ELSEVIER

Blood 142 (2023) 4973–4974

The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

731.AUTOLOGOUS TRANSPLANTATION: CLINICAL AND EPIDEMIOLOGICAL

Autologous Stem Cell Transplantation for Multiple Myeloma in Algeria

Malek Benakli, MD[1], *Arezki Tibiche*[2], *Nabil Yafour*[3], *Kamila Amani*[3], *Farah Bouamama*[3], *Leila Charef*[3], *Samira Bouchama*[3], *Khadidja Bouhafs*[3], *Amel Baki*[3], *Soufi Osmani*[3], *Mohamed Brahimi*[3], *Rachid Bouhass*[3], *Abdessamed Arabi*[3], *Mohamed Amine Bekadja*[3], *Farih Mehdid*[1], *Sabrina Akhrouf*[1], *Mounira Baazizi*[1], *Nadia Rahmoune*[1], *Dina Ait Ouali*[1], *Hanane Bouarab*[1], *Nacera Ait Amer*[1], *Farida Tensaout*[1], *Rihab Benouattas*[1], *Rachida Belhadj*[1], *Amina Talbi*[1], *Naima Abdennebi*[1], *Farida Harieche*[1], *Rose-Marie Hamladji*[1], *Redhouane Ahmed Nacer*[1], *Fatma Soltani*[4], *Mahbouba Ferrari*[4], *Mahdia Saidi*[4], *Salima Oukid*[5], *Cherifa Guezlane*[5], *Zohor Bouchetara*[5], *Mohand Tayeb Abad*[5], *Mohamed Bradai*[5], *Lina Kazi Tani*[6], *Naima Mesli*[6], *Mohamed Cherif Rahali*[7], *Mohamed Rafik Abadi*[7], *Samir Mnaouar*[7], *Khadidja Djouadi*[7], *Salahedine Belakehal*[7], *Samir Baghdad*[8], *Aissa Bachiri*[8], *Hadjira Ahmidatou*[9], *Soraya Kellouche*[9], *Nadia Boudjerra*[9], *Nawel Ferroudj*[9], *Salim Nekkal*[9], *Zohra Kaci*[9], *Yamina Bouchakor Moussa*[10], *Lynda Louanchi*[10], *Meriem Bensadok*[10]

[1] Pierre and Marie Curie Center, Algiers, Algeria
[2] CHU, Tizi Ouzou, Algeria
[3] EHU, Oran, Algeria
[4] CAC, Batna, Algeria
[5] CAC, Blida, Algeria
[6] CHU, Tlemcen, Algeria
[7] HCA, Algiers, Algeria
[8] HMRU, Oran, Algeria
[9] CHU Beni Messous, Algiers, Algeria
[10] SAHTS, Algiers, Algeria

Introduction : High dose therapy (HDT) with autologous stem cell transplantation (ASCT) is a validated standard of treatment in eligible patients (pts) with multiple myeloma (MM). It is associated with improved overall and event-free survival compared to conventional chemotherapy. We report here this first large retrospective multicentre study of activity and the outcomes of ASCT in MM pts for a long period (1998-2021) in Algeria.

Patients and methods: Over a period of 23 years, from April 1998 to December 2021, 1117 pts with MM (mainly of the IgG type: 604 pts, 54.1%) benefited from ASCT in 8 Algerian centers (Oran: 478, Algiers CPMC: 376, Batna: 76, Blida: 55, Tlemcen: 38, Algiers Military hospital: 32, Oran military hospital: 32, Beni Messous: 30). The median age is 54 years (27 to 78). These are 655 men and 462 women (sex ratio: 1.4). The majority of the pts are at stage III of Salmon and Durie (1024 pts, 91.7%). Several induction protocols were used depending on the period and the department: VAD (200 pts, 17.9%) and Bortezomib-based (799 pts, 80.7%). The diagnosis-transplant delay is on average 12 months (4-137) after the use of one (851 pts; 76.2%) or 2 or more (265 pts; 23.8%) of therapeutic lines. Status disease before intensification: 433 pts (38.8%) were in CR, 312 pts (27.9%) in VGPR and 332 (29.7%) in partial remission. Conditioning based on Melphalan 140 or 200 mg/m2 is widely used (977 pts, 87.4%), followed by reinjection of grafts made of PBSC obtained after mobilization by G-CSF alone, administered, at a dose of 10 at 15 μg/kg/d, including 755 (67.6%) no-cryopreserved cells.

Results: The median time to aplasia is 9 days (3-39). G-CSF was used systematically in 364 pts (32.6%). The evaluation carried out in the 3 months following the intensification: 740 pts (66.2%) are in CR, 202 pts (18.1%) in VGPR and 75 pts (6.7%) in PR. Fifteen pts (1.3%) died of early procedure-related complications. Six hundred and twenty-one pts (55.6%) received consolidation treatment combining Bortezomid (VRD, VCD or VTD) and 614 pts (55%) received maintenance treatment mainly with thalidomide (533 pts, 47.7%). A second autograft was performed in tandem or for relapse in 26 pts (2.3%). The final evaluation is carried out in March 2022. Out of a total of 1095 evaluable pts (98%), 731 pts (65.5%) are alive in RC (528 pts; 48.2%), in VGPR (76 pts; 6.9%) and in PR (36 pts; 3.2%) and 364 pts (32.6%) died mainly from relapse or progression (268 pts, 24%). For all patients, after a median follow-up of 125 months, overall survival is 68.5% at 5 years, 52.1% at 10 years and 25.3% at 23

years. OS and EFS have improved substantially over the last 10 years (2011-2021) compared for the first decade (1999-2010) (p<0,0001).

Conclusion: This long-term follow-up study shows the transition from induction treatment made essentially of conventional treatments during the 1st decade to triple combinations of new molecules widely used in the induction treatment of patients eligible for intensification. The possibility of carrying out this procedure without cryopreservation of the cells has made it possible to increase the number of beneficiary pts.

Disclosures No relevant conflicts of interest to declare.

https://doi.org/10.1182/blood-2023-174045