DATA FROM THE GERMAN OPAL REGISTRY

UNMET NEED IN PATIENTS WITH METASTATIC TRIPLE NEGATIVE BREAST CANCER INITIATING A FIRST-LINE TREATMENT

OPAL Registry Platform Breast Cancer

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INTRODUCTION

Despite treatment advances, the survival rates of patients with metastatic triple negative breast cancer (mTNBC) are still low and real world data on implementation and outcome of new treatment options in clinical routine are scarce. Here, we give insights into current treatment patterns and outcome of patients with mTNBC initiating a first-line treatment (1L) in routine care in Germany using data from the OPAL registry.

CONCLUSION

The tumor registry platform OPAL provides real-world data on treatment and outcome of patients with mTNBC in Germany. Despite treatment advances, patients with mTNBC, regardless of PD-L1 status, still have low PFS and OS rates in 1L and about one quarter of patients died before reaching 2L. This underscores the need for evaluating new treatment options to improve mTNBC outcomes.

METHODS

In the prospective registry platform OPAL (NCT03417115), over 2000 patients with metastatic breast cancer were enrolled by 189 German sites from 01/2018 to 04/2025. Details on (sequential) treatments, patient and tumor characteristics, biomarker testing, clinical and patient-reported outcomes are collected. Follow-Up is until death, lost-to follow-up or up to 5 years after start of 1L for mTNBC. This analysis focuses on 368 patients with mTNBC initiating 1L between January 2018 and August 2023 that meet the study inclusion criteria. Database cut was on December 31st, 2024.

For the PD-L1 status, the test result (positive/negative/unknown) as documented by the respective study sites was used.

Real world progression-free survival is defined as the time from start of first-line treatment (1L) until disease progression or death, whichever occurs first. Patients without an event will be censored at start of next line treatment or at the last confirmed activity date, whichever is earlier. PFS in registries can differ from PFS in clinical trials, since the RECIST criteria are usually not applied in routine care, and method and time point of imaging is performed as per local site standard. PFS in registries represents the time to clinically relevant progression in routine care.

Overall survival is defined as the time from start of 1L until death of any cause. Patients still alive will be censored the last contact date.

RESULTS

Patient characteristics by PD-L1 status are displayed in **Table 1.** Patients with mTNBC had a median age of 62 years (25 % of patients ≥ 75 years), with 11% of patients having an ECOG performance status of ≥ 2. 38 % of patients had de novo metastatic disease at initial diagnosis and 72 % of patients had visceral metastasis at start of 1L. Brain metastasis were present in about 7 % of patients at start of 1L.

Patients with PD-L1 positive tumors

Of patients with PD-L1 positive tumors (n = 117), 81 % received a 1L with PD-(L)1 inhibitors in combination with a chemotherapy **(Figure 1)**. Of patients receiving a PD-(L)1 inhibitor, 92 % received atezolizumab and 8 % pembrolizumab. Of note, atezolizumab was approved in 2019, whereas pembrolizumab was approved in 2021. Median progression-free survival (PFS) was 7.3 months (95 % confidence interval (CI) 6.5 – 9.1 months, **Figure 2**) and median overall survival (OS) was 21.5 months (16.4 – 24.8 months, **Figure 3**). At time of data cutoff, 50 % of patients received a 2L and 20% of patients could possibly still receive a 2L, e.g. because the prior 1L was still ongoing **(Figure 4)**.

Patients with PD-L1 negative tumors

Patients with PD-L1 negative tumor (n = 132) most frequently received mono-chemotherapy ± bevacizumab (59 %) as 1L, e. g., paclitaxel or capecitabine **(Figure 1)**. 27% of patients received a combination chemotherapy. Median PFS of patients with PD-L1 negative tumors was 6.3 months (5.0 – 7.6 months, **Figure 2**) and median OS was 16.7 months (14.0 – 20.7 months, **Figure 3**). At time of data cutoff, a 2L was documented for 63 % and 8 % could potentially still receive 2L **(Figure 4)**.

Patients with PD-L1 unknown tumors

For 119 patients, the PD-L1 status was unknown. Of note, since the approval of the first PD-(L)1 inhibitors in August 2019, PD-L1 testing was rapidly implemented in clinical routine (test rate about 72 % – 82 % in 2020 – 22, Zahn et al., 2022) so most of the patients with unknown PD-L1 status were diagnosed before August 2019. Patients with unknown PD-L1 status were mostly treated with mono-chemotherapy (71 %, **Figure 1**). The median PFS was 5.9 months (4.6 – 8.0 months) and median OS was 14.3 months (12.1 – 19.7 months, **Figure 2 and 3**). For 57 % of patients, a 2L treatment was already documented and 8 % of patients still had the potential to receive a 2L **(Figure 4)**.

Limitations

Outcome data presented here indicate the effectiveness of treatments in real-world patients treated in routine care. Since this is a descriptive analysis, it is important to note, that differences in OS/PFS for different PD-L1 status can also arise due to differences in other baseline characteristics.

Table 1: Patient and tumor characteristics by PD-L1 status

	PD-L1 positive	PD-L1 negative	PD-L1 unknown	Total
Patients (N)	**117**	**132**	**119**	**368**
Age				
≥ 18 & < 36	4 (3.4 %)	3 (2.3 %)	3 (2.5 %)	10 (2.7 %)
≥ 36 & < 46	8 (6.8 %)	12 (9.1 %)	5 (4.2 %)	25 (6.8 %)
≥ 46 & < 56	19 (16.2 %)	36 (27.3 %)	18 (15.1 %)	73 (19.8 %)
≥ 56 & < 65	38 (32.5 %)	31 (23.5 %)	23 (19.3 %)	92 (25.0 %)
≥ 65 & <75	20 (17.1 %)	28 (21.2 %)	28 (23.5 %)	76 (20.7 %)
≥ 75	28 (23.9 %)	22 (16.7 %)	42 (35.3 %)	92 (25.0 %)
ECOG				
0	42 (35.9 %)	59 (44.7 %)	36 (30.3 %)	137 (37.2 %)
1	48 (41.0 %)	41 (31.1 %)	50 (42.0 %)	139 (37.8 %)
≥ 2	8 (6.8 %)	21 (16.0 %)	10 (8.4 %)	39 (10.6 %)
Unknown to site	19 (16.2 %)	11 (8.3 %)	23 (19.3 %)	53 (14.4 %)
Any comorbidity				
Yes	81 (69.2 %)	91 (68.9 %)	93 (78.2 %)	265 (72.0 %)
No	36 (30.8 %)	41 (31.1 %)	26 (21.8 %)	103 (28.0 %)
Charlson comorbidity index				
0	90 (76.9 %)	107 (81.1 %)	92 (77.3 %)	289 (78.5 %)
1	13 (11.1 %)	8 (6.1 %)	15 (12.6 %)	36 (9.8 %)
2	8 (6.8 %)	10 (7.6 %)	9 (7.6 %)	27 (7.3 %)
≥3	6 (5.1 %)	7 (5.3 %)	3 (2.5 %)	16 (4.3 %)
Metastatic stage at first ever BC diagnosis				
M0 (recurrent BC)	67 (57.3 %)	79 (59.8 %)	74 (62.2 %)	220 (59.8 %)
M1 (de novo)	47 (40.2 %)	51 (38.6 %)	41 (34.5 %)	139 (37.8 %)
Unknown	3 (2.6 %)	2 (1.5 %)	4 (3.4 %)	9 (2.4 %)
Visceral metastasis				
Yes	84 (71.8 %)	94 (71.2 %)	87 (73.1 %)	265 (72.0 %)
No	32 (27.4 %)	30 (22.7 %)	28 (23.5 %)	90 (24.5 %)
Missing	1 (0.9 %)	8 (6.1 %)	4 (3.4 %)	13 (3.5 %)
Metastatic sites				
Brain	9 (7.7 %)	12 (9.1 %)	4 (3.4 %)	25 (6.8 %)
Liver	39 (33.3 %)	37 (28.0 %)	34 (28.6 %)	110 (29.9 %)
Lung	53 (45.3 %)	54 (40.9 %)	46 (38.7 %)	153 (41.6 %)
Lymph nodes	72 (61.5 %)	56 (42.4 %)	58 (48.7 %)	186 (50.5 %)
Other	58 (49.6 %)	80 (60.6 %)	78 (65.5 %)	216 (58.7 %)
Missing	1 (0.9 %)	8 (6.1 %)	4 (3.4 %)	13 (3.5 %)

ECOG: Eastern Cooperative Oncology Group (Oken et al. 1982). Any comorbidity: comorbidities according to CCI and other comorbidities combined. CCI: Comorbidities according to Charlson et al. 1987; current weighting according to Quan et al. 2011. Range 0 – 24. The values in square brackets show the score of the respective comorbidity in the CCI. Multiple answers possible. Visceral metastasis: All metastatic sites, documented from 8 weeks before until 8 weeks after start 1L were considered. Non-visceral: skin, bone and lymph node metastasis. Metastatic sites are defined as documentation of metastasis from 8 weeks before until 8 weeks after start of respective line of treatment. Multiple answers possible.

Figure 2: 1L progression-free survival by PD-L1 status

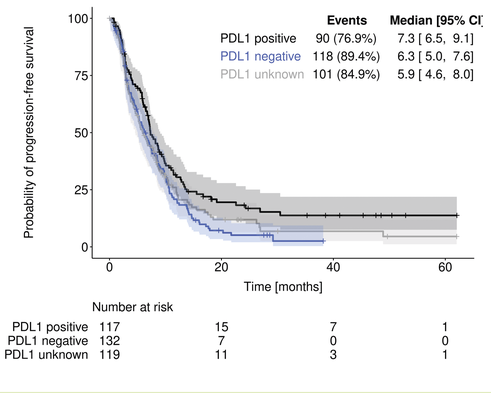


Figure 3: Overall survival by PD-L1 status

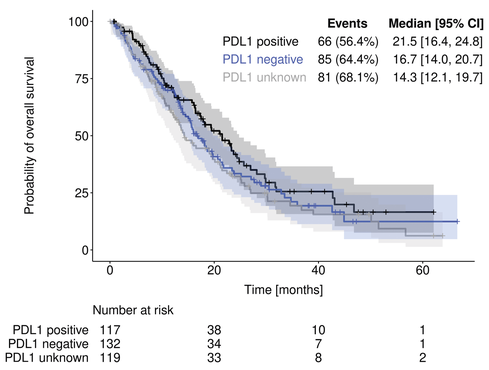
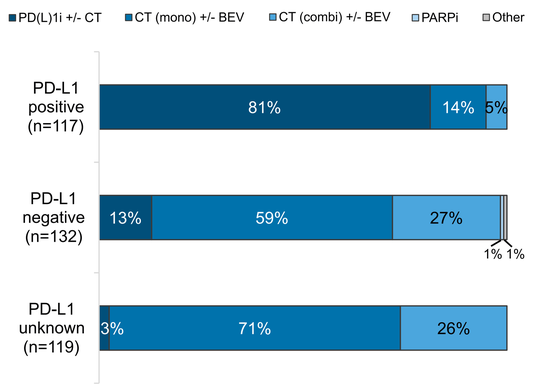
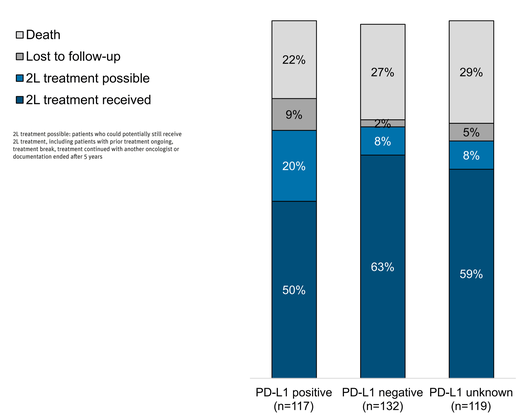


Figure 1: 1L treatment strategies by PD-L1 status



PD(L)1i: PD-(L)1 inhibitor | CT: chemotherapy | BEV: bevacizumab | PARPi: PARP inhibitor

Figure 4: Proportion of patients receiving 2L



2L treatment possible: patients who could potentially still receive 2L treatment, including patients with prior treatment ongoing, treatment break, treatment continued with another oncologist or documentation ended after 5 years

References:

Charlson, M.E., Pompei, P., Ales, K.L., MacKenzie, C.R., 1987. A new method of classifying prognostic comorbidity in longitudinal studies: development and validation. J Chronic Dis 40, 373–383. https://doi.org/10.1016/0021-9681(87)90171-8

Oken, M.M., Creech, R.H., Tormey, D.C., Horton, J., Davis, T.E., McFadden, E.T., Carbone, P.P., 1982. Toxicity and response criteria of the Eastern Cooperative Oncology Group. Am J Clin Oncol 5, 649–655.

Quan, H., Li, B., Couris, C.M., Fushimi, K., Graham, P., Hider, P., Januel, J.-M., Vijaya Sundararajan, 2011. Updating and validating the Charlson comorbidity index and score for risk adjustment in hospital discharge abstracts using data from 6 countries. Am. J. Epidemiol. 173, 676–682. https://doi.org/10.1093/aje/kwq433

Zahn MO, Welt A, Thill M, Stickeler E, Zaiss M, Nusch A, Engel E, Chiabudini M, Kruggel L, Jänicke M, Marscher N, Wöckel A, Harbeck N, Deckert T. Implementation of new tests and treatments for patients with advanced triple-negative breast cancer in routine care – data from the registry platform OPAL. Oncol Res Treat. 2022;45(Suppl. 1):241:023. https://doi.org/10.1159/000521004

Acknowledgement:

The OPAL Registry group thanks all participating patients, physicians and study teams. Project idea, design, management and analysis: iOMEDICO. The OPAL Study Group collaborates with the Arbeitsgemeinschaft Internistische Onkologie (AIO) in der deutschen Krebsgesellschaft e. V.

Conflicts of interest, general:

E. Stickeler: Consulting fees: AstraZeneca, Novartis, Roche

Payment or honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events: Astra Zeneca, Novartis, Roche, Onkowissen, Lilly, MSD

Support for attending meetings and/or travel: Pfizer, Novartis, MSD

Participation on a Data Safety Monitoring Board or Advisory Board: Iomedico, Astra Zeneca, MSD

Leadership or fiduciary role in other board, society, committee or advocacy group, paid or unpaid: GBG, AGO, IQTIQ

Funding:

OPAL-ABC is designed, managed, and analyzed by iOMEDICO and has received continuous financial support from Roche Pharma AG and Onkovis GmbH and temporary financial support from Daiichi Sankyo Deutschland GmbH, Daiichi Sankyo Europe GmbH, Eisai GmbH, Gilead Sciences GmbH, Lilly Deutschland GmbH, Mundipharma GmbH, Mylan Germany GmbH, and Pfizer GmbH. This poster is funded by Gilead Sciences GmbH.

None of the funders had any role in study design, data collection and interpretation of results.

Cite as:

Stickeler E., Decker T., Zahn M.-O., Thill M., Zaiss M., Nusch A., Teutsch C., Wang M., Kuske A., Ringwald K., Kruggel L., Harbeck N., Wöckel3 A., Welt A., Gratzke K. Unmet need in patients with metastatic triple-negative breast cancer initiating a first-line treatment – data from the OPAL registry. 2025, ESMO Congress, 561P

ESMO 2025
17. – 21. October 2025, Berlin
Poster number: 561P