SUPPLEMENTARY APPENDIX

MYC protein expression scoring and its impact on the prognosis of aggressive B-cell lymphoma patients

Maria R. Ambrosio, 1 Stefano Lazzi, 1 Giuseppe Lo Bello, 1 Raffaella Santi, 2 Leonardo Del Porro, 1 Maria M. de Santi, 3 Raffaella Guazzo, 1 Lucia Mundo, 1 Luigi Rigacci, 4 Sofia Kovalchuck, 4 Noel Onyango, 5 Alberto Fabbri, 6 Emanuele Cencini, 6 Pier Luigi Zinzani, 7 Francesco Zaja, 8 Francesco Angrilli, 9 Caterina Stelitano, 10 Maria G. Cabras, 11 Giuseppe Spataro, 12 Roshanak Bob, 13 Thomas Menter, 14, 15 Massimo Granai, 1 Gabriele Cevenini, 1 Kikkeri N. Naresh, 15 Harald Stein, 13 Elena Sabattini 16 and Lorenzo Leoncini 1

¹Department of Medical Biotechnologies, University of Siena, Italy; ²Division of Pathological Anatomy, University of Florence, Italy; ³Unit of Pathological Anatomy, AOU Siena, Italy; ⁴Hematology Division, AOU Careggi, University of Firenze, Italy; ⁵Department of Clinical Medicine and Therapeutics, Unit of Medical Oncology, University of Nairobi, Kenya; ⁴Haematology Unit, Azienda Ospedaliera Universitaria Senese, Siena, Italy; ¹Institute of Hematology "L. e A. Seràgnoli", University of Bologna, Italy; ³Clinica Ematologica ed Unità di Terapie Cellulari "Carlo Melzi", DAME, University of Udine, Italy; ¹Ematologia Ospedale Civile dello Spirito Santo, Pescara, Italy; ¹Ematologia, Ospedale Bianchi Melacrino Morelli, Reggio Calabria; ¹¹Hematology, Cagliari Hospital, Italy; ¹²Post Graduate School of Public Health, University of Siena, Italy; ¹³Pathodiagnostik Lab. Berlin, Germany; ¹⁴Institute of Pathology and Medical Genetics, University Hospital of Basel, Switzerland; ¹⁵Department of Cellular and Molecular Pathology, Hammersmith Hospital Campus, Imperial College Healthcare NHS Trust, London, UK and ¹⁶Unit of Haemolymphopathology, Department of Hematology and Oncology, University Hospital of Bologna, Italy

Correspondence: lorenzo.leoncini@dbm.unisi.it doi:10.3324/haematol.2018.195958

Supplementary figure 1. Kaplan-Meier curves of progression free survival in the different groups of patients.

A: Kaplan-Meier curve of progression free survival in double hit (DH) *versus* double expressor (DE) *versus* non-double hit/non-double expressor (nonDH/nonDE) lymphomas.

Progression free survival was significantly different between the DH and the other two groups (log rank test, p<0.001).

B: Kaplan-Meier curve of progression free survival in double expressor (DE) depending on MYC protein expression.

Progression free survival was significantly lower in the group showing MYC-IHC \geq 70% than in the group with MYC-IHC 40-69% (log rank test, p=0.001).

C: Kaplan-Meier curve of progression free survival in double hit (DH) depending on MYC protein expression.

Progression free survival was significantly different among the two groups (MYC-IHC 0 to 69% and BCL-2-IHC \geq 50%, and MYC-IHC \geq 70% and BCL-2-IHC \geq 50%) with MYC \geq 70% cases having the lower survival rate (log rank test, p<0.001). Noteworthy, among HGDH with MYC-IHC 0 to 69%, the 3 cases showing MYC-IHC<40% had a mean PFS of 42 months (data not shown).

D: Kaplan-Meier curve of progression free survival in double hit (DH) *versus* double expressor (DE) as defined by MYC-IHC \geq 70% and BCL-2-IHC \geq 50% *versus* non-double hit/non-double expressor (nonDH/nonDE).

Progression free survival overlaps in DH and DE with MYC-IHC \geq 70% and BCL-2-IHC \geq 50% (log rank test, p=0.064 for DH *versus* DE with MYC \geq 70% and BCL-2-IHC \geq 50%;), being worse than the OS of the nonDH/nonDE (log rank test, p=0.003).

