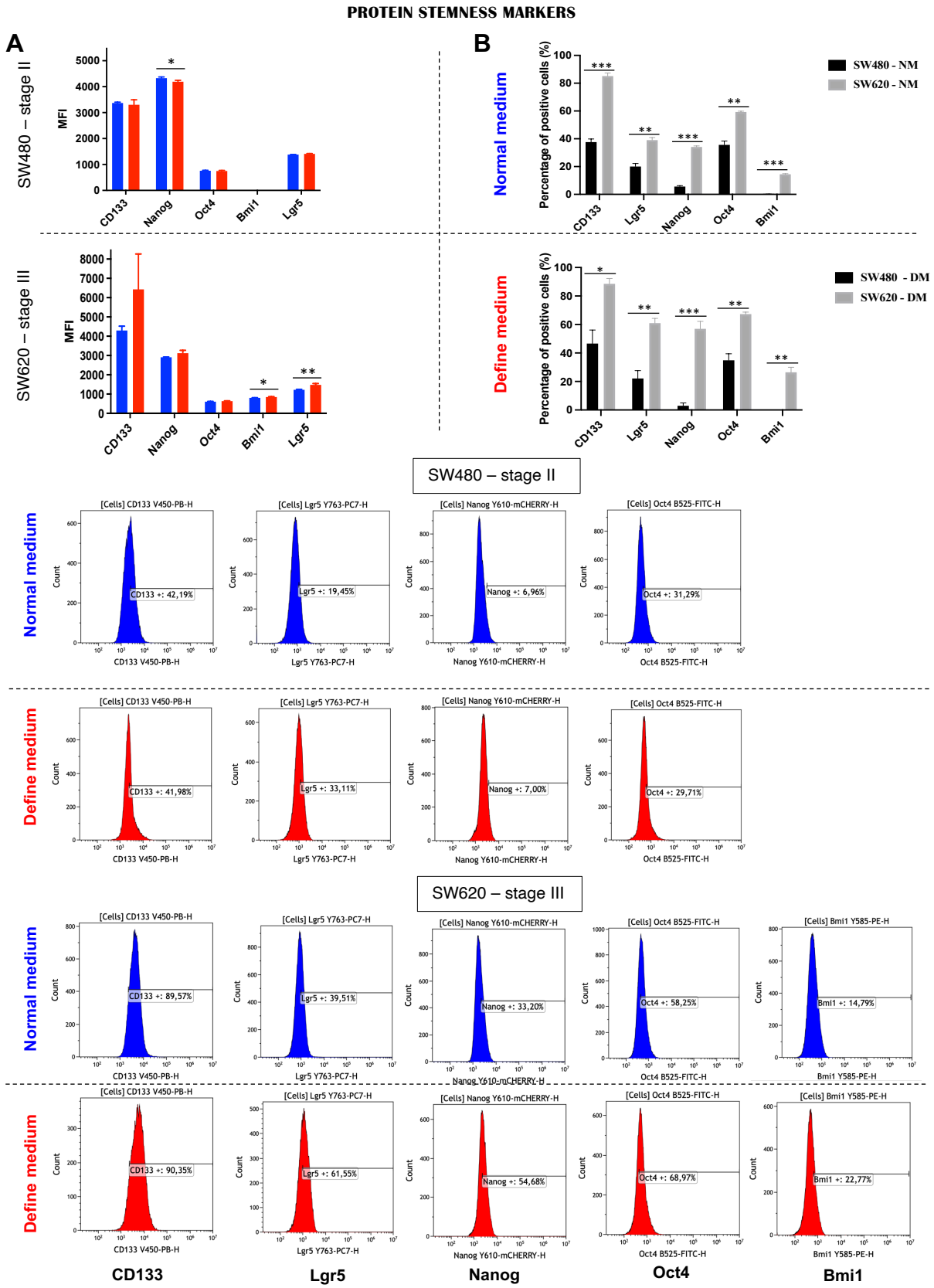
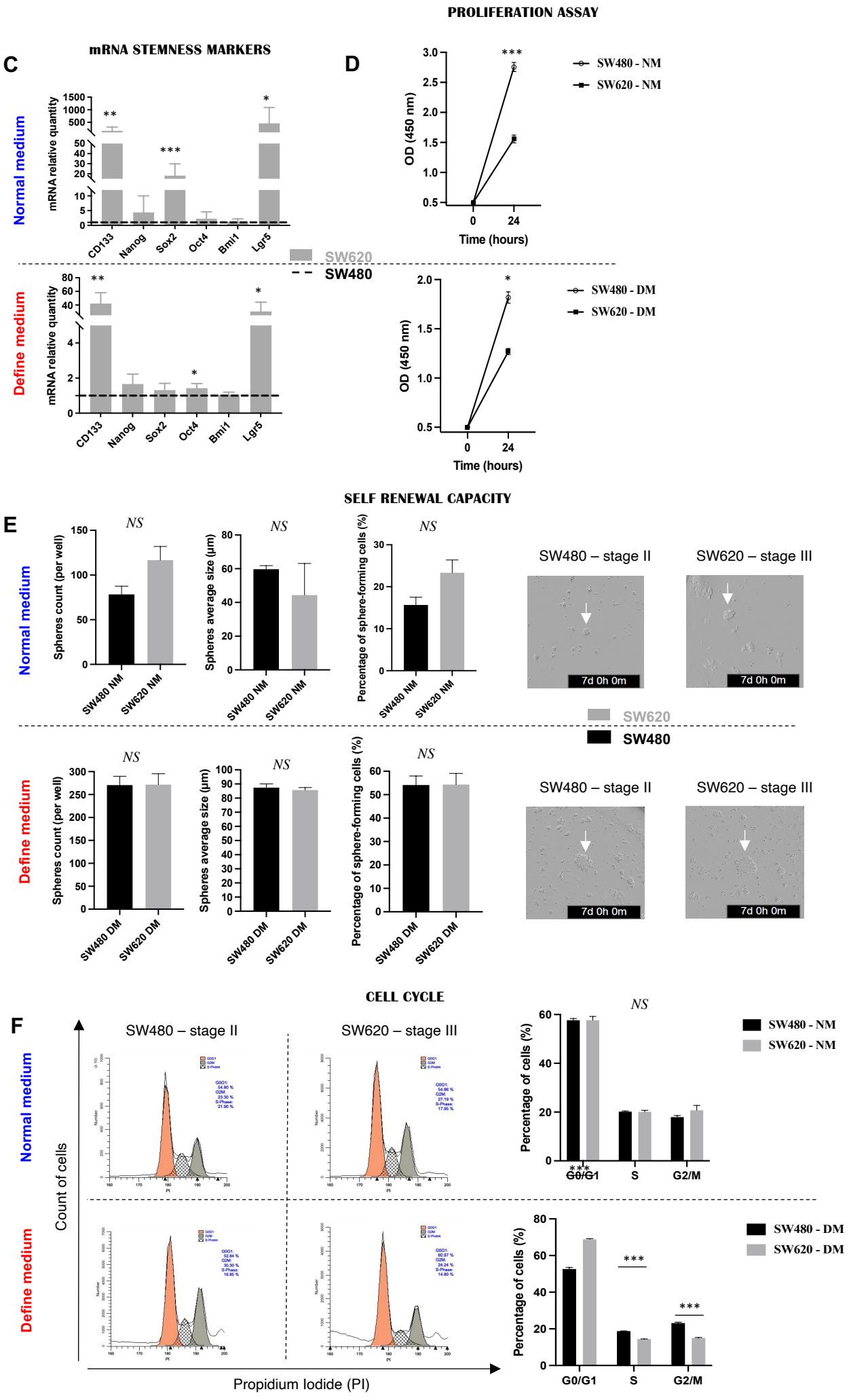
Supplementary files




PROLIFERATION ASSAY
C
mRNA STEMNESS MARKERS
Normal medium
mRNA relative quantity
CD133
Nanog
Sox2
Oct4
Bmi1
Lgr5
SW620
SW480
Define medium
D
OD (450 nm)
Time (hours)
SW480 - NM
SW620 - NM
SW480 - DM
SW620 - DM
SELF RENEWAL CAPACITY
E
Spheres count (per well)
Spheres average size (µm)
Percentage of sphere-forming cells (%)
NS
SW480 NM
SW620 NM
SW480 DM
SW620 DM
SW480 – stage II
SW620 – stage III
7d 0h 0m
CELL CYCLE
F
Count of cells
Propidium Iodide (PI)
Percentage of cells (%)
G0/G1
S
G2/M

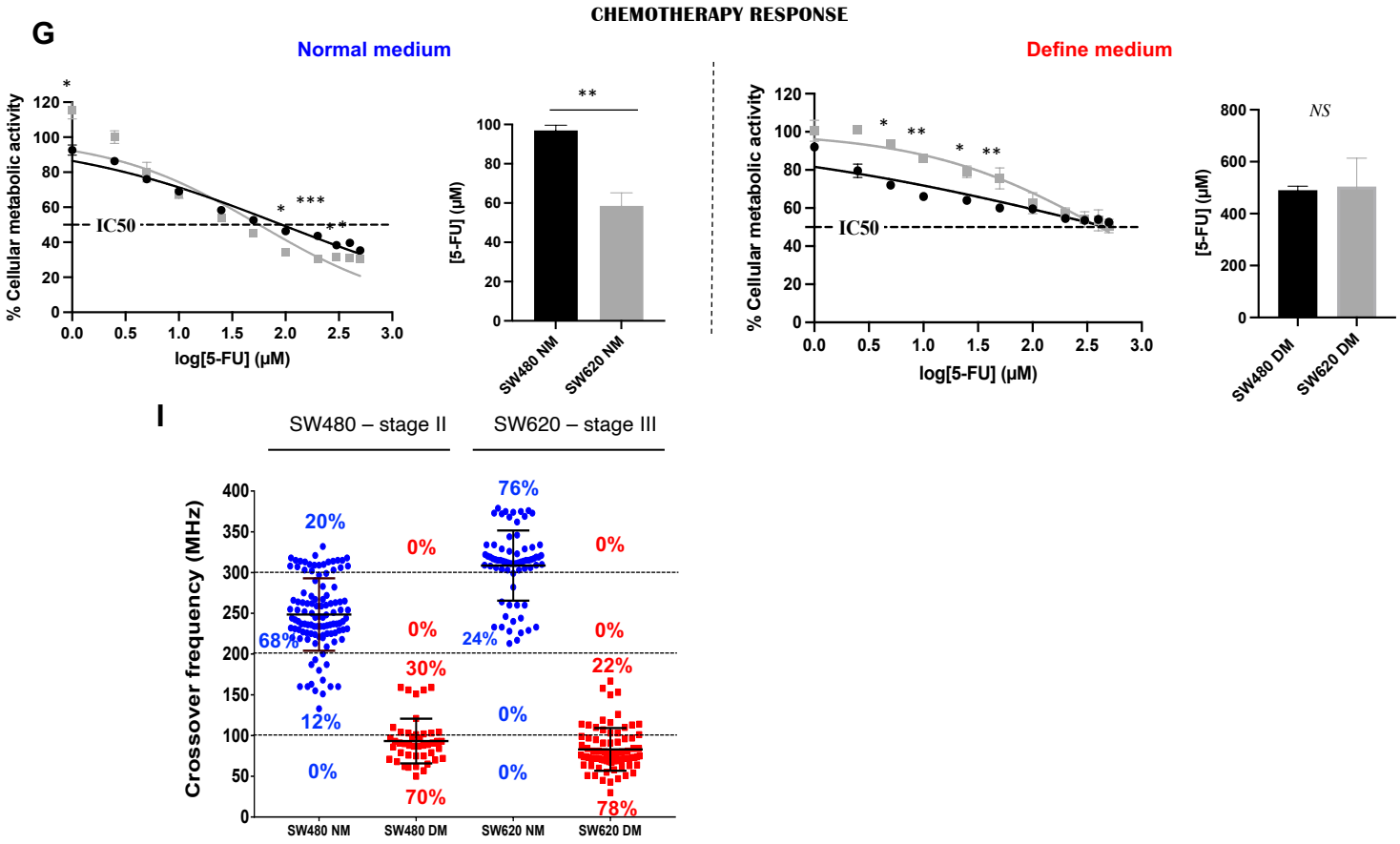


Figure S1. Characterization of cell lines according to culture conditions. Two colorectal cancer cell lines (SW480 and SW620) were cultured in Normal Medium (NM) or Define Medium (DM) to enrich cell population in differentiated cells or in CSCs, respectively. Mean Fluorescence Intensity (MFI) of stemness markers was assessed according to culture conditions for each cell line (A-B). Cell lines were compared to each other according to culture conditions for stemness markers (B), stemness related genes expression (C), proliferation rate (D), self-renewal capacity (E), cell cycle (F) and response to chemotherapy (G). The EM signature of both cell types was measured at UHF and cell proportions in 100 MHz increments are shown (I). All results are represented as mean ± SEM except EM signatures represented as mean ± SD, NS *p*-value indicate not significant result, * *p*-value < 0.05, ** *p*-value < 0.01, *** *p*-value < 0.001 using one-way ANOVA test.

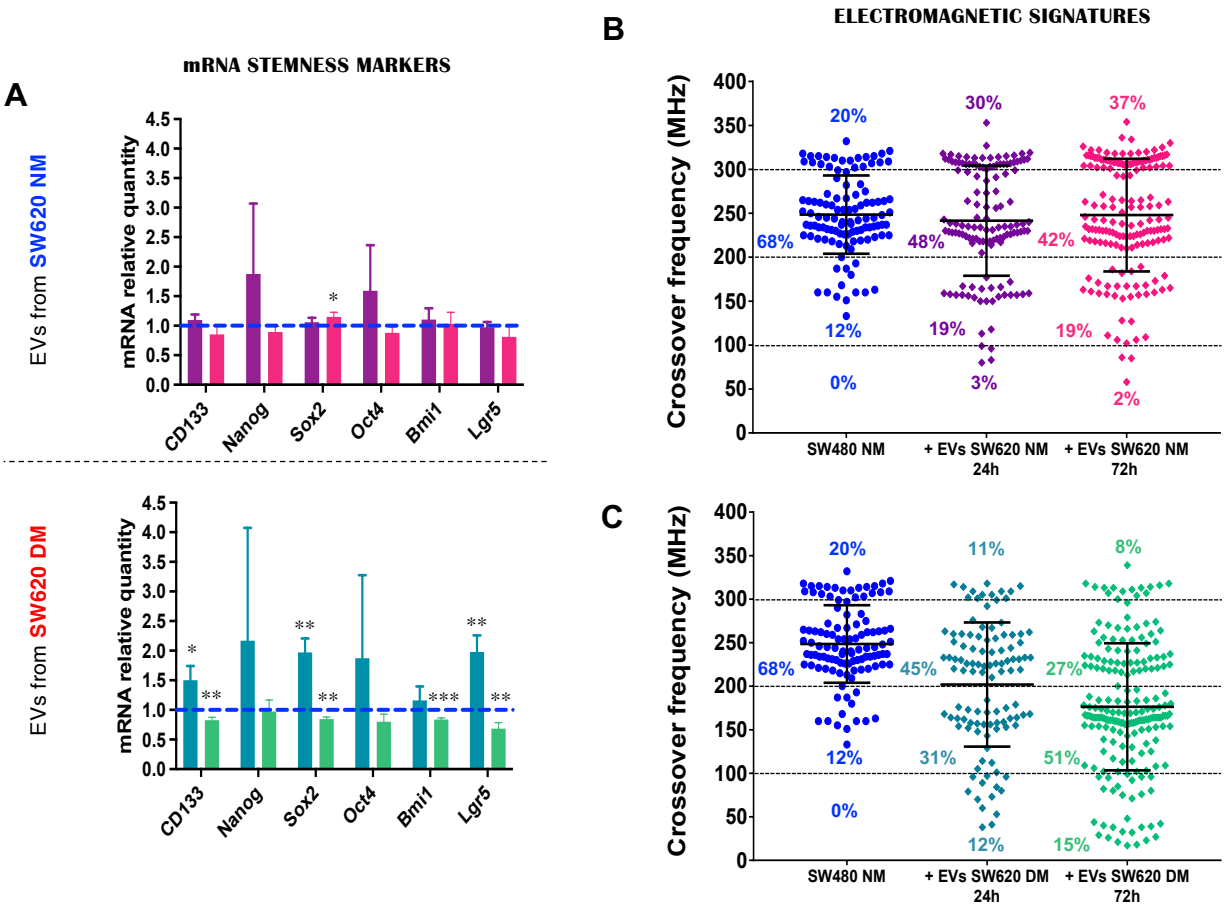


Figure S2. Impact of EVs derived from SW620 on the SW480 cell line. SW480-NM cells were treated once for 24 h (purple and light blue conditions) or twice for 72h (pink and green conditions) with EVs derived from the SW620 cell line (NM or DM cultured cells). Stemness-related genes were analyzed (A) according to treatment conditions, blue dotted line corresponding to untreated cells. The EM signature of cells treated with EVs from SW620-NM (B) or SW620-DM (C) were measured at UHF and cell proportions in 100 MHz increments are shown. All results are represented as mean ± SEM except EM signatures represented as mean ± SD, NS *p*-value indicate not significant result, * *p*-value < 0.05, ** *p*-value < 0.01, *** *p*-value < 0.001 using one-way ANOVA test.

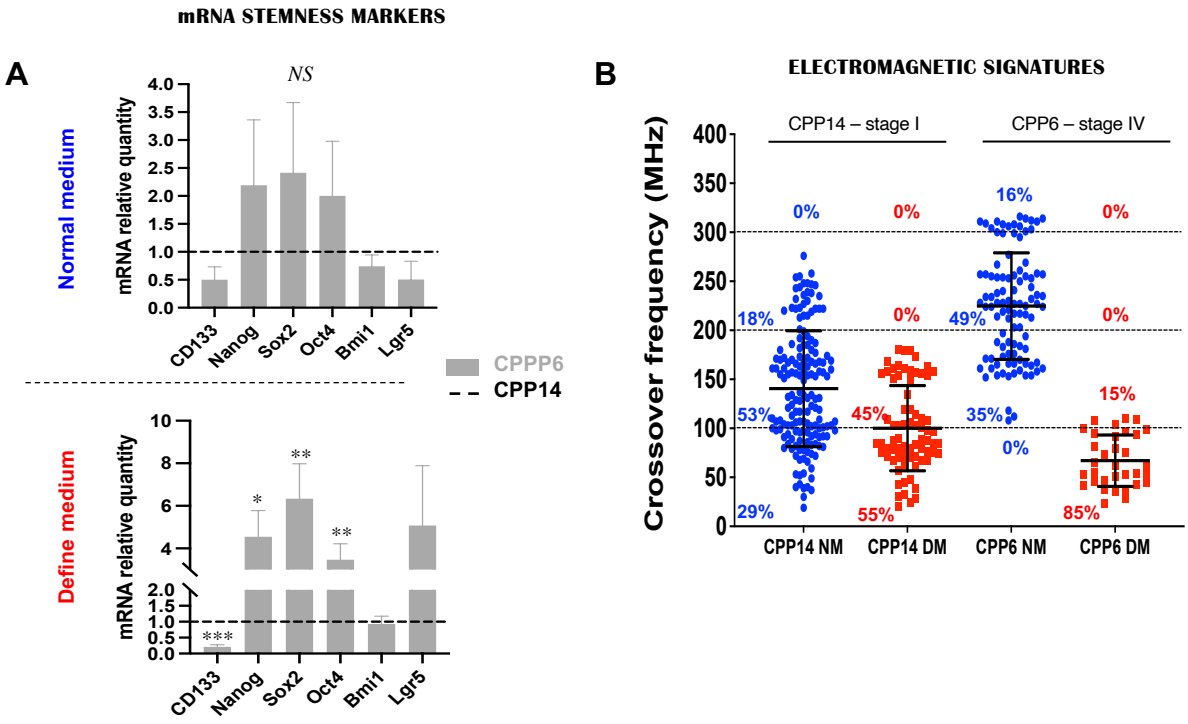


Figure S3. Characterization of primary cultures of patient according to culture conditions. Two colorectal primary cultures of patients (CPP14 and CPP6) were cultured in Normal Medium (NM) or Define Medium (DM) to enrich cell population in differentiated cells or in CSCs, respectively. CPP were compared to each other according to culture conditions for stemness related genes (A). The EM signature of CPP according to culture was measured at UHF and cell proportions in 100 MHz increments are shown (B). All results are represented as mean ± SEM except EM signatures represented as mean ± SD, NS *p*-value indicate not significant result, * *p*-value < 0.05, ** *p*-value < 0.01, *** *p*-value < 0.001 using one-way ANOVA test.

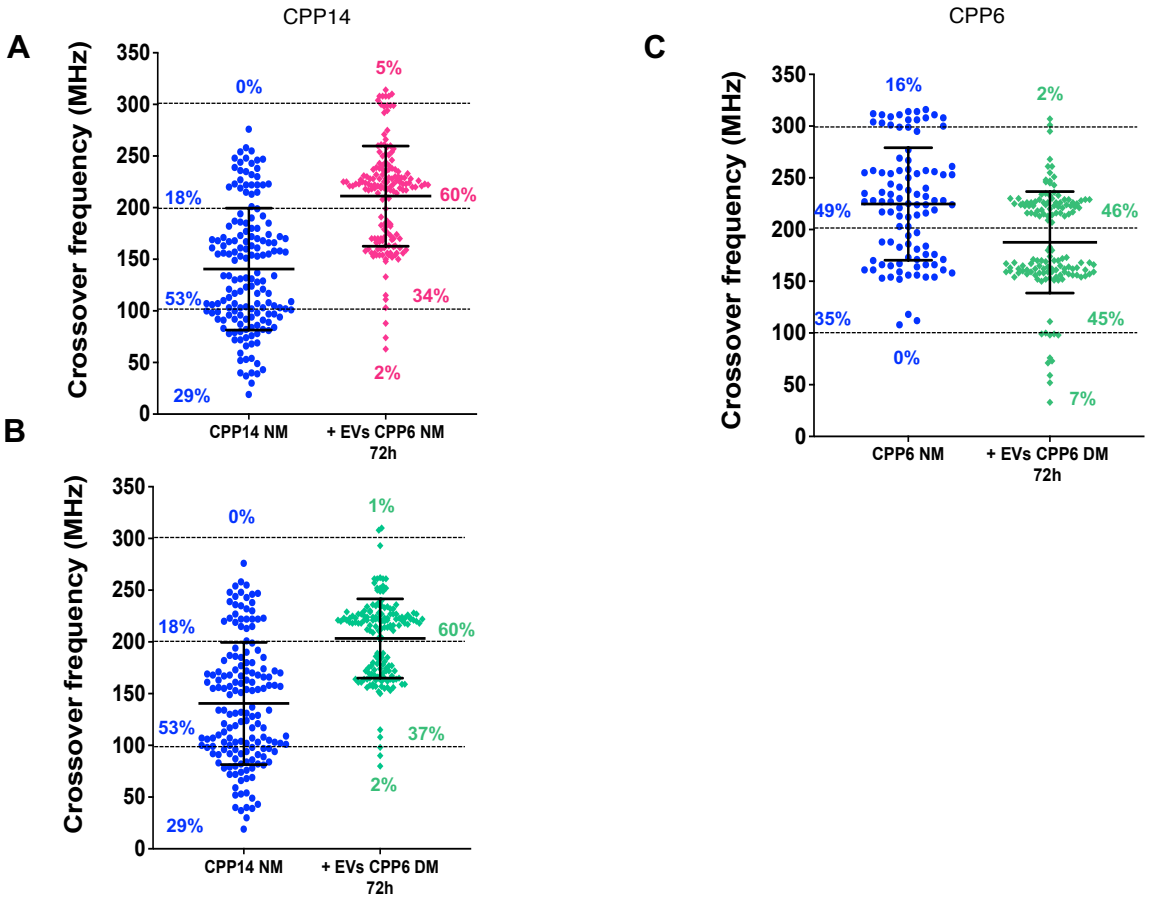


Figure S4. Impact of EVs derived from CPP6 on cells. CPP14-NM cells were treated twice for 72h with EVs from CPP6-NM (A) or CPP6-DM (B). CPP6-NM cells were treated twice for 72h with EVs from CPP6-DM (C). The EM signature of treated cells was measured at UHF and cell proportions in 100 MHz increments are shown. All results are represented as mean ± SEM except EM signatures represented as mean ± SD, NS *p*-value indicate not significant result, * *p*-value < 0.05, ** *p*-value < 0.01, *** *p*-value < 0.001 using one-way ANOVA test.