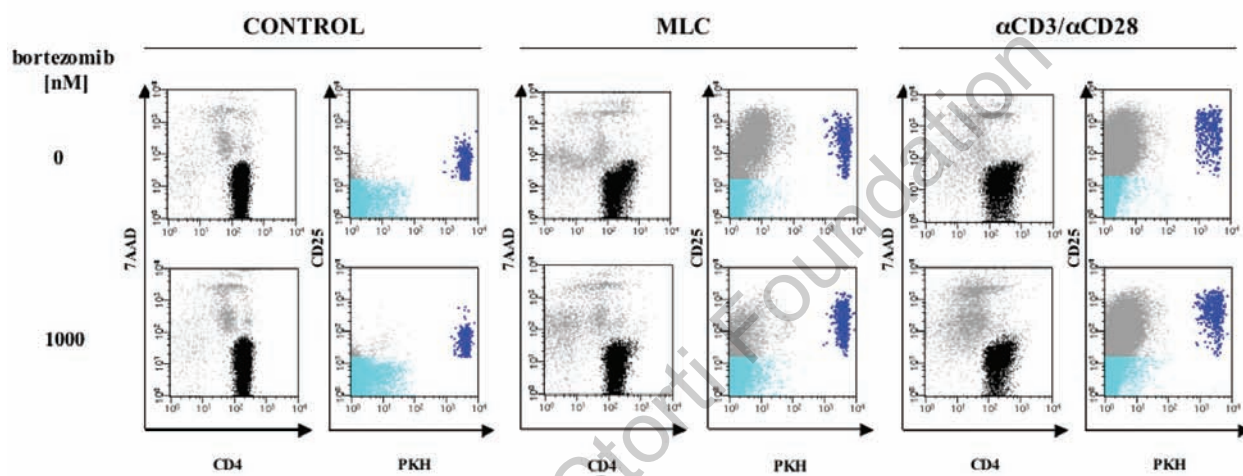


# Treatment with bortezomib of human CD4<sup>+</sup> T cells preserves natural regulatory T cells and allows the emergence of a distinct suppressor T-cell population

Belén Blanco, José A. Pérez-Simón, Luis I. Sánchez-Abarca, Teresa Caballero-Velazquez, Silvia Gutierrez-Cossío, Pilar Hernández-Campo, María Díez-Campelo, Carmen Herrero-Sanchez, Concepción Rodríguez-Serrano, Carlos Santamaría, Fermín M. Sánchez-Guijo, Consuelo del Cañizo, and Jesús F. San Miguel

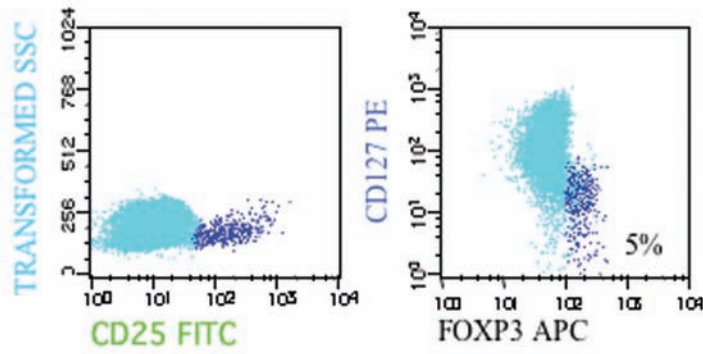
Servicio de Hematología, Hospital Universitario de Salamanca and Centro de Investigación del Cáncer (CIC/CSIC) Salamanca, Centro en Red de Medicina Regenerativa y Terapia celular de Castilla y León, Spain

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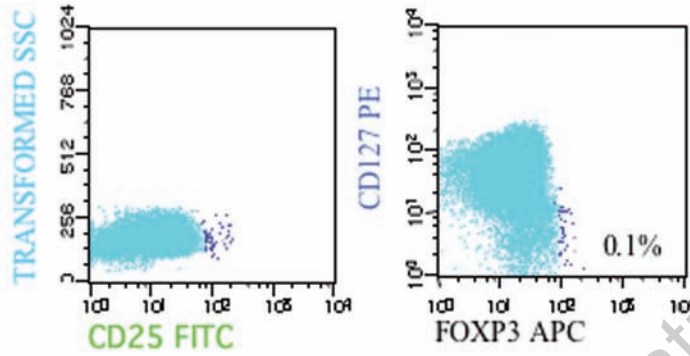


Online Supplementary Figure S1. Viability of the different types of CD4<sup>+</sup> T cells: regulatory (CD25<sup>+</sup> PKH<sup>+</sup>), resting conventional (CD25<sup>-</sup> PKH<sup>-</sup>) and activated conventional (CD25<sup>+</sup> PKH<sup>-</sup>) T cells, assessed by the percentage of 7AAD<sup>-</sup> cells of each subpopulation

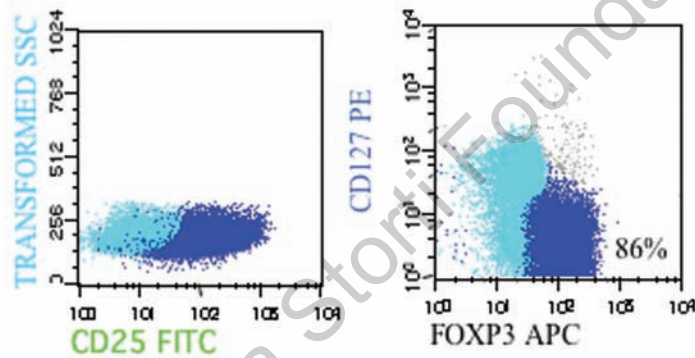
Isolated  
CD4<sup>+</sup> T cells



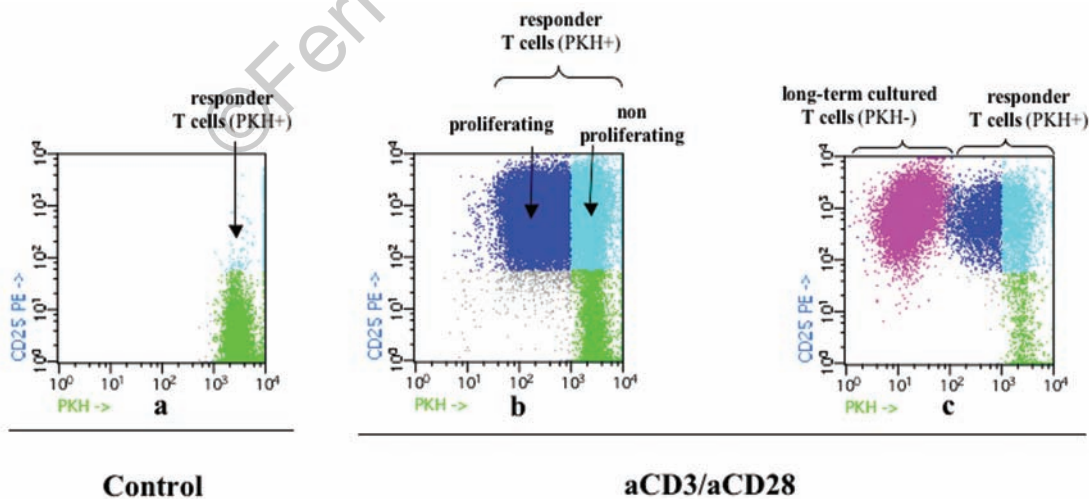
Isolated  
CD25<sup>-</sup> T cells



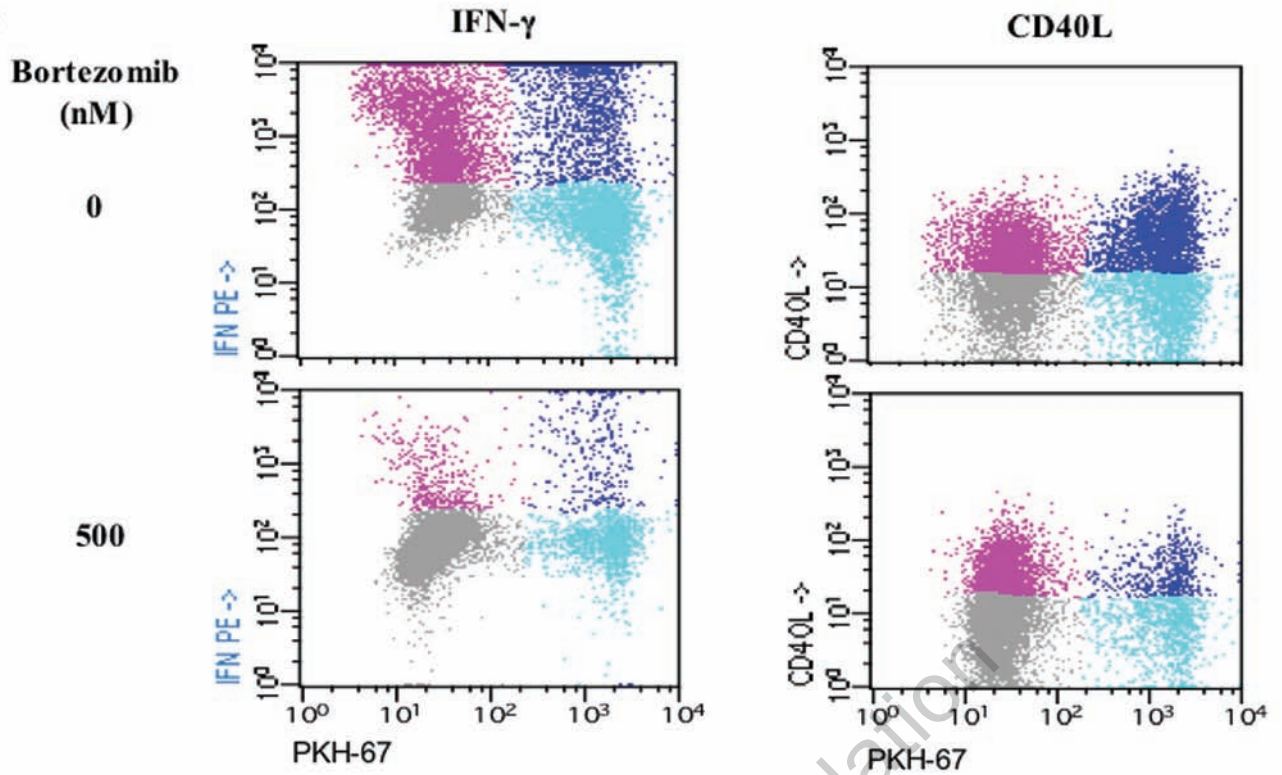
Isolated  
CD25<sup>+</sup> T cells



Online Supplementary Figure S2. Analysis of CD25, FOXP3 and CD127 expression by total CD4<sup>+</sup>, CD4<sup>+</sup>CD25<sup>-</sup> or CD4<sup>+</sup>CD25<sup>+</sup> T cells separated by immunomagnetic selection based on the expression of CD4 and CD25.



Online Supplementary Figure S3. Suppression assays: proliferation and CD25 expression. (A) Schematic representation of 4-day suppression assays analysis by flow cytometry: (a) unstimulated PKH-stained responder T cells; (B) aCD3/aCD28 stimulated PKH-stained responder T cells co-incubated with non PKH-stained long-term cultured cells, among which we can distinguish: long-term cultured cells (violet), proliferating CD25<sup>+</sup> responder T cells (blue), non-proliferating CD25<sup>+</sup> responder T cells (cyan) and non-proliferating CD25<sup>-</sup> responder T cells (green).

**A**

Online Supplementary Figure S4. Suppression assays: IFN-g and CD40L production after co-culture of responder plus long-term cultured T cells. (A) IFN- $\gamma$  and CD40L intracytoplasmic expression by both responder (PKH<sup>+</sup>) and long-term cultured (PKH<sup>-</sup>) T cells. One experiment of five is shown.