Timing of final oncologist visit and systemic treatment use near the end of life in advanced triple-negative breast cancer: a multinational cohort study

December 9-12, 2025

Zubrowska Justyna[1], Holánek Miloš*[2], Pieniazek Malgorzata[3], Polakiewicz-Gilowska Anna[4], Soumarová Renata[5], Študentová Hana[6], Konieczna Aleksandra[7], Mlodzinska Agnieszka[7], Winsko-Szczesnowicz Karolina[8], Lisik-Habib Maja[9], Pekala Anika[9], Krejčí Daniel[10], Šustr Jan[11], Kolářová Iveta[12], Danielewicz Iwona[13], Szymanik-Resko Magdalena[13], Ciszewski Tomasz[14], Rušinová Lenka[15], Czartoryska-Arlukowicz Bogumila[8], Lacko Aleksandra[3], Jarzab Michal[4], Pacholczak-Madej Renata[16], Lugowska Iwona[17], Bielčiková Zuzana[18], Malejčíková Miroslava[19], Puskulluoglu Miroslawa[20]

[1] Department of Clinical Oncology, Holy Cross Cancer Center, Kielce, POLAND, [2] Department of Comprehensive Cancer Care, Masaryk Memorial Cancer Institute, and Faculty of Medicine, Masaryk University, Brno, CZECH REPUBLIC, [3] Department of Oncology, Wrocław Medical University; Lower Silesian Comprehensive Cancer Center, Wrocław, POLAND, [4]Breast Cancer Center, Maria Sklodowska-Curie National Research Institute of Oncology, Gliwice Branch, POLAND, [5] Department of Oncology, Third Faculty of Medicine, Charles University, University Hospital Kralovske Vinohrady, Prague, CZECH REPUBLIC, [6] Department of Oncology, Faculty of Medicine and Dentistry, Palacky University and University Hospital, Olomouc, CZECH REPUBLIC, [7] Department of Breast Cancer and Reconstructive Surgery, Maria Sklodowska-Curie National Research Institute of Oncology-National Research Institute, Warszawa, POLAND, [8] Department of Clinical Oncology, M. Sklodowska-Curie Bialystok Oncology Center, Bialystok, POLAND, [9] Department of Proliferative Diseases, Nicolaus Copernicus Multidisciplinary Centre for Oncology and Traumatology, Lodz, POLAND, [10] Department of Oncology, First Faculty of Medicine, Charles University in Prague, and Bulovka University Hospital, Prague, CZECH REPUBLIC, [11] Department of Oncology and Radiotherapy, Faculty of Medicine in Pilsen, Charles University, and University Hospital Pilsen, Plzen, CZECH REPUBLIC, [12] Department of Oncology and Radiotherapy, Faculty of Medicine in Hradec Kralove and University Hospital in Hradec Kralove, Charles University, Hradec Kralove, CZECH REPUBLIC, [13]Oddział Onkologii i Radioterapii, Szpitale Pomorskie sp. z o.o., Gdynia, POLAND, [14]Department of Metabolic Diseases and Immuno-oncology, Medical University of Lublin, Lublin, POLAND, [15] Department of Oncology, Stefan Kukura Hospital Michalovce, Michalovce, SLOVAKIA, [16] Department of Gynecological Oncology, Maria Sklodowska-Curie National Research Institute of Oncology, Krakow Branch, Krakow, POLAND, [17] Centre of Excellence for Precision Oncology, Maria Sklodowska-Curie National Research Institute of Oncology (NIO-PIB), Warsaw, POLAND, [18] Department of Oncology, First Faculty of Medicine, Charles University, and General University Hospital, Prague, CZECH REPUBLIC, [19] II. Oncology Clinic of LFUK, National Cancer Institute, Bratislava, SLOVAKIA, [20] Department of Clinical Oncology, Maria Sklodowska-Curie National Research Institute of Oncology, Krakow Branch, Krakow, POLAND.

*Presenting author
Holánek Miloš
milos.holanek@mou.cz

Background

- Triple-negative breast cancer (TNBC) is an aggressive subtype of breast cancer (BC) associated with rapid clinical progression and poor prognosis.
- Subsequent lines of palliative systemic therapy often provide diminishing benefit and increasing toxicity.
- In heavily pretreated patients, deciding whether to continue systemic therapy is particularly complex and clinically uncertain.
- Timely recognition of the end-of-life (EOL) phase helps to:
  - ✓ Prevent overtreatment,
  - ✓ Minimize treatment-related harm,
  - ✓ Align care with patient preferences and goals.

Aim

- To assess the timing of the final oncologist visit in relation to death among heavily pretreated women with advanced TNBC
- To evaluate the use of systemic treatment and palliative care involvement near the EOL
- To identify clinical factors associated with this interval

Materials and Methods

- Multinational ambispective cohort study
- 17 oncology centers across Poland, the Czech Republic and Slovakia
- Women with advanced TNBC who:
  - ✓ Received ≥2 lines of palliative systemic therapy
  - ✓ Died between June 20, 2022, and June 20, 2025
- Data source: hospital records
- Primary endpoint: Interval between the final oncologist visit and death.

Table 1. Patients' characteristics and time intervals

Parameter		Total (N=183)
Time from the last oncologist visit to death [days]	Mean (SD)	30.12 (49.27)
	Median (quartiles)	17 (6-34)
	Range	0-410
	n	182
Time from diagnosis to metastasis [years]	Mean (SD)	2.09 (2.46)
	Median (quartiles)	1.55 (0.68-2.52)
	Range	0-15.14
	n	181
Time from metastasis diagnosis to last oncologist visit [years]	Mean (SD)	1.78 (1.27)
	Median (quartiles)	1.46 (0.96-2.28)
	Range	0.07-8.72
	n	180
Time from metastasis diagnosis to death [years]	Mean (SD)	1.87 (1.29)
	Median (quartiles)	1.6 (1.03-2.36)
	Range	0.09-8.72
	n	181
PS at the last visit	0-1	36 (19.67%)
	2	38 (20.77%)
	3	65 (35.52%)
	4	35 (19.13%)
	Unknown	9 (4.92%)
Initial treatment intention at the time of BC diagnosis	Palliative	39 (21.31%)
	Curative	144 (78.69%)
Relevant comorbidities*	No	101 (55.19%)
	Yes	82 (44.81%)

Abbreviations: BC, breast cancer; PS, performance status; SD, standard deviation.
* comorbid conditions requiring active treatment and considered clinically relevant by the attending physician

Table 2. Systemic treatment and palliative care involvement at the last oncologist visit

Parameter		Total (N=183)
Any systemic treatment at last visit	No	128 (69.95%)
	Yes	54 (29.51%)
	Unknown	1 (0.54%)
Patient under palliative care at the last visit	No	81 (44.26%)
	Yes	89 (48.63%)
	Unknown	13 (7.10%)

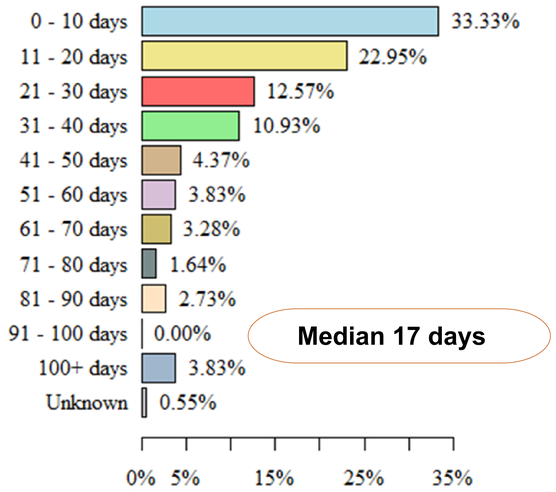


Figure 1. Distribution of time from the last oncologist visit to death

Results

- Total cohort: **183 women** with advanced TNBC
- Median age at death: **53.6 years** *(range: 28.6–86.5)*
- Median number of prior palliative chemotherapy lines: **4** *(range: 2–12)*

- **Median interval between final oncologist visit and death: 17 days *(range: 0–410)***

- Systemic treatment was ongoing in **53 patients** (29.5%) at the final visit
- Palliative care involvement before the last visit was documented in **89 patients** (49%)
- Longer intervals between final visit and death were associated with **better performance status** (PS 0–1 vs ≥2, p = 0.005)
- Palliative care involvement showed no significant association (p = 0.849)

Conclusions

- Discontinuation of systemic therapy in patients with mTNBC often occurs too late, exposing them to treatment-related toxicity without meaningful clinical benefit.
- Early recognition of functional decline and the use of prognostic tools can support timely transition to supportive care and informed decision-making.
- Despite European initiatives such as the Network of Expertise on Complex and Poor Prognosis Cancers (NoE PPC), structured EOL planning remains an unmet need requiring urgent action to improve equity and outcomes in this high-risk population.

Literature:

(1) Sanders JJ, Temin S, Ghoshal A, et al. Palliative Care for Patients With Cancer: ASCO Guideline Update. *JCO*. 2024;42(19):2336-2357.
(2) Crawford GB, Dzierżanowski T, Hauser K, et al. Care of the adult cancer patient at the end of life: ESMO Clinical Practice Guidelines. *ESMO Open*. 2021;6(4):100225.