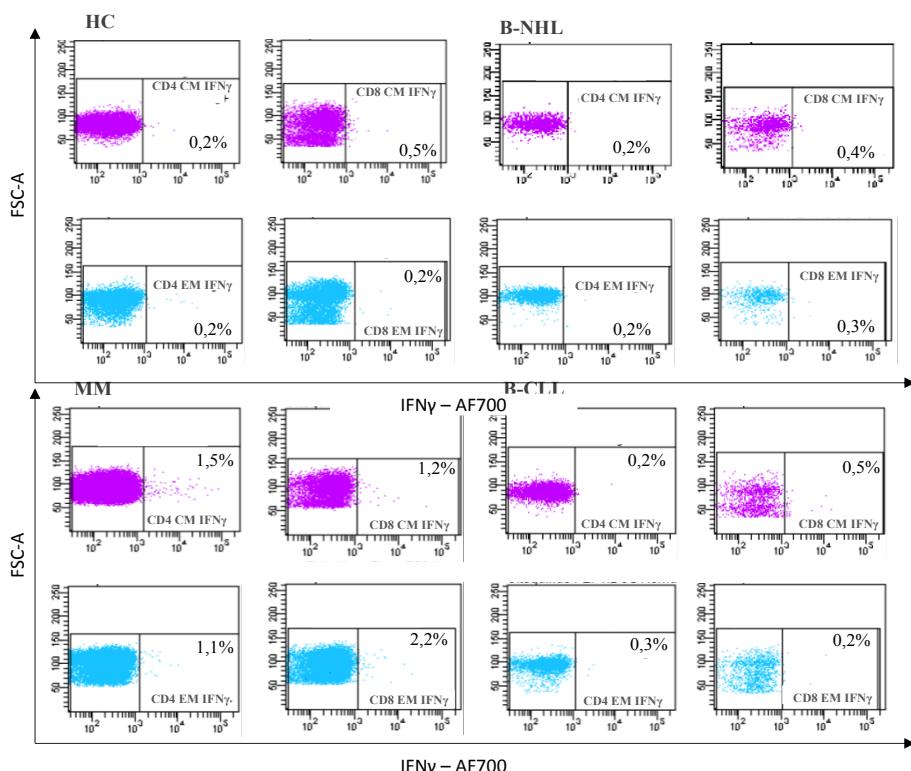
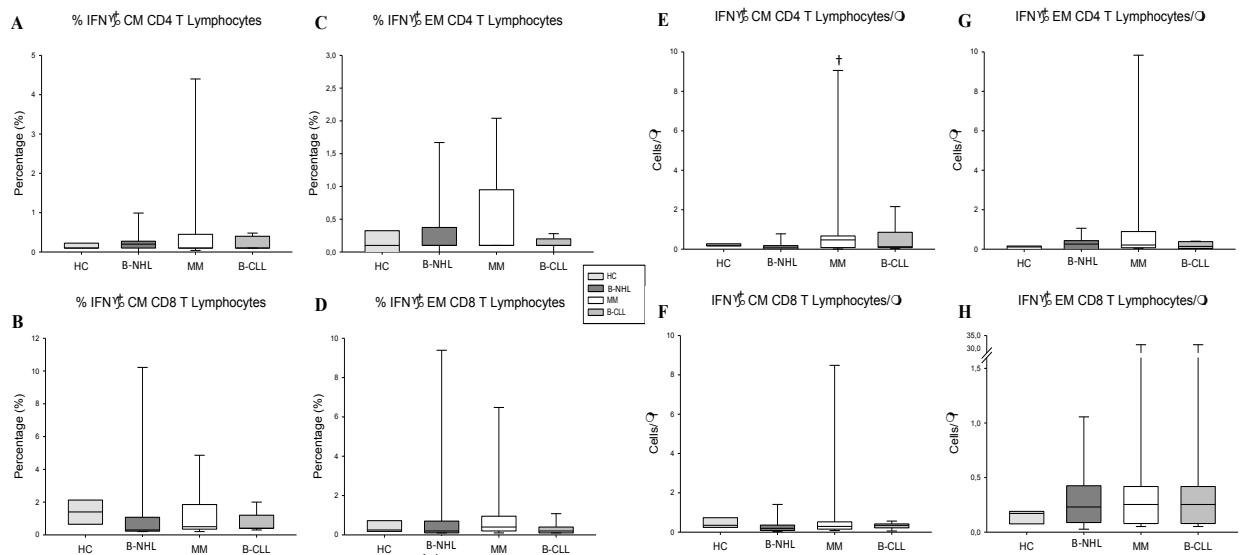


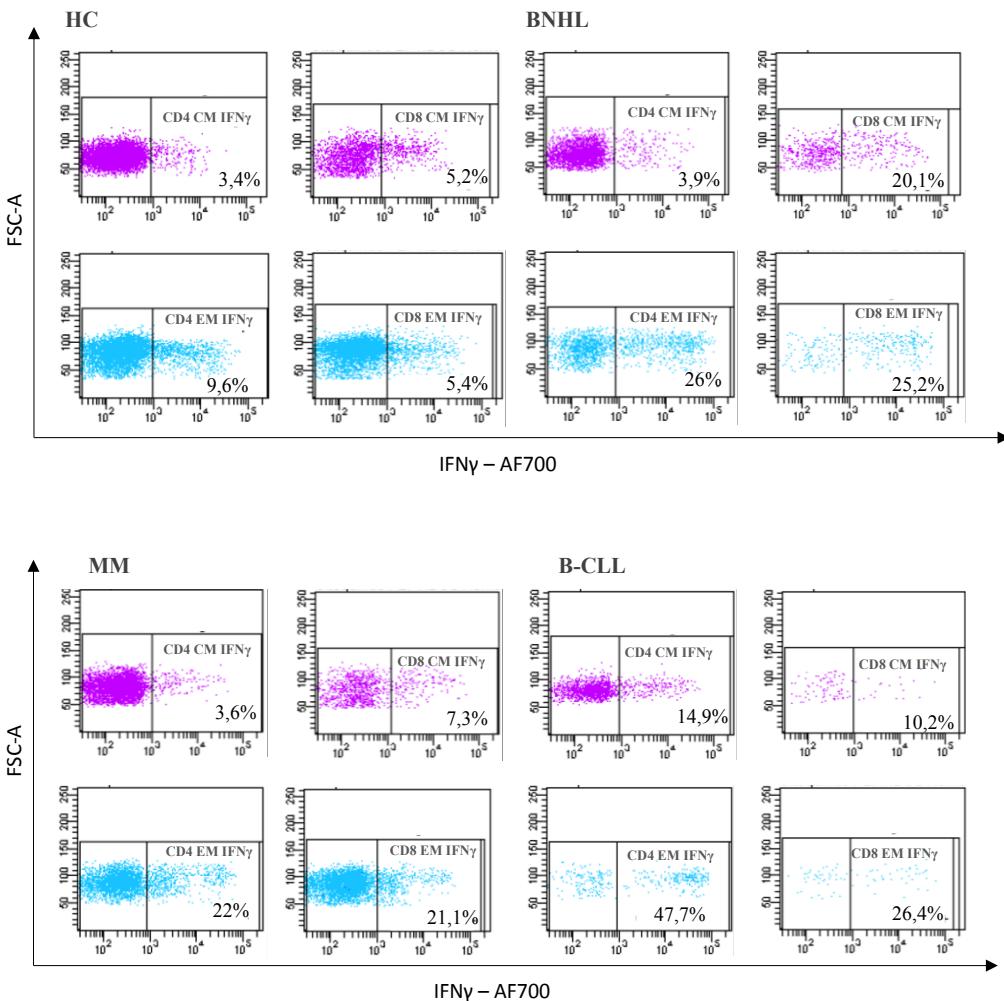
**Supplementary material Figure S1.** Study Flowchart. B-NHL, B-lymphocyte Non-Hodgkin B-NHL; CLL, Chronic Lymphocytic Leukemia; MM, Multiple Myeloma; ICF, Informed Consent Form.



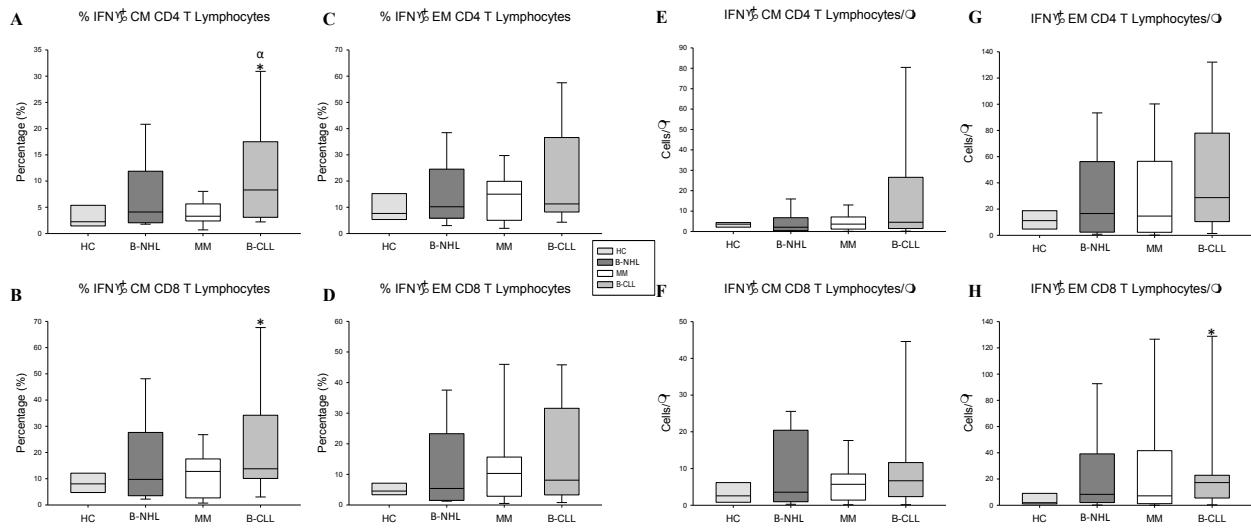
**Supplementary material Figure S2.** Dot plots represent the percentage of intralymphocytic IFN $\gamma$  secretion from  $T_{CM}$  and  $T_{EM}$  subpopulations of  $CD4^+$  and  $CD8^+$  T after stimulation with the peptide pool, in a HC and a lymphoma patient, in a MM patient and in a B-CLL patient.



**Supplementary material Figure S3.** Percentage and numbers of intralymphocytic IFN $\gamma$  secretion from T<sub>CM</sub> and T<sub>EM</sub> subpopulations of CD4<sup>+</sup> and CD8<sup>+</sup> T after stimulation with the peptide pool. **A, B** Box plots represent the percentage of IFN $\gamma$  production by the T<sub>CM</sub> subpopulations of CD4<sup>+</sup> and CD8<sup>+</sup> T. **C, D** Box plots represent the percentage of IFN $\gamma$  production by T<sub>EM</sub> subpopulations of CD4<sup>+</sup> and CD8<sup>+</sup> T. **E, F** Box plots represent the numbers of IFN $\gamma$  production by T<sub>CM</sub> subpopulation of CD4<sup>+</sup> and CD8<sup>+</sup> T. **G, H** Box plots represent the numbers of IFN $\gamma$  production by T<sub>EM</sub> subpopulation of CD4<sup>+</sup> and CD8<sup>+</sup> T. HC, B-NHL, MM, B-CLL. \* p<0.05 HC vs Patients; † p<0.05 B-NHL vs MM; α p<0.05 B-NHL vs B-CLL; β p<0.05 MM vs B-CLL.



**Supplementary material Figure S4.** Dot plots represent the percentage of intralymphocytic IFN $\gamma$  secretion from T<sub>CM</sub> and T<sub>EM</sub> subpopulations of CD4<sup>+</sup> and CD8<sup>+</sup> T after stimulation with PMA, in a HC and a lymphoma patient, in a MM patient and in a B-CLL patient.



**Supplementary material Figure S5. Percentage and numbers of intralymphocytic IFN $\gamma$  secretion from T<sub>CM</sub> and T<sub>EM</sub> subpopulations of CD4 $^{+}$  and CD8 $^{+}$  T after stimulation with PMA.** A, B Box plots represent the percentage of IFN $\gamma$  production by the T<sub>CM</sub> subpopulations of CD4 $^{+}$  and CD8 $^{+}$  T. C, D Box plots represent the percentage of IFN $\gamma$  production by T<sub>EM</sub> subpopulations of CD4 $^{+}$  and CD8 $^{+}$  T lymphocyte. E, F Box plots represent the numbers of IFN $\gamma$  production by T<sub>CM</sub> subpopulation of CD4 $^{+}$  and CD8 $^{+}$  T. G, H Box plots represent the numbers of IFN $\gamma$  production by T<sub>EM</sub> subpopulation of CD4 $^{+}$  and CD8 $^{+}$  T lymphocyte. HCs, B-NHL, MM, B-CLL. \* p<0.05 HCs vs Patients; † p<0.05 B-NHL vs MM; α p<0.05 B-NHL vs B-CLL; β p<0.05 MM vs B-CLL.