



**Microarray statistical analyses for CIS genes differentially expressed from different AML patients in the 2 different Cohorts.** As AML patients are characterized by different chromosomal aberrations or mutations, we divided the AML patients in different groups according to their mutation: 1) Normal karyotype (NK, N=101 Cohort1; 86 Cohort2); 2) CBF-associated AMLs (characterized by chromosomal abnormalities as inv(16) or t(8;21), N=18+21 Cohort1; 15+14 Cohort2); 3) PML/RAR $\alpha$  translocations (t(15,17), N=17 Cohort1, 4 Cohort2); 4) complete or partial deletions of chromosomes 7 or 5 (N=17 Cohort1, 12 Cohort2); 5) trisomy of chromosome 8 (N=13 Cohort1, 7 Cohort2); 6) complex karyotype (N=7 Cohort1, 6 Cohort2); 7) patients with other translocations (N=30 Cohort1, 21 Cohort2). For microarray gene expression analyses of AML samples, nonparametric Kruskal–Wallis Analysis Of Variance (ANOVA) was performed to identify overall differences in gene expression between AML groups. Whenever significant, Wilcoxon rank sum test for pairwise comparisons adjusted with Bonferroni correction was applied. For each gene is reported: the value of the Kruskal-Wallis test statistic; the correspondent *p*-value and only significant pairwise contrasts after Bonferroni correction. For some genes different microarray probesets are provided. All the analyses were performed in R-statistical software (version 2.15.3; see <http://www.R-project.org>).