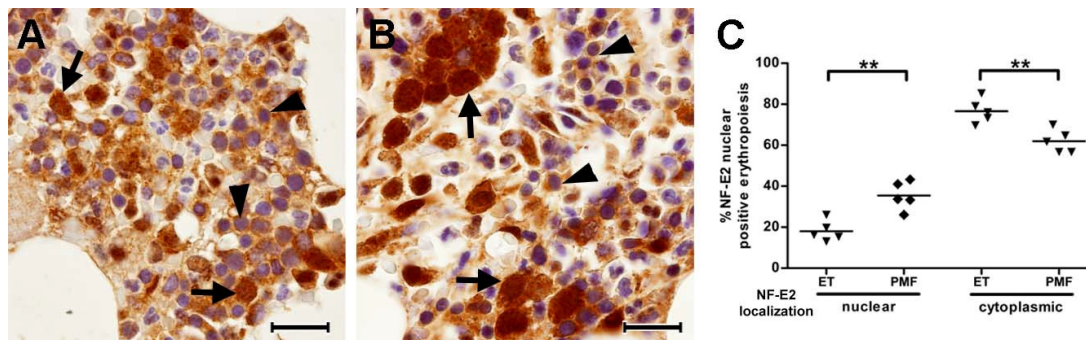
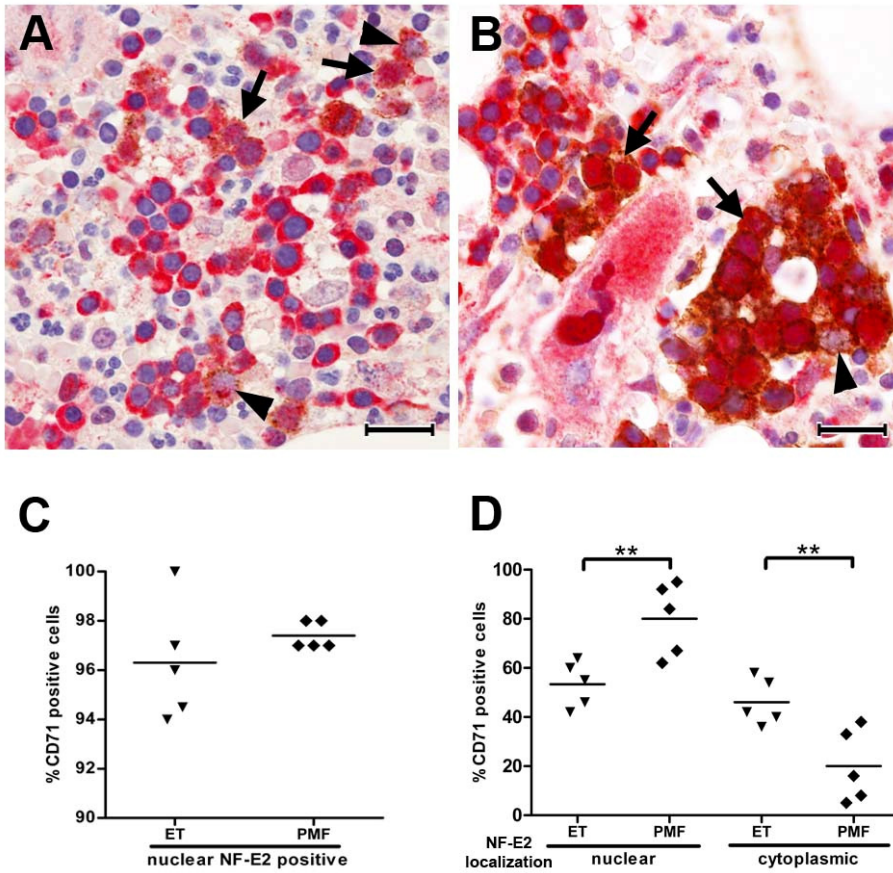


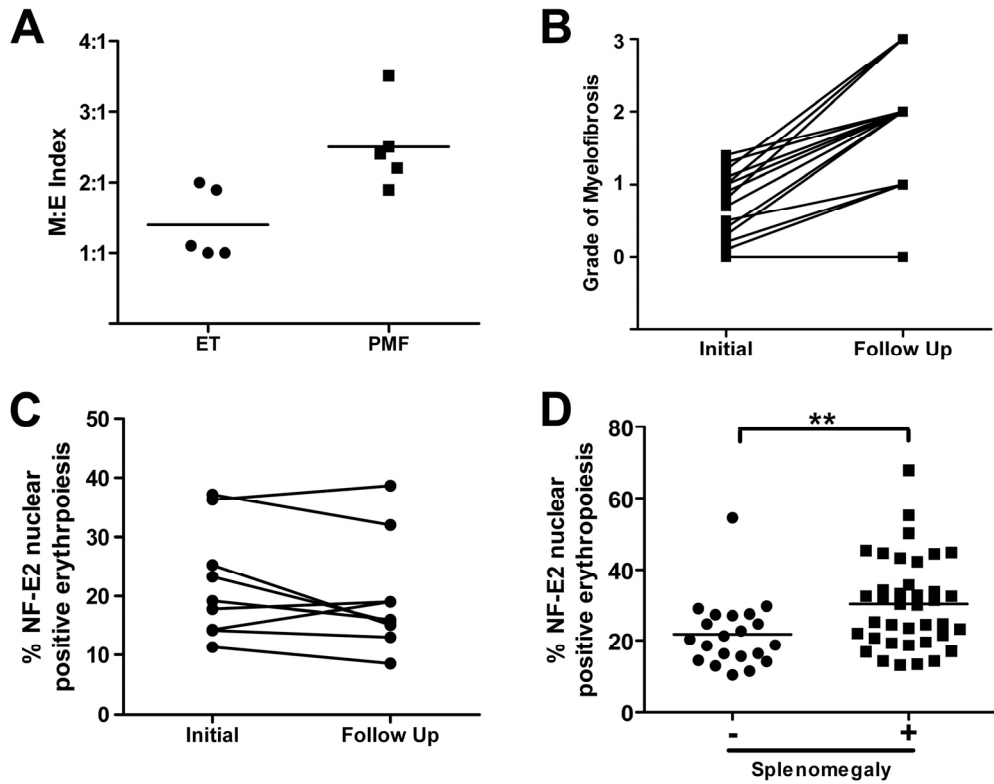
Supplemental Figures



Supplemental Figure 1: Immunohistochemistry of NF-E2 in ET and PMF patients using an alternative NF-E2 antibody. (A, Essential Thrombocythemia; B, Primary Myelofibrosis) Bone marrow biopsies were stained with an antibody against NF-E2, raised against a peptide spanning amino acids 133 – 147 of the NF-E2 protein, and counterstained with hematoxylin (1000x original magnification, bar indicates 20 μ m). Arrows point to erythropoietic cells with nuclear NF-E2 staining, filled arrow heads indicate cytoplasmic NF-E2 staining. **(C) Quantitative analysis of NF-E2 subcellular localization.** Shown is the percentage of nuclear or cytoplasmic NF-E2 positive erythroid cells, respectively, as a proportion of all erythroid precursors in ET and PMF patients, as indicated. **p<0.01, by two-tailed Wilcoxon-test.



Supplemental Figure 2: Immunohistochemical Double Staining of NF-E2 and CD71 in ET and PMF patients. (A Essential Thrombocythemia; B, Primary Myelofibrosis) Bone marrow biopsies were stained with an antibody against NF-E2 (red) as well as an antibody against CD71 (brown) and counterstained with hematoxylin (1000x original magnification, bar indicates 20µm). Arrows point to CD 71-positive erythropoietic cells with nuclear NF-E2 staining, filled arrow heads indicate CD71-positive erythroid cells with cytoplasmic NF-E2 staining. **(C) Quantitative analysis of CD71 staining in nuclear NF-E2 positive cells in ET and PMF.** Shown is the percentage of cells with nuclear NF-E2 staining that also stained positive for CD71. These data reveal that more than 95% of all cells that stain nuclear for NF-E2 in the bone marrow are CD71-positive. **(D) Quantitative analysis of NF-E2 subcellular localization in CD71-positive cells in ET and PMF.** Shown is the percentage of nuclear or cytoplasmic NF-E2 staining in CD71-positive cells. **p<0.01 by two-tailed Wilcoxon-test.



Supplemental Figure 3: M:E Index of ET and PMF patients as well as Follow-Up Data. (A) M:E Index. Bone marrow biopsies were stained with CAE and erythroid and myeloid cells scored to determine the M:E ratio. **(B) Change in Myelofibrosis Grade in PMF patients upon follow-up.** Initial and follow up bone marrow biopsies of 15 PMF grade 0 or 1 patients were stained with Gomorri silver stain and graded for fibrosis according to the WHO scale (grade 0, 1, 2 or 3). **(C) Nuclear NF-E2 staining in MPN patients upon follow-up.** Shown is the percentage of erythroid cells with nuclear NF-E2 staining in initial and follow up biopsies in 9 MPN patients (5 ET and 4 PMF).