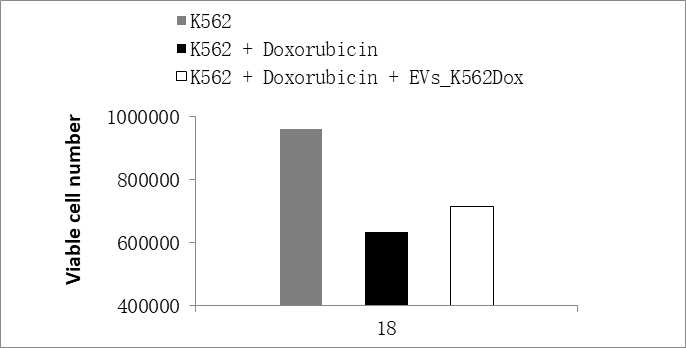
Deep Sequencing Analysis Reveals Distinctive Non-Coding RNAs When Comparing Tumor Multidrug-Resistant Cells and Extracellular Vesicles with Drug-Sensitive Counterparts

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**Supplementary Materials:**

**Supplementary Figures:**



**Figure S1.** Effect of EVs released by MDR cells on the viable cell number of drug-sensitive recipient cells treated with doxorrubicin, in the CML model.Viable cell number of drug-sensitive K562 cells, co-cultured with (grey) or without (black) EVs released by drug-resistant K562Dox cells, following treatment with doxorubicin, determined with the trypan blue exclusion assay.

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**Figure S2.** Multiple dimensional scaling using read counts of all mapped RNA transcripts (**a**) and all mapped miRs (**b**) as input.

|  |  |
| --- | --- |
| a) |  |
| b) |  |

**Figure S3.** Principal Component Analysis using read counts per million of all mapped RNA transcripts (**a**) and all mapped miRs (**b**) as input.

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**Figure S4.** Functional analysis of the possible target mRNAs of the miRs found significantly altered. The functional analyses were performed by DAVID.

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**Figure S5.** Molecular function of the possible target mRNAs of the significant regulated miRs (obtained by Venn diagram analysis and extracted targets mRNAs) were obtained from miRTarBase [81]. Functional analysis performed by DAVID analysis.

**Supplementary Tables:**

**Table S1.** Total number of sequenced reads, number of processed reads after FASTQ quality control, number of alignments mapped to human genome (HG19) and reads obtained in FeatureCounts (RNA species) for each biological replicate of drug-sensitive and MDR cells, as well as respective EVs, in both CML (K562,K562Dox) and NSCLC (NCI-H460,NCI-H460/R) cell models.

**Table S2–S9:** attached excel Files.

**Supplementary Tables legends:**

**Table S2.** Log Fold Change of RNA species expression between drug-sensitive (NCI-H460) cells and their MDR (NCI-H460/R) counterparts. Log FC above > 1 and P value < 0.05 indicate up regulation in MDR condition.

**Table S3.** Log Fold Change of RNA species expression between drug-sensitive (K562) cells and their MDR (K562Dox) counterparts. Log FC above > 1 and P value < 0.05 indicate up regulation in MDR condition.

**Table S4.** Log Fold Change of RNA species expression between EVs released by drug-sensitive (NCI-H460) cells and the EVs released by their MDR (NCI-H460/R) counterparts. Log FC above > 1 and P value < 0.05 indicate up regulation in MDR condition.

**Table S5.** Log Fold Change of levels of RNA species between EVs released by drug-sensitive (K562) cells and EVs released by their MDR (K562Dox) counterparts. Log FC above > 1 and P value < 0.05 indicate up regulation in MDR condition.

**Table S6.** Log Fold Change of levels of miRs between drug-sensitive (NCI-H460) cells and their MDR (NCI-H460/R) counterparts. Log FC above > 1 and P value < 0.05 indicate up regulation in MDR condition.

**Table S7.** Log Fold Change of miRs expression between drug-sensitive (K562) cells and their MDR (K562Dox) counterparts. Log FC above > 1 and P value < 0.05 indicate up regulation in MDR condition.

**Table S8.** Log Fold Change of levels of miRs between EVs released by drug-sensitive (NCI-H460) cells and EVs released by their MDR (NCI-H460/R) counterparts. Log FC above > 1 and P value < 0.05 indicate up regulation in MDR condition.

**Table S9.** Log Fold Change of miRs expression between drug-sensitive (K562) cells and EVs derived from their MDR (K562Dox) counterparts. Log FC above > 1 and P value < 0.05 indicate up regulation in MDR condition.