ACTUAL USAGE OF CURRENT SYSTEMIC TREATMENTS AND INFLUENCE OF KEY DRIVERS FOR MULTIPLE MYELOMA IN THE FIRST 2 LINES OF THERAPY. DATA FROM REAL-WORLD STUDY IN EU5 COUNTRIES.

N. BLIN 1, C. MAI 2, S. ERTL 3, E. SCHNEIDER 2, M. LEBERRE 2. / 1 Hematology Department, Nantes University Hospital, Nantes, France | 2 *APLUSA*, Lyon, France | 3 *APLUSA*, London, UK

INTRODUCTION

The therapeutic landscape in multiple myeloma (MM) has changed dramatically in recent years. Pharmacological innovation has resulted in significant survival improvement in all patients' subsets but also increased complexity of treatment choice in any line of therapy and potentially led to more heterogeneity in patient management. Different approaches across Europe are observed regarding reimbursement and availability of MM drugs, especially monoclonal antibodies and new combinations. Real world practices differ from clinical trial designs and need to be investigated against official guidelines.

OBJECTIVES

Identify treatment patterns in MM in EU5 countries (France, Germany, Spain, Italy and UK) based on real-world patient data with a focus on the two first lines of therapy.

METHODS

Anonymous patient charts, provided by onco-haematologists treating patients with MM in France (FR), Germany (DE), Spain (ES), Italy (IT) and UK were analyzed.

A total of 4,851 unique patient charts (last patients seen in consultation, currently treated for MM and not included in clinical trials, whatever the date of initiation of current treatment) were included in the analysis, filled by 430 Doctors. The analysis focused on the first two lines of therapy for MM: 1,279 first line (1L) patients, 441 receiving induction treatment prior to autologous stem cell transplantation (SCT) and 838 patients not eligible for intensive treatment, + 1,208 second line (2L) patients.

D= daratumumab; V=bortezomib; T=thalidomide; d= dexamethasone; R=lenalidomide; M= melphalan; p= prednisone; K=carfilzomib

RESULTS

Median age (in years) was 59 in SCT eligible and 74 in SCT ineligible populations. No difference in patient age was observed between countries. ECOG score at treatment initiation was 0-1 in 91% of SCT eligible patients and 66% in the SCT ineligible population. ISS stage was I in 10%, II in 25% and III in 61% of SCT patients vs. 9%, 32% and 57% of SCT ineligible patients, respectively. Cytogenetic profile revealed high risk in 34% in patients fit for SCT and 14% in those receiving less intensive treatment. Patients' comorbidities at first line initiation were also collected and are listed below.

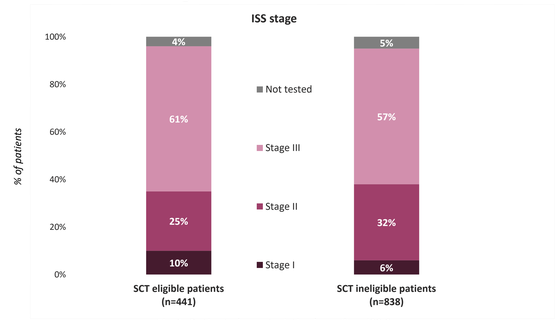

Fig 1. Patient characteristics based on ISS Score (Total= 1,279 patients)

Co-morbidities at initiation of current treatment	SCT eligible	SCT ineligible
Number of patients (Total= 1,279 patients)	**441**	**838**
None	**49%**	**11%**
At least 1 co-morbidity	**51%**	**89%**
Mild renal insufficiency (ClCr = 50-90 mL/min)	13%	34%
Moderate renal insufficiency (ClCr = 30-49 mL/min)	4%	15%
Severe renal insufficiency (ClCr < 30 mL/min)	2%	4%
Previous Deep Vein Thrombosis	2%	6%
Grade I neuropathy	4%	10%
Grade II neuropathy	1%	4%
Grade III neuropathy	0%	1%
Grade IV neuropathy	0%	0%
Hypertension	24%	52%
Dyslipidaemia	14%	28%
Cardiac dysfunction	2%	24%
Diabetes	7%	26%
Cancers	0%	5%
Other co-morbidities	11%	20%

Fig 2. Patient co-morbidities at 1st line treatment initiation (Base: percentage of patients)

In accordance with EHA-ESMO 2021 clinical practice guidelines (1), D-VTd was the most frequently used combination in SCT eligible patients (FR:23%, DE:30%, IT:29%, ES:14%, UK:60%). VRd was less frequently used except in ES (49% vs. 14% for D-VTd).

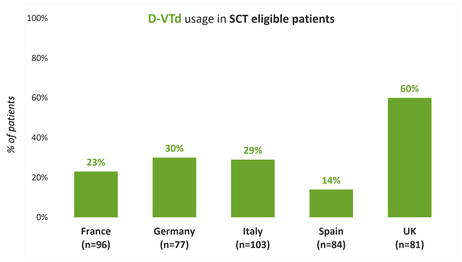

Fig 3. Percentage of patients receiving D-VTd induction regimen prior to SCT in EU5 countries (Total= 441 patients)

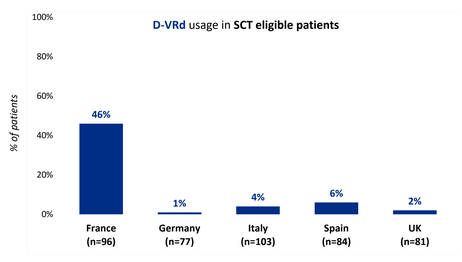

Fig 4. Percentage of patients receiving D-VRd induction regimen prior to SCT in EU5 countries (Total= 441 patients)

RESULTS

D-VRd was the third most frequently prescribed regimen in 1L SCT eligible patients. Percentage of patients receiving this regimen ranged from 46% in FR, to 1% & 2% in DE and the UK, where low use is likely due to lack of reimbursement of quadruplet therapy, and absence of phase III comparative data vs D-VTd.

Surprisingly, peripheral neuropathy did not appear to be a key driver for the use of thalidomide vs. lenalidomide (5% grade I peripheral neuropathy in the D-VTd group vs. 0% in the D-VRd group). Similarly, no link was seen between prognostic markers or patient's comorbidities and combination chosen (39% of patients with high-risk cytogenetics in D-VTd group vs 41% in D-VRd group).

In 1L SCT ineligible patients, DRd was the most frequently used regimen in FR: 43%, DE: 30%, IT:19%, but not in ES: 13% or the UK: 3%. In these countries, D-VMP was the most used combination in ES: 30% (<10% of patients in the FR, DE, IT, UK), while Rd was most frequently used in the UK: 30%.

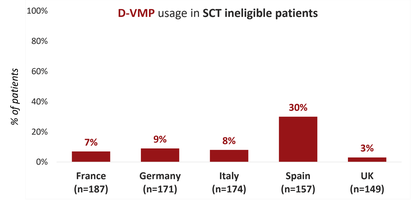

Fig 5. Use of D-VMP regimen in first line SCT ineligible patients by country (Total= 838 patients)

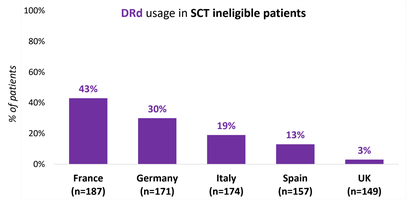

Fig 6. Use of DRd in first line SCT ineligible patients by country (Total= 838 patients)

In 2L patients, the most frequently used combinations were DRd in FR, DE & IT (30%, 20% and 17% of patients respectively), KRd in ES (15%) and DVd in the UK (28%), the major driver being the regimen received in 1L. No correlation was observed between patient's comorbidities, cytogenetic risk or ISS score and treatment selection.

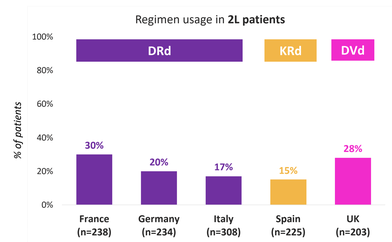

Fig 7. Most frequently used regimens in second line of therapy (Total= 1,208 patients)

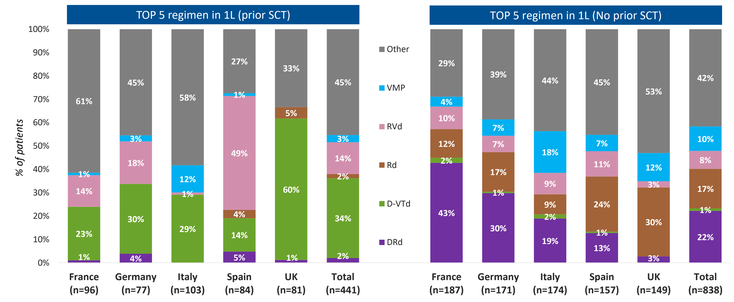

Fig 8. Focus on the 5 most frequently used regimens in first line SCT eligible and SCT ineligible patients (Total= 1,279 patients)

CONCLUSIONS

This real-world study demonstrates that regimens recommended in the latest 2021 EHA-ESMO guidelines (1) are the most frequently used in both 1L and 2L in most EU5 countries. However, different practices are apparent between countries regarding the use of regimens that are not fully reimbursed in all countries (i.e., D-VRd), the use of DRd in 1L, and KRd/DVd in 2L. No major drivers of treatment choice, based on disease risk or treatment efficacy could be identified vs. published data. These differences are probably more dependent on physician prescribing habits and local recommendations.

REFERENCES

(1) Multiple myeloma: EHA-ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Dimopoulos M. et al. Ann Oncol.2021 Mar;32(3):309-322

CONTACT

- Nicolas Blin, MD, Hematology Department, Nantes University Hospital, Nantes, France. nicolas.blin@chu-nantes.fr
- Christine Maï, MD, *APLUSA*, Lyon, France. c.mai@aplusaresearch.com
- Siegfried Ertl, *APLUSA*, London, UK. s.ertl@aplusaresearch.com