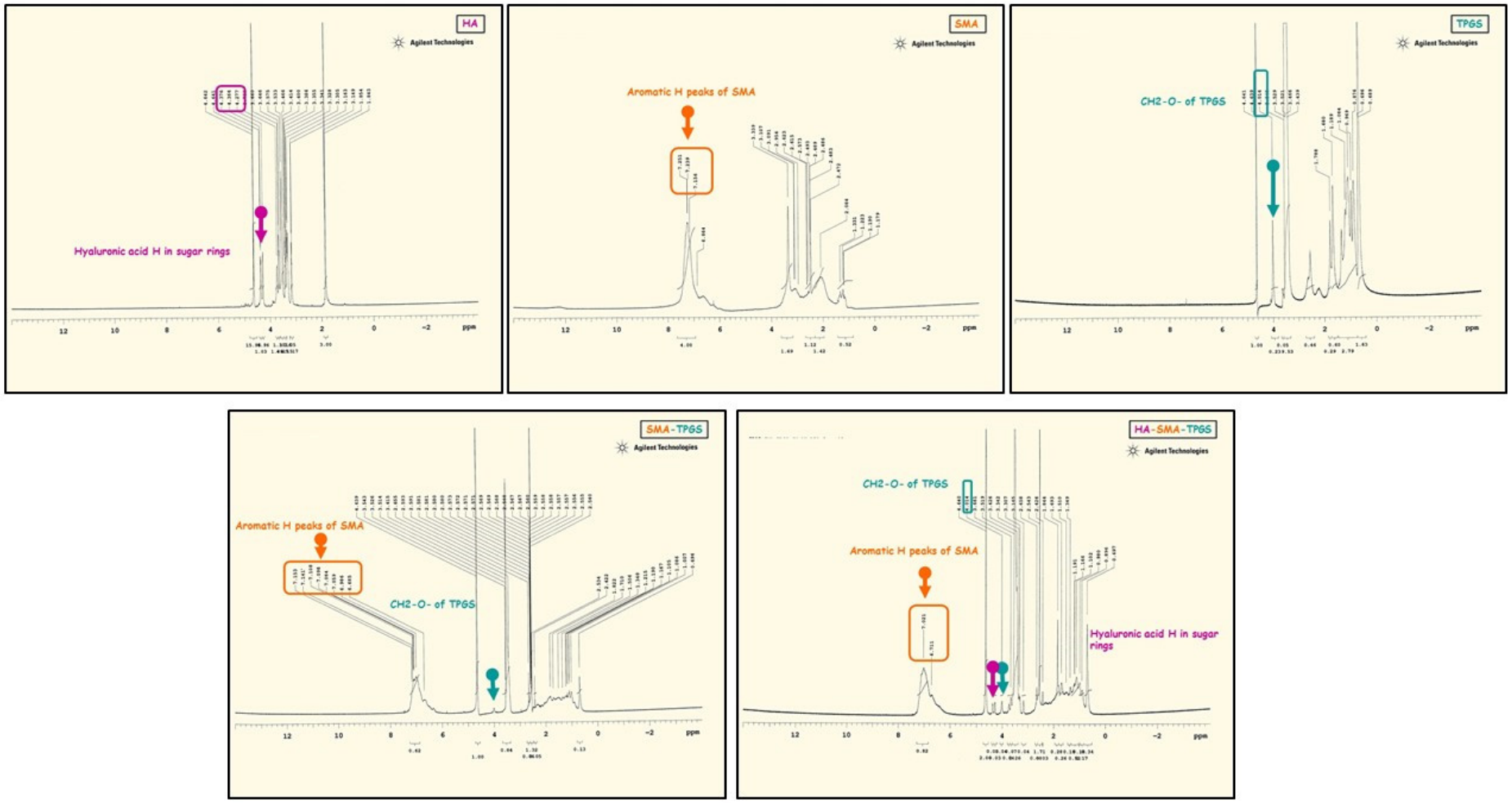

Figure S3. Carriers Chemical Characterization. Characterization of HA, SMA, TPGS, SMA-TPGS, and HA-SMA-TPGS by proton nuclear magnetic resonance spectroscopy (^{1}H NMR).

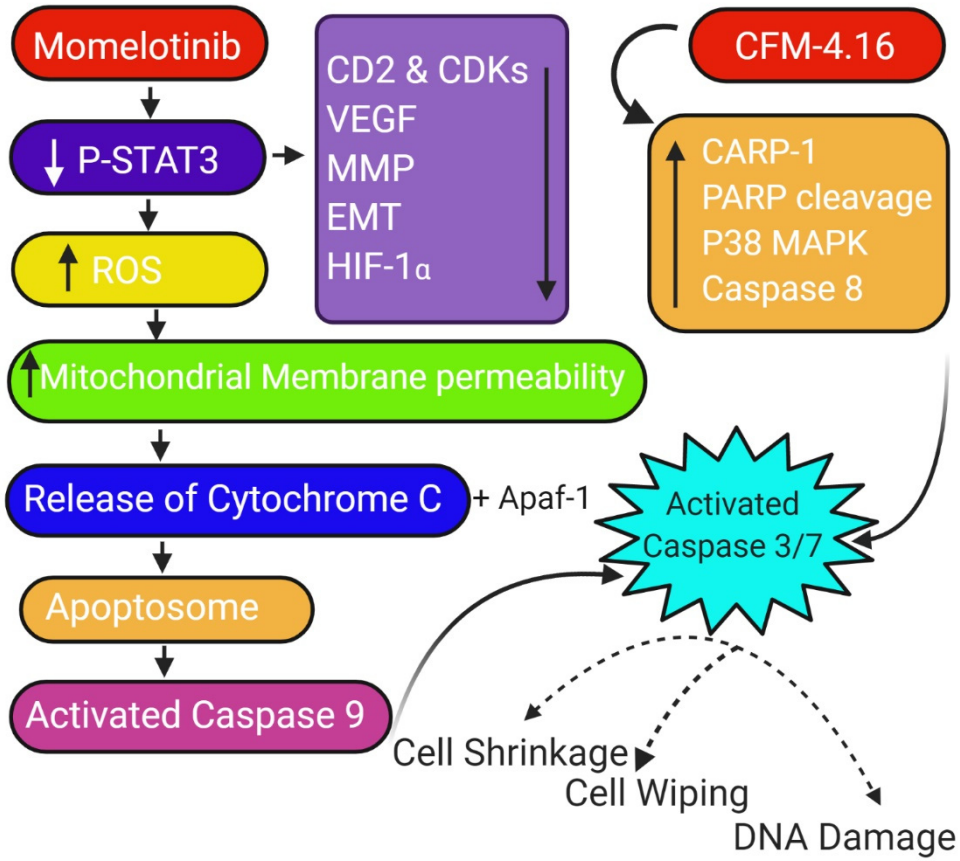

Figure S4. Synergism underlying mechanisms of action based on our results and other supporting previously published results [1–10] Treating the cells with Momelotinib + CFM-4.16 combination evokes cascading events that end up by activating caspase 3/7, the irreversible executer of cellular apoptosis.

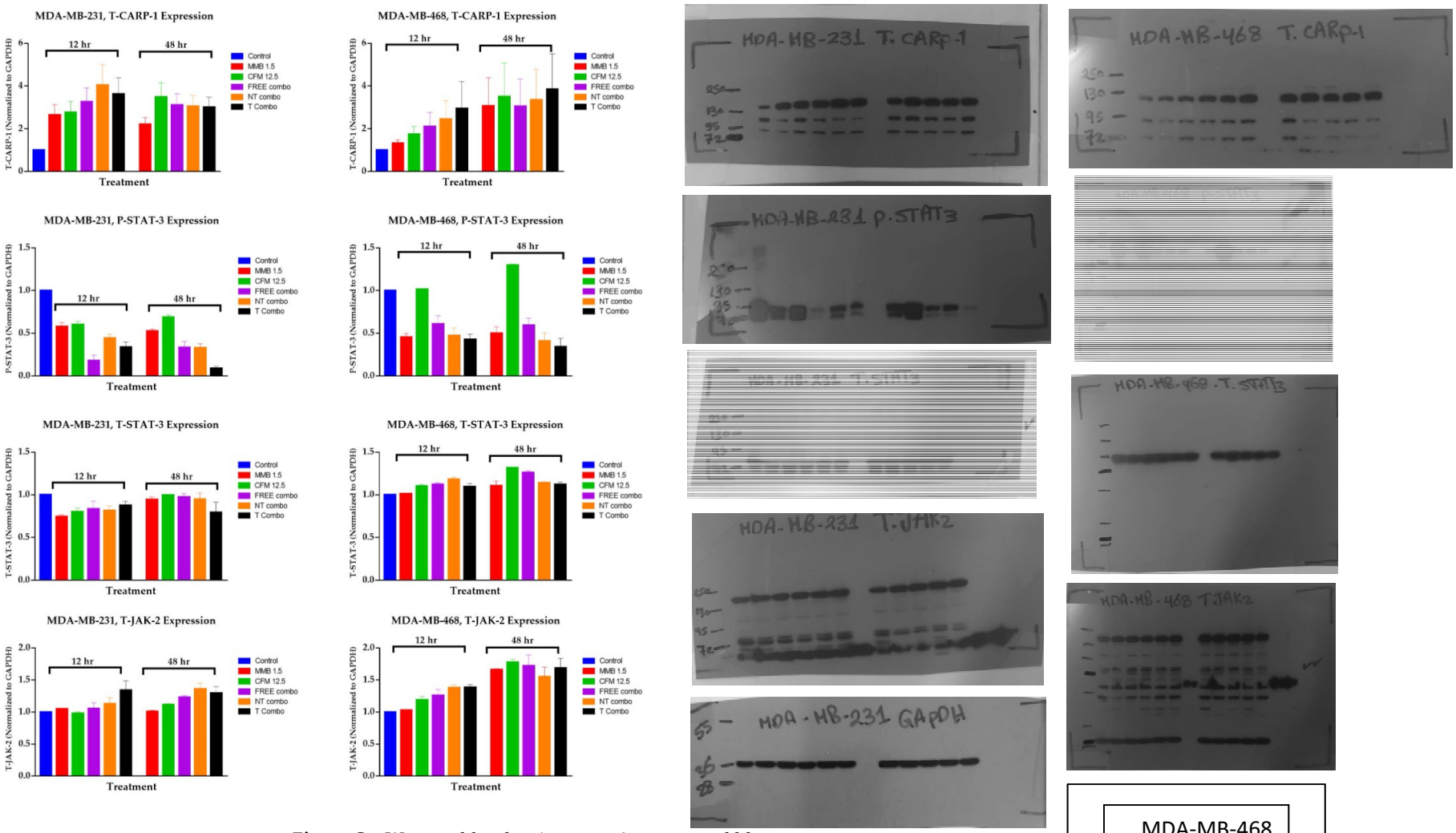

Figure S5. Western blot densitometry & uncropped blots.

Table S1. The molecular weights and primary antibodies dilution of the western blot tracked proteins.

Protein	MW kDa	Primary Antibody	Source
Total CARP-1	150	1:2000	Dr.Arun Rishi
Total STAT3	88	1:1000	Proteintech
Phosphorylated STAT3	88	1:1000	Dr.Arun Rishi
Total JAK2	150	1:1000	Proteintech
GAPDH	37	1:45000	Abcam

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