



Supplementary

# Impact of Erythropoietin Production by Erythroblastic Island Macrophages on Homeostatic Murine Erythropoiesis

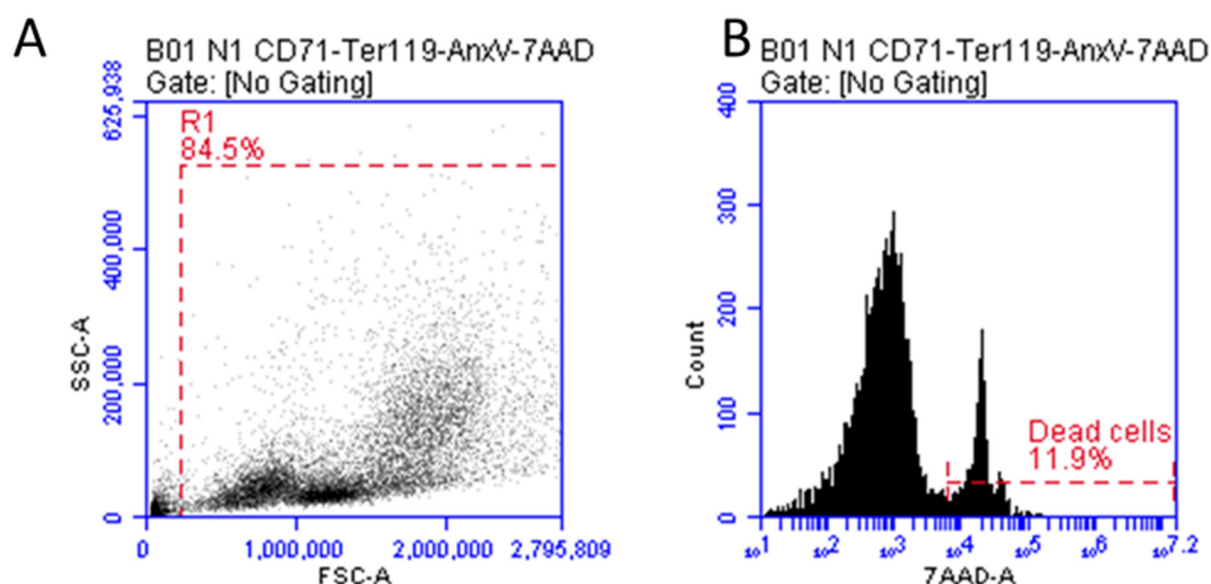
Genève Perron-Deshaies <sup>1</sup>, Philippe St-Louis <sup>1</sup>, Hugo Romero <sup>1,2</sup> and Tatiana Scorza <sup>1,\*</sup>

<sup>1</sup> Département des Sciences Biologiques, Université du Québec à Montréal, Montréal H3C 3P8, Canada; perron-deshaies.geneve@courrier.uqam.ca (G.P.-D.); st-louis.philippe.2@courrier.uqam.ca (P.S.-L.); hugo.romero.pro@gmail.com (H.R.)

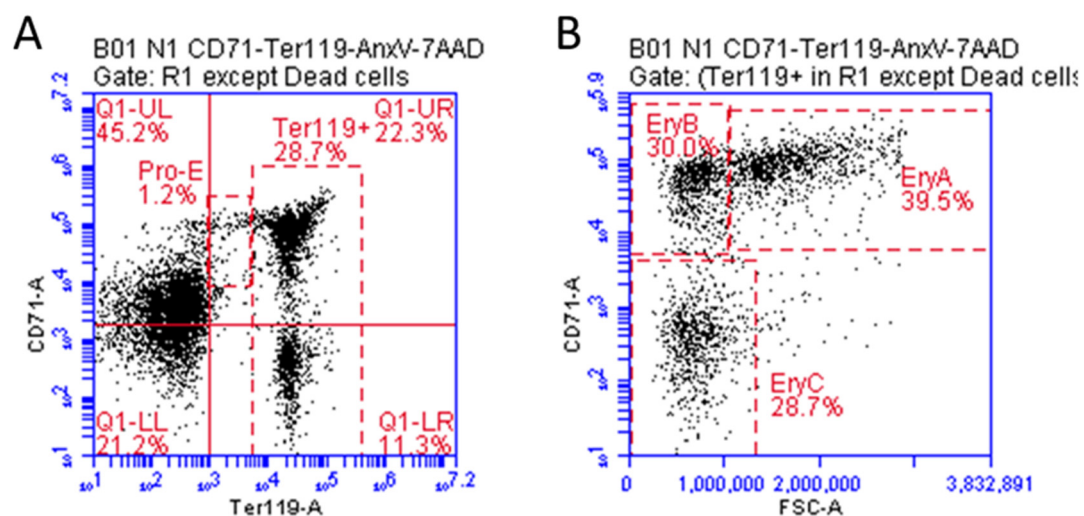
<sup>2</sup> CHU Sainte-Justine Research Centre, Montreal H3T 1C5, Canada

\* Correspondence: scorza.tatiana@uqam.ca; Tel.: +1-514-9873000 (ext. 1918)

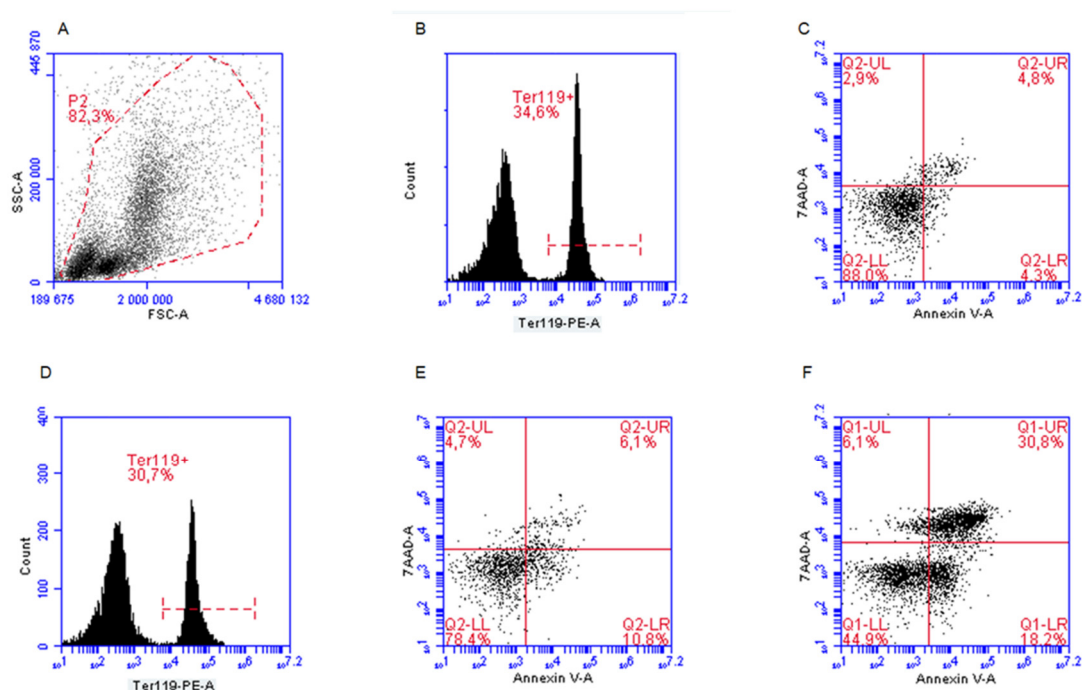
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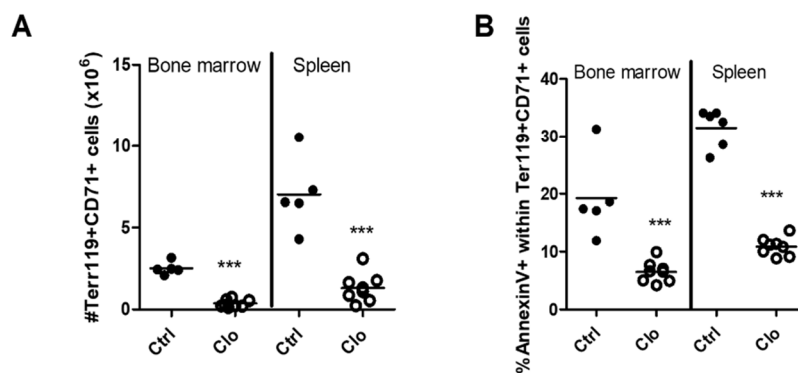
**Figure 1.** Gating strategies for the exclusion of debris and dead cells. (A) A gate was created broadly to include cells but exclude debris. For each sample, 10 000 events were collected inside this gate. (B) 7AAD+ cells were selected on a histogram plot for exclusion in later analysis.



**Figure 2.** Gating strategies for identification of ProE, EryA, EryB and EryC. **(A)** Live cells were analyzed by expression of Ter119 and CD71.  $CD71^{high}Ter119^{med}$  cells were identified as proerythroblasts (ProE). A gate was created to select all  $Ter119^{high}$  cells. **(B)**  $Ter119^{high}$  cells were analyzed by size (FSC) and expression of CD71. EryA were identified as  $CD71^{high}FSC^{high}$ , EryB as  $CD71^{high}FSC^{low}$  and EryC as  $CD71^{low}FSC^{low}$ .



**Figure 3.** Strategy to evaluate apoptotic cells in the bone marrow and spleen by flow cytometry. Bone marrow and splenic cells were stained with anti Ter119 antibody, Annexin V and 7AAD. **(A)** Gate to exclude debris. **(B)** Selection of Ter119+ cells in the BM and **(C)** assessment of Annexin V+ and Annexin V+7AAD+ cells within BM Ter119+ cells. **(D)** Selection of Ter119+ in the spleen and **(E)** analysis the percentages of annexin V+ and annexinV+7AAD+ cells within Ter119+ cells in the spleen. **(F)** Splenic apoptotic erythroblasts following 48 hours in culture; supernatants from these cells were used to condition BMDM prior to their co-culture with LSK cells for evaluation of pro-erythropoietic activity.



**Figure 4.** Assessment of total Ter119+ CD71+ cells and apoptosis levels in control mice and in mice treated with clodronate liposomes. (A) Compilation of Ter119+CD71+ cell numbers in the BM and spleen from control (Ctrl) and clodronate -treated (Clo) mice one week after injection of liposomes; significantly lower numbers of Ter119+ cells are found in mice ablated of macrophages. (B) The percentages of apoptotic annexin V+ Ter119+CD71+ cells significantly decreased in the BM and spleen from clodronate treated mice. \*\*\*  $p < 0.001$ .