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Real-world effectiveness of belantamab mafodotin, BCMA-CD3 bispecific antibodies and talquetamab in patients with triple-class-exposed multiple myeloma.
Updated data from the Danish ABCD-study.

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INTRODUCTION

The most recent effective therapies for triple-class-exposed relapsed/refractory multiple myeloma patients are antibody-drug-conjugates (**A**DC), bispecific antibodies (**B**sAbs) and **C**AR-T cells - together we call these drugs: **ABC**-therapies.

BCMA-ADC, GPRC5D BsAbs and BCMA BsAbs (teclistamab, elranatamab and linvoseltamab) were available to Danish patients via early access programs. Since February 2024 teclistamab is reimbursed for patients who had received a least 3 prior therapies.

Here we present data collected under the ABCD set up from 2022 to 2024.

AIM

This study aims to document the real-world safety and effectiveness of ABC-therapies used *outside of clinical trials* in Denmark.

METHODS

An ongoing, retrospective, multicenter study, where multiple myeloma specialists from all Danish regions have conducted comprehensive chart reviews for patients who received ABC-therapy outside of clinical trials.

Baseline demographics, prior lines of therapy, response rates (overall response; ORR; very good partial response or better; ≥VGPR), duration of response, progression-free survival, overall survival, and adverse events were recorded.

The study is a collaboration with J&J. GSK gave financial support.

CONCLUSION

Our study confirms the clinical activity of ABC-therapies in patients with triple class exposed, relapse/refractory multiple myeloma in a real-world setting.

The largest cohort at the time of analysis was the BCMA BsAb cohort due to the reimbursement of teclistamab. The effectiveness and safety profile of BCMA BsAbs were in line with what was expected based on the respective clinical trials. The effectiveness of ADC BCMA and GPRC5D BsAbs in our dataset seem inferior to previously reported clinical findings. This may be explained by the relatively small sample sizes, heavily pretreated patients and high prevalence of adverse cytogenetic features.

Our study will report results with longer-term follow-up in the coming years.

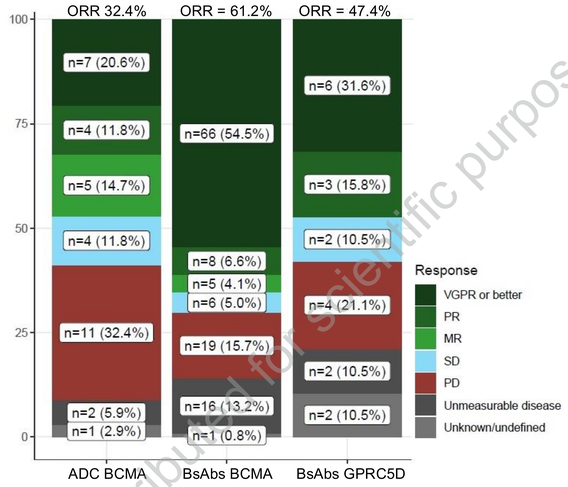
RESULTS

PATIENT CHARACTERISTICS

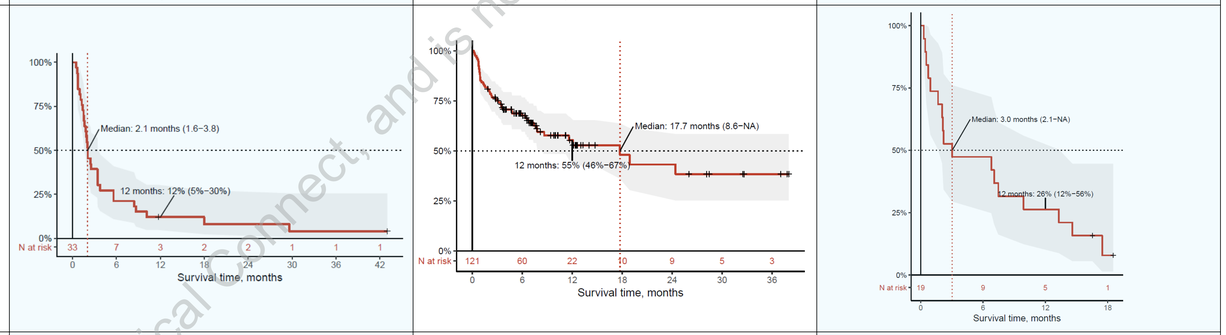
	BCMA ADC (N = 34)	BCMA BsAbs (N = 121)	GPRC5D BsAbs (N = 19)
Age at start of treatment - T0; *median (IQR)*	68 years (64-73)	69 years (61-76)	64 years (59-69)
Age at diagnosis; *median (IQR)*	60 years (56-66)	61 years (53-68)	58 years (52-61)
Years from diagnosis to T0; *median (IQR)*	8 years (6-10)	6 years (4-9)	5 years (3-11)
Sex, female; *No. (%)*	18 (52.9%)	63 (52.1%)	6 (31.6%)
Performance status 0-1; *No (%)*	26 (81.2%)	107 (88.4%)	14 (73.7%)
Extramedullary disease T0; *No (%)*	16 (48.5%)	31 (25.6%)	5 (26.3%)
FISH performed; *No (%)*	31 (91.2%)	109 (90.1%)	17 (89.5%)
FISH High Risk *; *No (% of N with FISH performed)*	10 (32.3%)	41 (37.6%)	8 (47.1%)
Prior lines; *median (IQR)*	9 (6 - 12)	5 (4 - 6)	5 (4 - 7)
Previous HDT-ASCT; *No (%)*	25 (73.5%)	91 (75.2%)	16 (84.2%)
Triple-class exposed; *No (%)*	34 (100 %)	120 (99.2%)	19 (100%)
Triple-class refractory; *No (%)*	31 (91.4%)	101 (83.5%)	18 (94.7%)
Refractory IMiD †; *No (%)*	34 (100%)	113 (93.4%)	19 (100%)
Refractory PI ‡; *No (%)*	31 (91.2%)	107 (88.4%)	18 (94.7%)
Refractory Anti-CD38 mAb §; *No (%)*	34 (100%)	118 (97.5%)	19 (100%)
Refractory BCMA ADC ¶; *No (%)*	NA	5 (4.1%)	1 (5.3%)
Refractory BCMA BsAbs #; *No (%)*	0 (0%)	NA	4 (21.1%)
Refractory GPRC5D BsAbS **; *No (%)*	3 (8.8%)	15 (12.4%)	NA
ABC-treatment as PNP††or CU‡‡; *No (%)*	34 (100%)	34 (28.1%)	19 (100%)
Name of ABC-therapy; *No (%)*	belantamab mafodotin 34 (100%)	linvoseltamab 7 (5.8%) elranatamab 4 (3.3%) teclistamab 110(90.9%)	talquetamab 19 (100%)

* : t(14:14), t(14;20), 17p del
† : thalidomide, lenalidomide, pomalidomide
‡ : bortezomib, carfilzomib, ixazomib
§ : daratumumab
¶ : belantamab mafodotin
# : teclistamab
** : talquetamab, forimtamig
†† : Patient Named Protocol
‡‡ : Compassionate Use

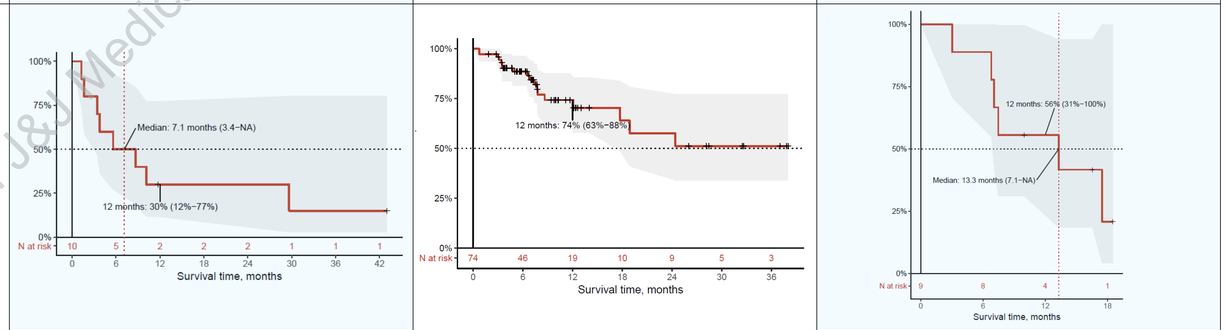
OVERALL RESPONSE RATES



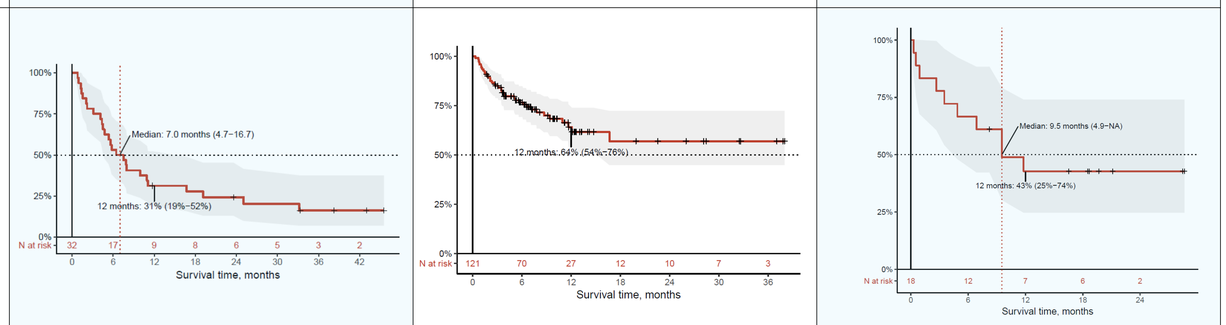
PROGRESSION FREE SURVIVAL



DURATION OF RESPONSE



OVERALL SURVIVAL



ADVERSE EVENTS

	Any grade	Grade 1-2	Grade 3-4	Grade 5
Keratitis	52.9%	38.2%	17.6%	NA
Lung infection	2.9%	0%	0%	2.9%
Fever	11.8%	11.8%	0%	0%

AEs reported here if >10% in grade 1-2, >5% grade 3-4 or any grade 5.

	Any grade	Grade 1-2	Grade 3-4	Grade 5
CRS	42.1%	42.1%	0%	0%
Upper resp. Infec.	24.8%	22.3%	2.5%	0%
Lung infection	14.9%	8.3%	8.3%	0.8%
Infections, other	9.9%	5.0%	5.8%	0%
Fever	10.7%	5%	5.8%	0%
Febrile neutropenia	1.7%	0%	0.8%	0.8%

AEs reported here if >10% in grade 1-2, >5% grade 3-4 or any grade 5.

	Any grade	Grade 1-2	Grade 3-4	Grade 5
CRS	52.6%	42.1%	10.5%	0%
Lung infection	10.5%	5.3%	5.3%	0%
Upper resp. Infec.	15.8%	15.8%	0%	0%
Infections, other	26.5%	26.5%	0%	0%
PPE* syndrome	15.8%	15.8%	0%	NA
Nail related	26.3%	26.3%	NA	NA
Rash maculopapular	15.8%	15.8%	0%	NA
Bone pain	10.5%	0%	10.5%	NA
Dysgeusia	68.4%	68.4%	NA	NA

AEs reported here if >10% in grade 1-2, >5% grade 3-4 or any grade 5.
** PPE = Palmar Plantar Erythrodysesthesia syndrome*

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