Table S1. Clinical data on the PV patients included in cell/biochemical studies

Patients	*JAK2*V617F	Age	WBC/mL	Hbg/dL	Hct %	Plt/mL	Duration (months)	Therapy
PV220705	**Hetero**	79/F	8400	17.3	56.0	335	0	Phlebotomy+CHT
PV569	**Hetero**	28/M	8700	20.8	61.9	358	0	Unknown
PV583	**Hetero**	60/M	13100	17.2	52.5	832	8	CHT
PV653	**Hetero**	72/M	8000	18.4	59.2	676	0	Unknown
PV766	**Hetero**	67/M	7100	15.2	52.2	493	0	CHT
PV842	**Hetero**	51/M	10300	16.8	54.3	573	0	Phlebotomy
PV870	**Hetero**	62/F	9300	17.6	53.6	448	0	Phlebotomy
PV904	**Hetero**	70/M	10810	18.4	56.8	866	1	CHT
PV909	**Hetero**	58/M	7170	16.8	53.6	578	90	Phlebotomy
PV190705	**Hetero**	65/F	5800	15.4	44.4	259	134	CHT
PV1	**Hetero**	67/M	13700	12.5	39.6	859	48	HU,Bus,Anagrel,Phlebotomy
PV3	**Hetero**	42/F	11000	15.8	46.3	560	60	HU or Phlebotomy
PV4	**Hetero**	58/M	7800	15.2	49.2	364	48	Phlebotomy
PV538	**Homo**	77/F	16600	13.9	46.0	306	65	CHT
PV546	**Homo**	74/F	9300	16.5	56.8	425	2	Phlebotomy + CHT
PV5	**Homo**	60/M	21900	14.4	47.3	862	180	HU and Phlebotomy

Abbreviations: Anagrel=anagrelide, BUS=busulfan, CHT=not otherwise specified chemotherapy, Hb=hemoglobin, Hct= hematocrit, HU=hydroxyurea,Plt= Platelets, WBC=white blood cells; 0=new or recent diagnosis.

Table S2. Frequency of erythroid ($CD235^{pos}$) and non-erythroid ($CD45^{pos}$) cells generated in cultures of MNC from ND or PV patients in the presence (+) or not (-) of DXM, as indicated.

		$CD45^{pos}$		$CD235^{pos}$	
		-DXM	**+DXM**	**-DXM**	**+DXM**
ND (n=5)	Day 11	38.6±17.0	8.2±1.3 *****	57.4±16.0	87.2±4.6 *****
	Day 13	37.8±21.0	7.0±2.6 *****	55.7±19.0	86.0±7.1 *****
Heterozygous (n=10)	Day 11	8.0±10.0 §	1.6±0.9 §	90.1±11.0 §	96.6±2.6 §
	Day 13	12.1±17.0 §	1.3±1.0 §	85.0±18.0 §	95.6±2.7 §
Homozygous (n=3)	Day 11	4.0±2.8 §	2.1±1.8 §	93.6±3.0 §	95.3±3.2 §
	Day 13	4.3±3.7 §	0.8±1.1 §	90.6±6.0 §	95.0±2.4

Values statistically different ($p<.05$) from those observed in the corresponding group from ND (§) or from the parallel cultures without DXM (*) are indicated. Representative FACS analyses are presented in Figure S2.

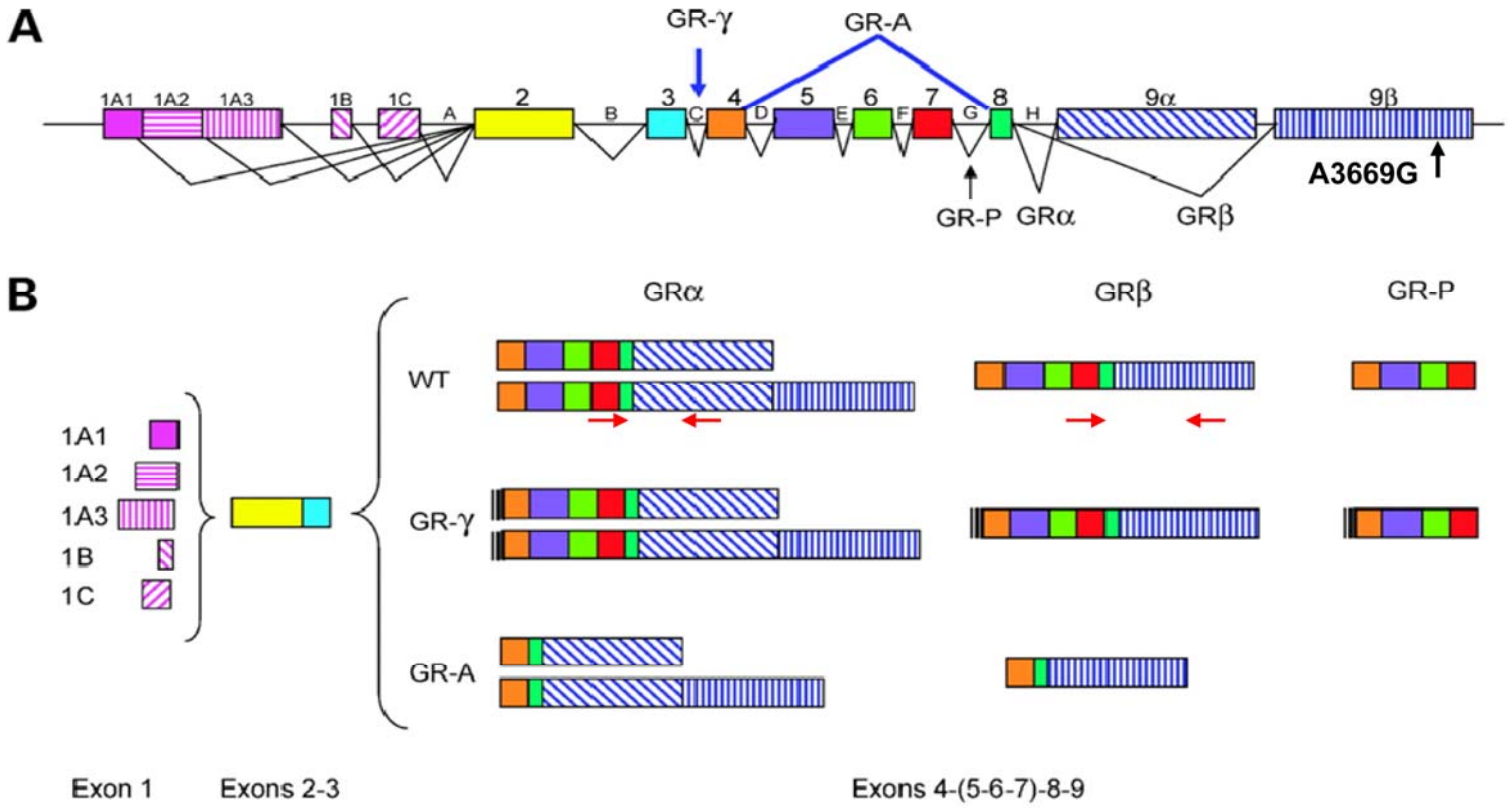

Figure S1. Diagram of the human *GR* locus and schematic representation of examples of alternative splicing sites (A) and GR isoforms (B) expressed in the population. The presence of the A3669G polymorphism gives rise to an alternative splicing at exon 9 which results in a mRNA encoding the dominant negative β isoform. Red arrows indicate the positions of the oligos used for RT-PCR determination of GRα and β isoform expression (from Sanchez-Vega B et al, Mol Cancer Ther. 2006;5:3062-3070.)

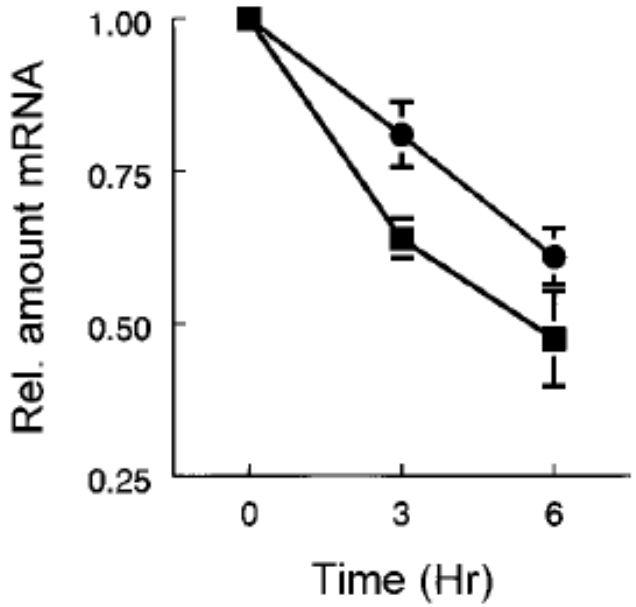

Figure S2. Half-life of A3669G positive (circles) and A3669G negative (squares) GRβ mRNA in COS-1 cells transfected with the expression plasmid pCMVGRβ (squares), or vector pCMβmut, which contains a mutated "ATTTA motif" (to GTTTA") in the 3′ UTR (circles). At 3 and 6 h after actinomycin-D treatment, the cells tranfected with pCMVGRß show a significantly ($p < 0.05$) larger decrease in GRβ mRNA levels than the cells transfected with the mutated vector. Data are expressed as mean ($n = 3$) ± SEM. Published by permission from Dr. Derijk and the editor of Journal of Rheumatology (see Derijk et al J Rheumatol 2001; 28:2383 for further details).

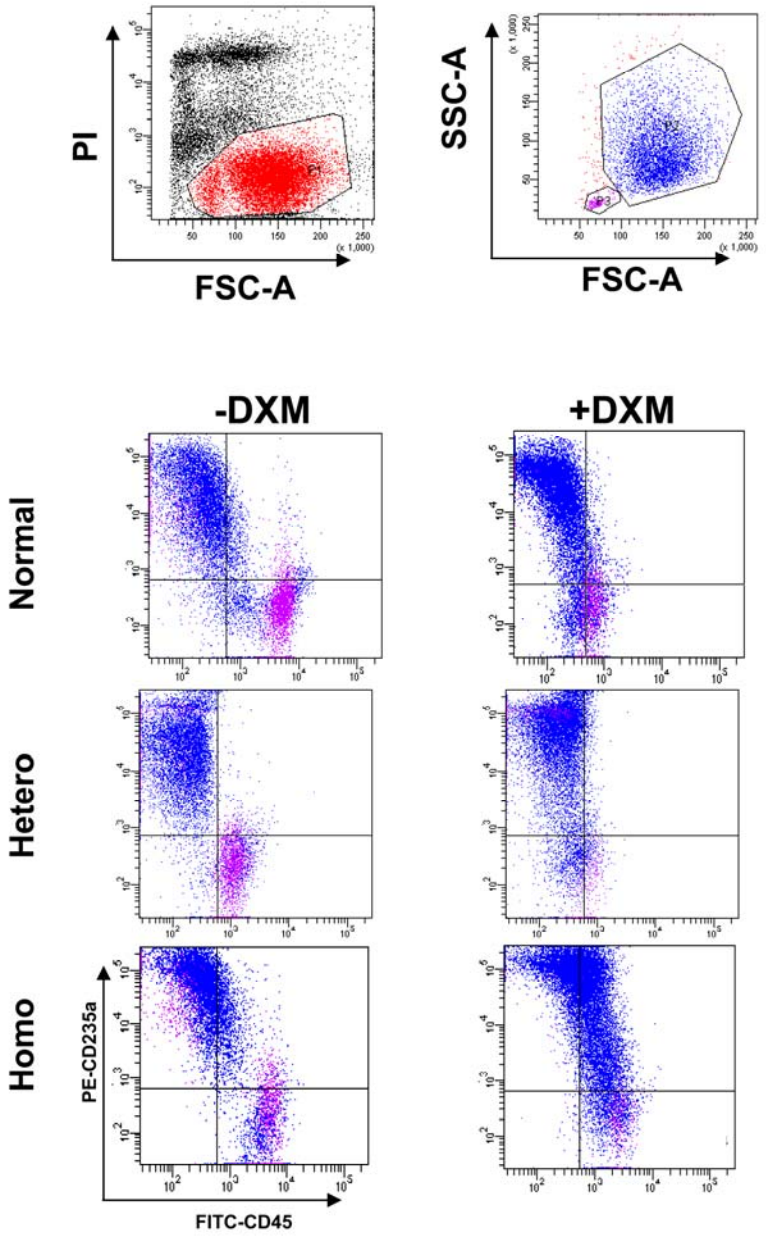

Figure S3. Representative FACS analysis for CD45 and CD235a expression of cells obtained after 13 days in cultures of MNC from ND and from patients with PV, as indicated. The cultures, the same as represented in Figure 2B, were stimulated with GFs with or without DXM. The mean (±SD) frequencies of $CD45^{pos}$ and $CD235a^{pos}$ cells observed in multiple experiments for each donor type are summarized in Table SII. Since the frequency of Propidium $Iodide^{pos}$ cells was comparable (~10-15%) in all cultures analyzed, the propidium iodide (PI) staining and FSC and SSC analyses of only one representative experiment are presented, as reference. Cultured cells were divided by FSC/SSC analyses into small lymphocyte-sized cells (purple dots) and large erythroblast-size cells (blue dots). This color code is retained in the CD45/CD235a analyses to allow comparison of size distribution of cells obtained in the different cultures.

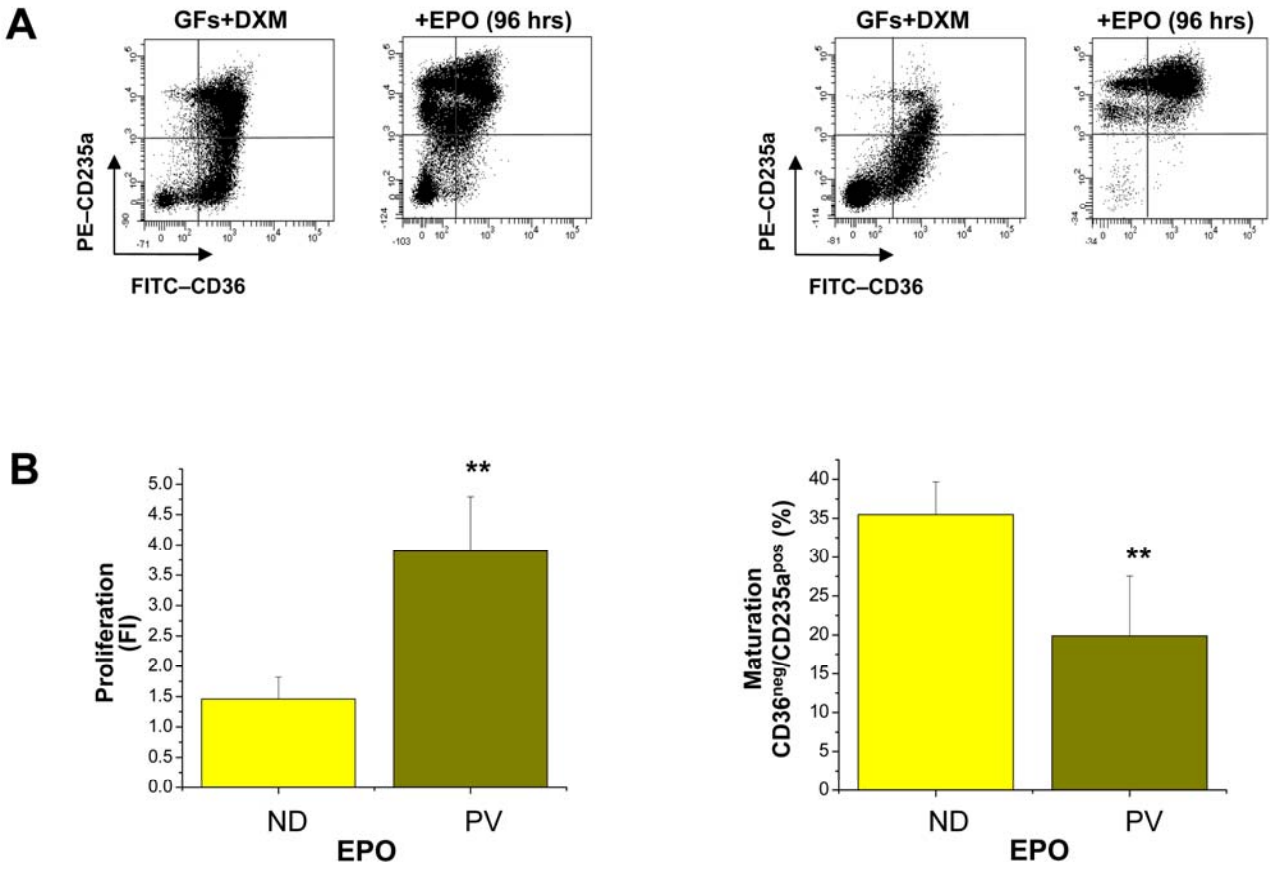

Figure S4. EPO alone induces proliferation and not maturation of EBs generated *ex-vivo* from PV patients. A) Representative FACS analyses for CD36 and CD235a expression of EBs obtained from ND (left panels) and PV patients (right panels) under HEMA conditions (GFs+DXM) and stimulated for 96 hrs with EPO (10 U/mL). B) Mean (±SD) fold increase (FI) in cell number and in the frequency of mature ($CD36^{neg}CD235a^{high}$) EBs observed in cultures of 3 separate ND and PV patients after 4 days with EPO alone.

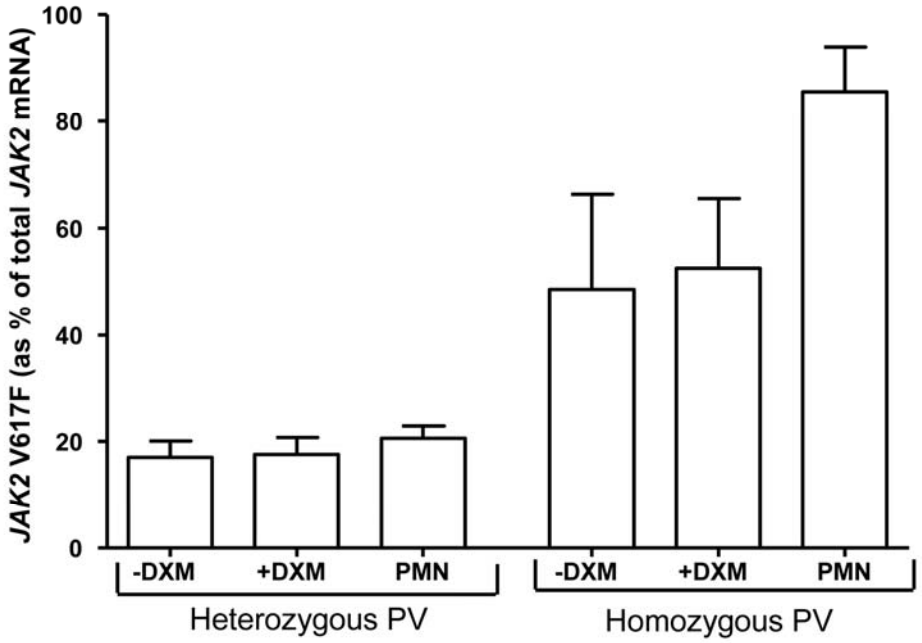

Figure S5. *JAK2*V617F expression, as percent of wild type allele expression, in erythroid cells obtained in vitro with (+) or without (-) DXM from PV MNC heterozygous or homozygous for the *JAK2*V617F mutation. Results are compared with the percent of *JAK2*V617F expressed by granulocytes (PMN) present in the blood of the patients at the time of collection for this study.