

Supplementary Materials: Monocyte Subsets and Serum Inflammatory and Bone-Associated Markers in Monoclonal Gammopathy of Undetermined Significance and Multiple Myeloma

Daniela Damasceno, Julia Almeida, Cristina Teodosio, Luzalba Sanoja-Flores, Andrea Mayado, Alba Pérez-Pons, Noemi Puig, Paula Arana, Bruno Paiva, Fernando Solano, Alfonso Romero, Sergio Matarraz, Wouter B.L. van den Bossche, Juan Flores-Montero, Brian Durie, Jacques J.M. van Dongen and Alberto Orfao on behalf of the TiMaScan Study Group

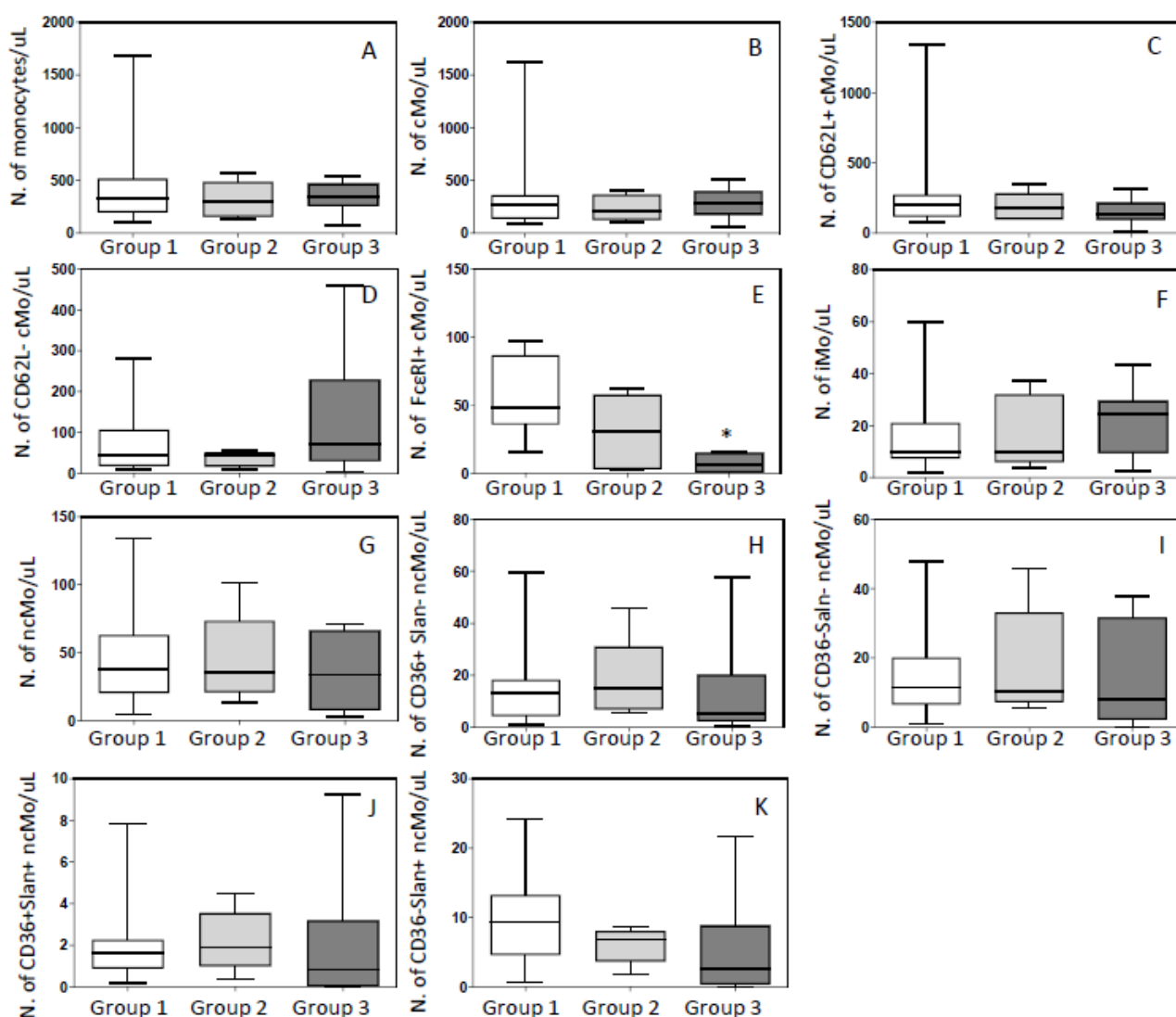


Figure S1. Distribution of total monocytes (panel A) and monocyte subsets (panels B-K) in blood of 4 MGUS, 5 SMM, 16 MM and 5 HD grouped by TSNE (groups 1, 2 and 3). Notched boxes extend from the 25th to the 75th percentile values; the lines in the middle and vertical lines correspond to median values and the 5th and 95th percentiles, respectively. Statistical significant differences ($p < 0.05$) were observed vs *Group 1. cMo: classical monocytes; iMo: intermediate monocytes; ncMo: non-classical monocytes.

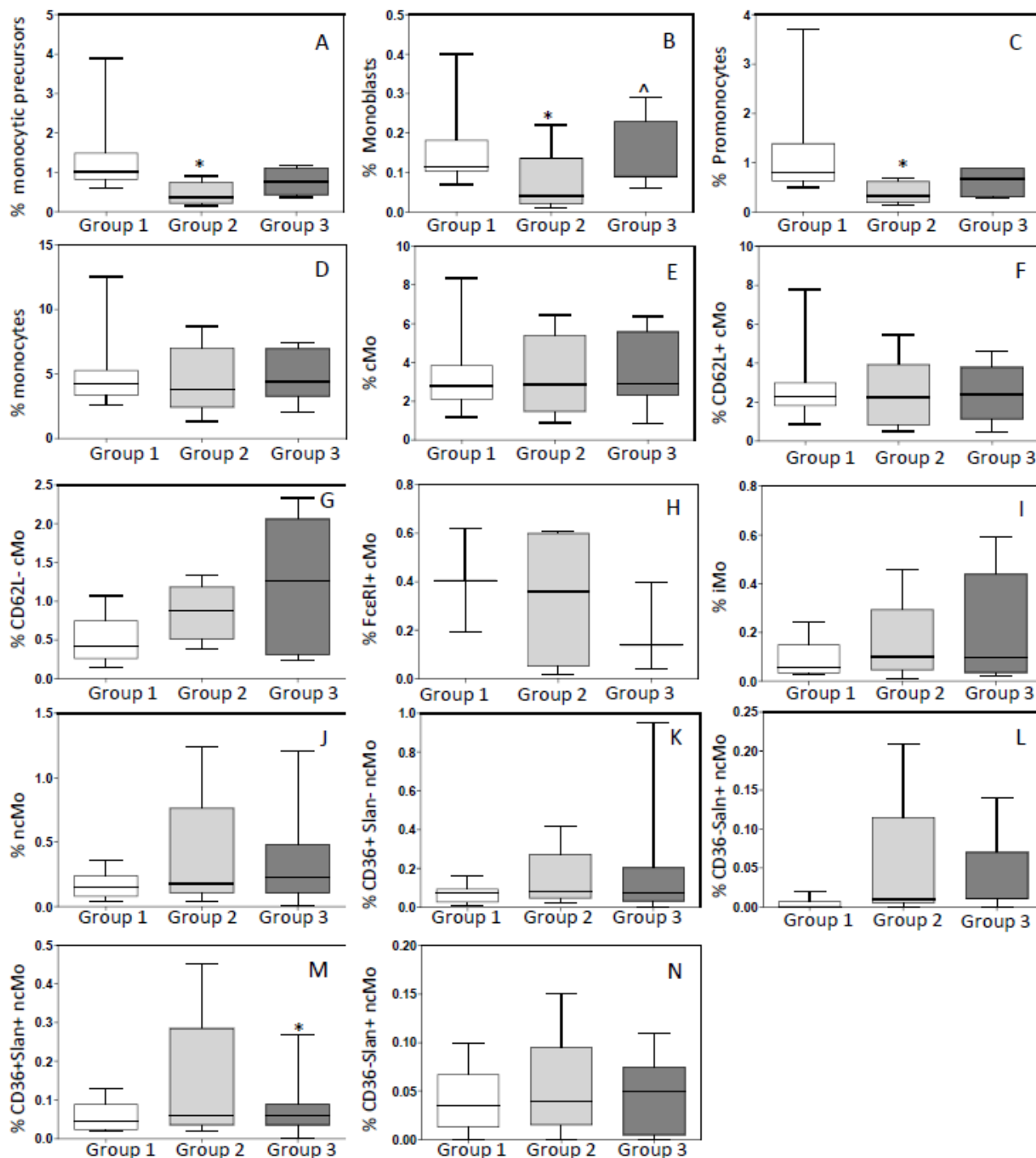


Figure S2. Distribution of monocytic precursors (total precursors, monoblasts and promonocytes) (panels A-C), total monocytes (panel D) and their subsets (panels E-N) in bone marrow of 4 MGUS, 5 SMM, 16 MM and 5 HD grouped by T-SNE (groups 1, 2 and 3). Notched boxes extend from the 25th to the 75th percentile values; the lines in the middle and vertical lines correspond to median values and the 5th and 95th percentiles, respectively. Statistical significant differences ($p < 0.05$) were observed vs *Group 1 and ^Group 2. cMo: classical monocytes; iMo: intermediate monocytes; ncMo: non-classical monocytes.

Table S1. Clinical characteristics of MGUS, SMM and MM patients and HD.

| Patient Characteristics | HD | | MGUS | | SMM | | MM | |
|--|-------------------|------------|-------------------|------------|------------------|------------|-------------------|------------|
| | PB | BM | PB | BM | PB | BM | PB | BM |
| Number of cases | 97 | 15 | 22 | 19 | 13 | 13 | 88 | 81 |
| Age, years, median (range) | 62 (32-92) | 59 (31-83) | 67 (31-85) | 70 (44-85) | 64 (43-86) | 63 (43-86) | 72 (45-85) | 71 (45-85) |
| Sex, males/females, (%) | 50/50 | 66/34 | 54/46 | 58/42 | 38/62 | 54/46 | 47/53 | 42/58 |
| MM ISS stage, I/II/III, (%) | | | | | | | | 37/23/40 |
| MM R-ISS stage, I/II/III, (%) | | | | | | | | 25/54/21 |
| Mayo Clinic risk score, 0/1/2/3, (%) | | | | 26/26/42/6 | | 23/61/16/0 | | |
| Osteolytic lesions, No/Yes, (%) | | | | 100/0 | | 100/0 | | 44/56 |
| Leukocytes (WBC), cells/ μ L, median (range) | 8310 (6120-10390) | | 6582 (4078-10147) | | 5885 (5346-6483) | | 5641 (2721-10907) | |
| Hemoglobin, g/dL, median (range) | NA | | 15 (12-18) | | 13 (12-16) | | 11 (6-17) | |
| Serum calcium, mg/dL, median (range) | NA | | 9.4 (8.7-9.8) | | 9.4 (8.7-10) | | 9.3 (7.2-14) | |
| Serum creatinine, mg/dL, median (range) | NA | | 0.8 (0.5-2.2) | | 0.8 (0.6-1.1) | | 0.99 (0.3-6.5) | |
| Urea, mg/dL, median (range) | NA | | 33 (17-54) | | 41 (31-55) | | 47 (20-231) | |
| Serum albumin, g/dL, median (range) | NA | | NA | | 4.3 (3.5-4.8) | | 4.1 (2.1-9) | |
| Serum β 2-microglobulin, mg/dL, median (range) | NA | | NA | | 2.6 (1.1-4.3) | | 3.7 (1.3-52) | |
| Serum M-component (g/L) | NA | | 0.6 (0-2.2) | | 1.6 (0.6-3.1) | | 3.4 (1.6-1161) | |
| Heavy chain, IgA/IgG, (%) | | | | 35/65 | | 38/62 | | 30/70 |
| Light chain, κ/λ , (%) | | | | 45/55 | | 62/38 | | 74/26 |
| Number of plasma samples analyzed | 13 | | 18 | | 7 | | 12 | |

*all patients were studied at diagnosis prior to any treatment.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).