

## **Supplementary Appendix: Contributing Centers**

Klinikum Grosshadern, Munich, Germany; Ospedale San Raffaele s.r.l., Milano, Italy; IRCCS Ospedale Policlinico San Martino, Genova, Italy; Universitaetsklinikum Dresden, Dresden, Germany; Institute of Hematology and Blood Transfusion, Prague, Czech Republic; Programme de Transplantation&Therapie Cellulaire, Marseille, France; Universita Cattolica S. Cuore, Rome, Italy; Azienda Ospedaliero Universitaria di Udine, Udine, Italy; University Hospital Erlangen, Erlangen, Germany; CHU Bordeaux, Hopital Haut-Leveque, Pessac, France; University Hospital Maastricht, Maastricht, Netherlands; CHU Grenoble Alpes - Université Grenoble Alpes, Grenoble, France; Medicana International Hospital Istanbul, Istanbul, Turkey; S.S.C.V.D Trapianto di Cellule Staminali, Torino, Italy; Charles University Hospital, Pilsen, Czech Republic; Hospital Gregorio Marañón, Madrid, Spain; Goethe-Universitaet, Frankfurt Main, Germany; IRCCS, Casa Sollievo della Sofferenza, San Giovanni, Italy; University Hospital Eppendorf, Hamburg, Germany; RM Gorbacheva Research Institute, Pavlov University, Petersburg, Russian Federation; University Hospital | Basel, Basel, Switzerland; Hannover Medical School, Hannover, Germany; Ospedale San Gerardo, Monza, Italy; Techniciens d' Etude Clinique suivi de patients greffes, Strasbourg, France; Azienda Ospedali Riuniti di Ancona, Ancona, Italy; Mazzoni Hospital, Ascoli Piceno, Italy; Hosp. Reina Sofia, Córdoba, Spain; ASST GRANDE OSPEDALE METROPOLITANO NIGUARDA, Milano, Italy; ASST Papa Giovanni XXIII, Bergamo, Italy; University of Freiburg, Freiburg, Germany; Fondazione IRCCS Policlinico San Matteo, Pavia, Italy; Istituto Clinico Humanitas, Milano, Italy; CHRU, Angers, France; USD Trapianti di Midollo, Adulti, Brescia, Italy; Turku University Hospital, Turku, Finland; University Hospital | Essen, Essen, Germany; Hopital La Miletrie, Poitiers, France; Fondazione IRCCS – Ca' Granda, Milano, Italy; Elisabethinen-Hospital, Linz, Austria; Philipps Universitaet Marburg, Marburg, Germany; Ospedale La Maddalena - Dpt. Oncologico, Palermo, Italy;

Klinikum Augsburg, Augsburg, Germany; Hospital Sirio-Libanés, Sao Paulo, Brazil; University Hospital Innsbruck, Innsbruck, Austria; Hospital San Maurizio, Bolzano, Italy; Ospedale Nord, Taranto, Italy; Klinikum Rechts der Isar, Munich, Germany; ICO-Hospital Universitari Germans Trias i Pujol, Badalona, Spain; University Hospital La Fe, Valencia, Spain; H SS. Antonio e Biagio, Alessandria, Italy; Gazi University Faculty of Medicine, Ankara, Turkey; CHU Nantes, Nantes, France; Azienda Ospedaliera Universitaria Careggi, Firenze, Italy; LKH - University Hospital Graz, Graz, Austria; Fundación Jiménez Díaz, Madrid, Spain; Martin-Luther-Universität Halle-Wittenberg, Halle, Germany; U.O.D Trapianti di midollo osseo, Rozzano, Italy; Anadolu Medical Center Hospital, Kocaeli, Turkey; A.Z. Sint-Jan, Brugge, Belgium; University of Heidelberg, Heidelberg, Germany; AORMN Hospital, Pesaro, Italy; George Papanicolaou General Hospital, Thessaloniki, Greece; Az. Ospedaliera S. Croce e Carle, Cuneo, Italy; Hospital Universitario Virgen del Rocío, Madrid, Spain; Klinikum Nuernberg, Nuernberg, Germany; U.O. Ematologia con Trapianto, Bari, Italy; Fundació Institut d'Investigació Sanitària Illes Balears ? IdISBa, Palma, Spain; Hospital Clínico, Salamanca, Spain; Hospital Morales Meseguer, Murcia, Spain; Kings College Hospital, London, United Kingdom; University of Saarland, Homburg, Germany; A.O.R.N. `SAN.G MOSCATI`, Avellino, Italy; Centro Trapianti Unico Di CSE Adulti e Pediatrico A. O Brotzu, Cagliari, Italy; Imperial College, London, United Kingdom; University Hospital Gasthuisberg, Leuven, Belgium; Cliniques Universitaires St. Luc, Brussels, Belgium; Hospital U. Marqués de Valdecilla, Santander, Spain; CHU CAEN, Caen, France; Département d'Oncologie, Service d'Hématologie, Geneva, Switzerland; CHU ESTAING, Clermont, France; CHU de Lille, Lille, France; Hospital Clínico de Valencia, Valencia, Spain; Ospedale S. Camillo-Forlanini, Rome, Italy; U.O.S.A Centro Trapianti e Terapia Cellulare, Siena, Italy; Hospital Universitario Virgen de la Arrixaca, Murcia, Spain; ZNA, Antwerp, Belgium; University Medical Center Schleswig-Holstein, Luebeck, Germany; Medical Clinic and Policlinic 1, Leipzig, Germany; ALBERTS CELLULAR THERAPY, Pretoria,

South Africa; Azienda Ospedaliero Universitaria di Modena Policlinico, Modena, Italy; Hospital Univ. Virgen de las Nieves, Granada, Spain; Grande Ospedale Metropolitano Bianchi Melacrino Morelli - Centro Unico Trapianti A. Neri, Reggio Calabria, Italy; AZ Delta, Roeselare, Belgium; University of Muenster, Muenster, Germany; Ospedale San Carlo, Potenza, Italy; University of Amiens: CHU Amiens, Amiens, France; Demiroglu Bilim University Istanbul Florence Nightingale Hospital, Istanbul, Turkey; Antwerp University Hospital (UZA), Antwerp E, Belgium; Universitaet Bonn, Bonn, Germany; Universitaetsmedizin Mannheim, Mannheim, Germany; Robert\_Bosch\_Krankenhaus, Stuttgart, Germany; Diakonissenkrankenhaus, Stuttgart, Germany; Hospital Guglielmo da Saliceto, Piacenza, Italy; Klinikum Frankfurt (Oder) GmbH, Frankfurt Oder, Germany; Hospital Clinic, Barcelona, Spain; Medizinische Universitaet Wien, Vienna, Austria; Univ. La Sapienza, Rome, Italy; Hospital de la Princesa, Madrid, Spain; Institut de Cancerologie Lucien Neuwirth, Saint Etienne, France; Hôpital Henri Mondor, Creteil, France; Hadassah University Hospital, Jerusalem, Israel; Hospital Santa Creu i Sant Pau, Barcelona, Spain; Research Committee - University of Patras, Patras, Greece; Inst. Portugues Oncologia, Lisboa, Portugal; University Hospital Center Rebro, Zagreb, Croatia; European Institute of Oncology, Milano, Italy; University Hospital Aachen, Aachen, Germany; Národný onkologický ústav, Bratislava, Slovak Republic; American University of Beirut Medical Center, Beirut, Lebanon; University Hospital Birmingham NHSTrust, Stoke, United Kingdom; Heinrich Heine Universitaet, Duesseldorf, Germany; Department of Bone Marrow Transplantation and Oncohematology, Gliwice, Poland; Ospedale Dell'Angelo, Venezia, Italy; HUCH Comprehensive Cancer Center, Helsinki, Finland; HELIOS Klinikum Berlin-Buch, Berlin, Germany; University of Cologne, Cologne, Germany; Hospital de Gran Canaria Dr Negrin, Las Palmas, Spain; St. George`s Hospital, London, United Kingdom; Hospital Regional de Málaga, Malaga, Spain; Hospital Vall d`Hebron, Barcelona, Spain; Baskent University Hospital, Adana, Turkey; Klinikum Bremen-

Mitte, Bremen, Germany; Hospital del SAS, Cadiz, Spain; University of Milano, Milano, Italy; Policlinico G.B. Rossi, Verona, Italy; CHU - Institut Universitaire du Cancer Toulouse, Toulouse, France; Universitair Ziekenhuis Brussel, Brussels, Belgium; Centre Hospitalier Universitaire de Rennes, Rennes, France; Nottingham University, Nottingham, United Kingdom; University of Liege, Liege, Belgium; University Hospital | Linköping, Linköping, Sweden; University of Napoli, Napoli, Italy; Hopital Saint Antoine, Paris, France; University Regensburg, Regensburg, Germany; Ospedale Policlinico, Catania, Italy; Sezione di Ematologia, Perugia, Italy; Azienda Ospedaliero Universitaria Pisana, Pisa, Italy; Medical University of Gdansk, Gdansk, Poland; Medizinische Klinik m. S. Hämatologie , Onkologie und Tumorimmunologie, Berlin, Germany; CHU Lapeyronie, Montpellier, France; Centre

### Supplemental Table S1: Conditioning details

	<i>de novo</i> (n=590)	secAML (n=129)	Overall (n=719)
TBF	247 (42%)	50 (38.8%)	297 (41.4%)
BuFlu	94 (16%)	19 (14.7%)	113 (15.8%)
Flu-TBI	76 (12.9%)	22 (17.1%)	98 (13.7%)
FluMel	58 (9.9%)	15 (11.6%)	73 (10.2%)
FluTreo	34 (5.8%)	8 (6.2%)	42 (5.9%)
FLAMSA-TBI	20 (3.4%)	1 (0.8%)	21 (2.9%)
FLAMSA-Mel	17 (2.9%)	3 (2.3%)	20 (2.8%)
FTM	14 (2.4%)	4 (3.1%)	18 (2.5%)
BuCy	5 (0.9%)	1 (0.8%)	6 (0.8%)
Cy-TBI	4 (0.7%)	0 (0%)	4 (0.6%)
FLAMSA-Bu	3 (0.5%)	0 (0%)	3 (0.4%)
FLAMSA-Treo	3 (0.5%)	1 (0.8%)	4 (0.6%)
TBI-other	3 (0.5%)	0 (0%)	3 (0.4%)
Other CT	3 (0.5%)	0 (0%)	3 (0.4%)
Flucy	2 (0.3%)	4 (3.1%)	6 (0.8%)
TBI-VP16	2 (0.3%)	0 (0%)	2 (0.3%)
Thiotepa-based	2 (0.3%)	0 (0%)	2 (0.3%)
Clofa-based	1 (0.2%)	0 (0%)	1 (0.1%)
Bu-TBI	0 (0%)	1 (0.8%)	1 (0.1%)
Missing	2	0	2

Abbreviations: CT-chemotherapy; TBI-total body irradiation; Mel-melphalan; Bu-busulfan; Flu-fludarabine; Cy-cytosan; TBF-thiotepa, Bu, Flu; Treo-treosulfan; FTM-Flu, thio, mel; Clofa-clofarabine, FLAMSA-Bu- Flu, amsacrine, cytarabine-Bu; FLAMSA-Mel- Flu, amsacrine, cytarabine-Mel; VP16-etoposide

**Supplemental Table S2: GvHD prevention**

	<i>de novo</i> AML (n=590)	secAML (n=129)	Overall (n=719)
CSA+MMF	312 (52.9%)	53 (41.1%)	365 (50.8%)
MMF+TACRO	198 (33.6%)	53 (41.1%)	251 (34.9%)
MMF+SIRO	33 (5.6%)	10 (7.8%)	43 (6%)
MMF+SIRO	33 (5.6%)	10 (7.8%)	43 (6%)
MMF	16 (2.7%)	4 (3.1%)	20 (2.8%)
TACRO	8 (1.4%)	1 (0.8%)	9 (1.3%)
Other	8 (1.4%)	1 (0.8%)	9 (1.3%)
CSA+MTX	7 (1.2%)	5 (3.9%)	12 (1.7%)
CSA	6 (1%)	2 (1.6%)	8 (1.1%)
TACRO+SIRO	1 (0.2%)	0 (0%)	1 (0.1%)
CSA+MTX+MMF	1 (0.2%)	0 (0%)	1 (0.1%)

Abbreviations: secAML – secondary acute myeloid leukemia; CSA – cyclosporine A; MMF – mycophenolate mofetil; MTX – methotrexate; TACRO- tacrolimus; SIRO-sirolimus

