Supplementary Materials: Replacement of miR-155 Elicits Tumor Suppressive Activity and Antagonizes Bortezomib Resistance in Multiple Myeloma

Nicola Amodio, Maria Eugenia Gallo Cantafio, Cirino Botta, Valter Agosti, Cinzia Federico, Daniele Caracciolo, Domenica Ronchetti, Marco Rossi, Christoph Driessen, Antonino Neri, Pierosandro Tagliaferri and Pierfrancesco Tassone

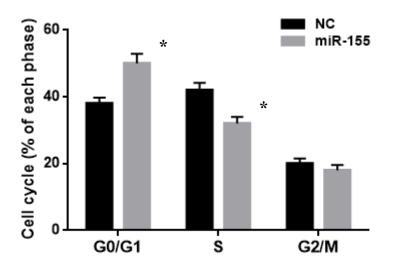


Figure S1. MiR-155 overexpression in MM cells impairs the cell cycle. RPMI-8226 cells were transfected with 100nM of miR-155 mimics or scrambled control oligonucleotides (NC), and cell cycle was then evaluated by PI staining and FACS analysis as reported in Materials and Methods. *p < 0.05.

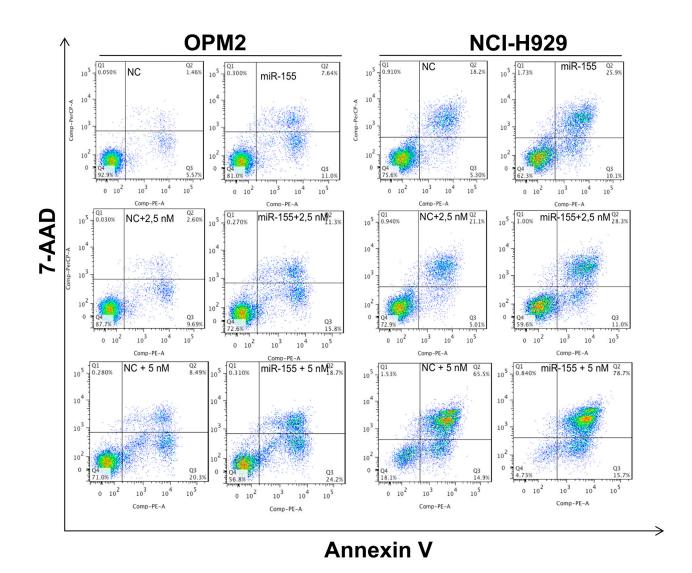


Figure 2. MiR-155 overexpression triggers apoptosis of MM cells. OPM2 and NCI-H929 were transfected with 100nM of syntethic miR-155 or scrambled oligonucleotides (NC), and then treated with different doses of bortezomib for 48 hours, as indicated in each plot. Annexin V/7AAD staining and FACS analysis were then performed. A representative experiment is reported.

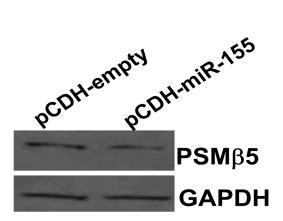
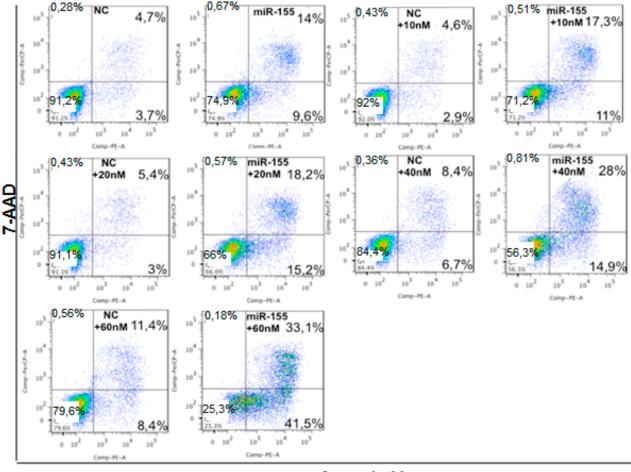
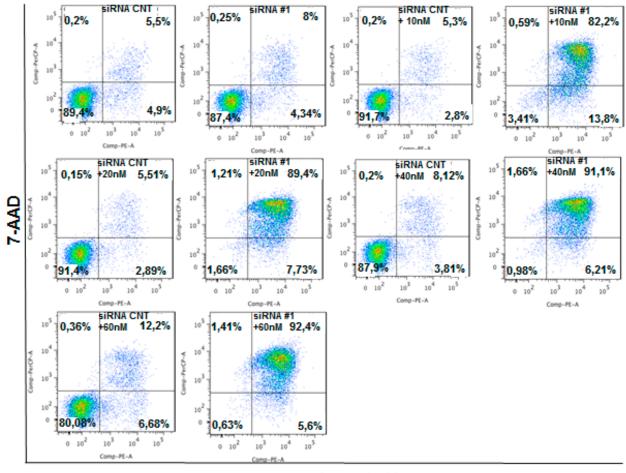


Figure 3. MiR-155 overexpression reduces PSMβ5 expression in MM xenografts. WB analysis of PSMβ5 protein in lysates from OPM2 xenografts expressing pCDH-empty vector or pCDH-miR-155, explanted at day 17. GAPDH was used as loading control.



Annexin V

Figure 4. MiR-155 overexpression alleviates bortezomib resistance in MM cells. AMO-bzb cells were transfected with 100nM syntethic miR-155 or scrambled oligonucleotides (NC), and then treated with different doses of bortezomib for 72 hours, as indicated in each plot. Annexin V/7AAD staining and FACS analysis were then performed. A representative experiment is reported.



Annexin V

Figure 5. PSM β 5 silencing alleviates bortezomib resistance in MM cells. AMO-bzb cells were transfected with 100nM syntethic PSM β 5 siRNAs (siRNA #1) or siRNA control (siRNA CNT), and then treated with different doses of bortezomib for 72 hours, as indicated in each plot. Annexin V/7AAD staining and FACS analysis were then performed. A representative experiment is reported.