Post-platinum Treatment Landscape in Patients with Recurrent Endometrial Cancer: Analysis of German Claims Data

Poster No. 73

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Background

Endometrial cancer (EC) is the sixth most common cancer among women worldwide and the fifth most common in Germany[1,2]

Survival outcomes for patients with recurrent or advanced EC who progress on or after a platinum-based treatment are poor, with a median overall survival (OS) of <1 year[3]

Although platinum-based therapy is used to treat advanced EC, treatment options for patients who progress on or after a platinum-based therapy are limited, with no clear standard-of-care treatment and limited data to support recommendations[4,5]

There is a lack of real-world data on the treatment landscape and clinical outcomes in patients with recurrent or advanced EC who progress on or after a platinum-based treatment, highlighting an unmet clinical need in this population

Aim

The aim of this study was to analyse the treatment landscape of patients with recurrent or advanced EC who received ≥1 post-platinum treatment in Germany

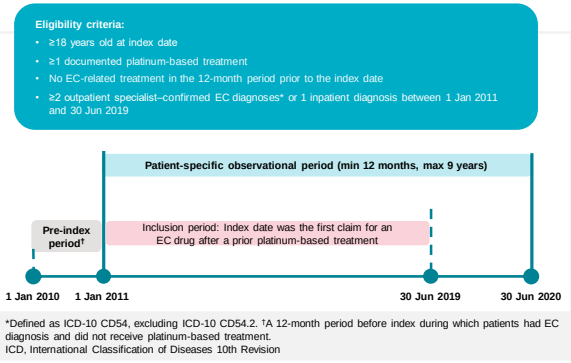
Methods

Study design

This study was a retrospective, non-interventional, cohort analysis of patients diagnosed with EC in Germany

The study used anonymized claims data from a German statutory health insurance fund, AOK PLUS (which covers about 3.4 million individuals), between 01 Jan 2010 and 30 Jun 2020 (**Figure 1**)

Figure 1. Study design and eligibility criteria



*Defined as ICD-10 CD54, excluding ICD-10 CD54.2. †A 12-month period before index during which patients had EC diagnosis and did not receive platinum-based treatment.
ICD, International Classification of Diseases 10th Revision

Data analysis

Patient demographics and treatments were summarized descriptively

OS was calculated and reported as median survival in days and via Kaplan–Meier analysis, from the start of the first post-platinum treatment as index date, censored for end of observation (30 Jun 2020)

Subsequent line of treatment (LOT) was not explicitly captured in the claims database; therefore, an algorithm based on receipt and timing of treatment was used

- Start of a subsequent LOT after platinum-based treatment was defined as the add-on of a substance or the switch to a new substance ≥3 months after treatment start; any treatment after a gap of >3 months was also considered a new LOT
- Post-platinum treatment initiation (index) was defined as the date of the first claim for an EC drug after the end of prior platinum-based treatment
- Platinum-based treatment was defined as ≥1 prescription of carboplatin/cisplatin/oxaliplatin (identified via Anatomical Therapeutic Chemical [ATC] code) or one inpatient chemotherapy procedure (excluding those with explicitly defined other substances than platinum; identification via procedure code)
- A sensitivity analysis was conducted to assess whether a smaller (≥1 month) or larger (≥6 month) time-gap between platinum treatment and subsequent LOT will impact which post-platinum treatments are observed

Results

Patient population

From a total of 6832 patients with identified EC diagnosis, 713 patients received a platinum-based therapy, of which 201 received ≥1 post-platinum treatment and had a ≥12-month period since their last platinum-based treatment. Characteristics for these 201 patients are shown in **Table 1**

Table 1. Characteristics of patients who received ≥1 post-platinum treatment

Characteristic	Median (interquartile range), N=201
Age (years)	71 (63–76)
Follow-up time (days)	335 (155–810)
Charlson Comorbidity Index	9 (8–11)

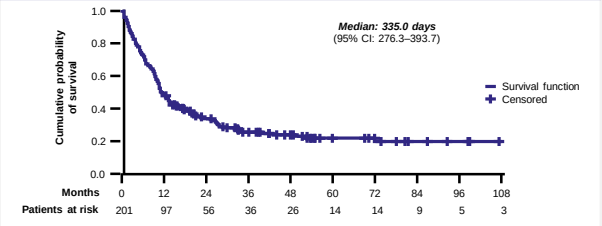
Survival outcomes after ≥1 post-platinum treatment

Median post-index survival for patients who received ≥1 post-platinum treatment was 335.0 days (**Figure 2**)

In total, 149 patients (74.1%) with recurrent or advanced EC after ≥1 post-platinum treatment died during the follow-up period, including

- 69 of 100 patients (69.0%) who were aged <71 years
- 80 of 101 patients (79.2%) who were aged ≥71 years

Figure 2. Kaplan–Meier estimate of survival of patients with recurrent or advanced EC after ≥1 post-platinum treatment



Results

Treatment

During follow-up, of the 201 patients who received at least one post-platinum treatment line, 79 patients (39.3%) received a second post-platinum LOT, 21 (10.4%) received a third post-platinum LOT, and 4 (2.0%) received a fourth or later post-platinum LOT

- Additionally, 67 patients (33.3%) had surgery and 36 patients (17.9%) had radiotherapy

The most frequently observed first post-platinum treatments and agents/procedures are shown in **Table 2** and **Table 3**, respectively

- At the first post-platinum LOT, the most frequently observed treatment was non-complex chemotherapy with 2 agents, followed by medroxyprogesterone, then doxorubicin (**Table 2**)
- The most frequent agents/procedures at the first post-platinum LOT included carboplatin, paclitaxel, and doxorubicin (**Table 3**)
- In sensitivity analyses in which the gap between treatment LOTs was defined as 1 or 6 months, observed treatments and agents/procedures were comparable to the main cohort definition (3 months; data not shown)

Table 2. Most frequent treatments received during first post-platinum LOT

Treatment(s)	Patients, n (%) (N=201)	Percentage of patients by number of LOT
Non-complex chemotherapy with 2 agents (inpatient)*	20 (10.0%)	75.0% / 20.0% / 5.0%
Medroxyprogesterone (monotherapy)	16 (8.0%)	43.8% / 43.8% / 12.5%
Doxorubicin (monotherapy)	14 (7.0%)	71.4% / 14.3% / 14.3%
Carboplatin & paclitaxel	11 (5.5%)	72.7% / 18.2% / 9.1%
Paclitaxel (monotherapy)	8 (4.0%)	75.0% / 25.0%
Tamoxifen (monotherapy)	7 (3.5%)	71.4% / 28.6%
Carboplatin & doxorubicin	7 (3.5%)	28.6% / 57.1% / 14.3%
Moderate complex chemotherapy with 2 agents (inpatient)*	6 (3.0%)	71.4% / 14.3% / 14.3%
Carboplatin & gemcitabine	6 (3.0%)	50.0% / 33.3% / 16.7%
Gemcitabine (monotherapy)	6 (3.0%)	17.0% / 66.7% / 16.7%
Anastrozole (monotherapy)	5 (2.5%)	100%
Fulvestrant (monotherapy)	4 (2.0%)	100%
Megestrol (monotherapy)	4 (2.0%)	75.0% / 25.0%
Bevacizumab & carboplatin & paclitaxel	4 (2.0%)	50.0% / 25.0% / 25.0%
Non-complex chemotherapy with 1 agent (inpatient)*	4 (2.0%)	75.0% / 25.0%
59 other combinations (<4 patients each)	78 (38.8%)	55.1% / 33.3% / 9.0% / 2.6%

Max 1 LOT Max 2 LOT Max 3 LOT >3 LOT

*Due to the German reimbursement system for hospitalizations, for inpatient chemotherapy procedures, the identification of specific substances is only possible to a limited extent. Therefore, the treatment analysis includes specific agents as well as inpatient chemotherapy procedures (non-complex and moderate complex) in parallel.

Table 3. Most frequent agents/procedures at first post-platinum LOT

Agent/Procedure	Patients, n (%) (N=201)	Percentage of patients with monotherapy/combination
Carboplatin	42 (20.9%)	7.1% / 92.9%
Paclitaxel	33 (16.4%)	24.2% / 75.8%
Doxorubicin	30 (14.9%)	46.7% / 53.3%
Non-complex chemotherapy with 2 agents (inpatient)*	26 (12.9%)	100%
Medroxyprogesterone	20 (10.0%)	80.0% / 20.0%
Gemcitabine	17 (8.5%)	35.3% / 64.7%
Bevacizumab	16 (8.0%)	6.3% / 93.8%
Moderate complex chemotherapy with 2 agents (inpatient)*	10 (5.0%)	100%
Tamoxifen	8 (4.0%)	87.5% / 12.5%
Non-complex chemotherapy with 1 agent (inpatient)*	8 (4.0%)	50.0% / 50.0%
Megestrol	7 (3.5%)	57.1% / 42.9%
Anastrozole	6 (3.0%)	83.3% / 16.7%
Cisplatin	5 (2.5%)	100%
Docetaxel	5 (2.5%)	20.0% / 80.0%
Fulvestrant	5 (2.5%)	80.0% / 20.0%
Immunotherapy (inpatient)	5 (2.5%)	60.0% / 40.0%
Trabectedin	5 (2.5%)	100%
23 other agents/procedures (<5 patients each)	48 (23.9%)	37.5% / 62.5%

Monotherapy Combination

*Due to the German reimbursement system for hospitalizations, for inpatient chemotherapy procedures the identification of specific substances is only possible to a limited extent. Therefore, the treatment analysis includes specific agents as well as inpatient chemotherapy procedures (non-complex and moderate complex) in parallel.

Conclusions

This study demonstrates that post-platinum treatment options for patients with recurrent or advanced EC are highly varied, indicating no defined standard of care

In this treatment landscape, survival outcomes of patients with recurrent EC remain poor; given the new molecular characterization of EC, personalized and targeted treatments may be the future approach

Limitations of this study include potential variation in treatment/patient management due to differences in histology or molecular subtype

Disclosures

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