

# The CDK4/6 Inhibitors Takeover of the HR+/HER2- Locally Advanced to Metastatic Breast Cancer Market in the EU5: Findings from a Real-World Study



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## BACKGROUND

CDK4/6 (Cyclin Dependent Kinase 4/6) inhibitors (CDKI) are indicated in the treatment of HR+/HER2- (Hormone Receptor positive / Human Epidermal growth factor Receptor 2 negative) locally advanced to metastatic breast cancer.

This study aims at understanding the evolution of the use of CDK4/6 inhibitors (Palbociclib, Ribociclib & Abemaciclib) in the EU5 from 2017 to 2020.

## METHODS

This study was conducted using Oncology Dynamics™, an IQVIA cross-sectional survey collecting anonymized patient data.

21,000 drug treated HR+/HER2- breast cancer patients (pts) in locally advanced to metastatic stages, excluding clinical trials, were collected across France, Germany, Italy, Spain & the UK. The side effects were collected and analyzed on 8,019 patients.

## CONCLUSIONS

**Between 2017 and 2020, CDK4/6 inhibitors became a treatment of choice in HR+/HER2- locally advanced to metastatic breast cancer. Their use in combination with aromatase inhibitors has induced an increase in overall aromatase inhibitors use in this population.**

**The use of CDK4/6 inhibitors is becoming more common in 1<sup>st</sup> line treatment for HR+/HER2- locally advanced to metastatic patients. Neutropenia is the most common side effect for CDK4/6 inhibitors, affecting 44% of the treated population.**

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## RESULTS

In locally advanced to metastatic HR+/HER2- breast cancer patients, the use of CDK4/6 inhibitors has increased from 7% in 2017 to 42% in 2020. This rise is observed as we see a decline in other approaches, namely Aromatase Inhibitors (AI) monotherapy or standard chemotherapy. (Figure 1)

CDK4/6 inhibitors can be used in combination with aromatase inhibitors or fulvestrant. The use in combination with aromatase inhibitors is increasing (51% in 2017 – 72% in 2020) as the use with fulvestrant is declining (44% in 2017 – 27% in 2020). (Figure 2)

The use of aromatase inhibitors in combination with CDK4/6 inhibitors has led to an overall increase in the number of aromatase inhibitors treated HR+/HER2- locally advanced to metastatic patients. Indeed, 40% of patients' regimens included an aromatase inhibitor in 2017 and 53% in 2020. (Figure 3)

Since 2017, the use of CDK4/6 inhibitors has become more common in 1<sup>st</sup> line therapy. In 2017, 59% of the CDK4/6 inhibitors treated patients were in 1<sup>st</sup> line compared to 87% in 2020. (Figure 4)

Neutropenia is the most common side effect observed in CDK4/6 inhibitors treated patients. In our sample, 44% of CDK4/6 inhibitors treated patients presented neutropenia and only 12% in the non-CDK4/6 inhibitors treated patients. (Figure 5)

Figure 1 – Evolution of the HR+/HER2- Locally Advanced to Metastatic Breast Cancer Market

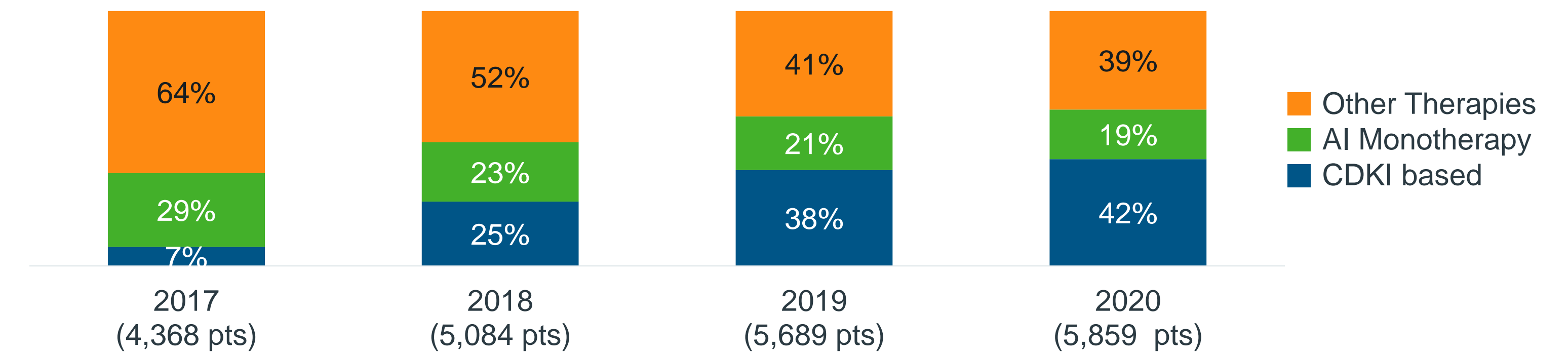


Figure 2 – CDKI Based Regimens

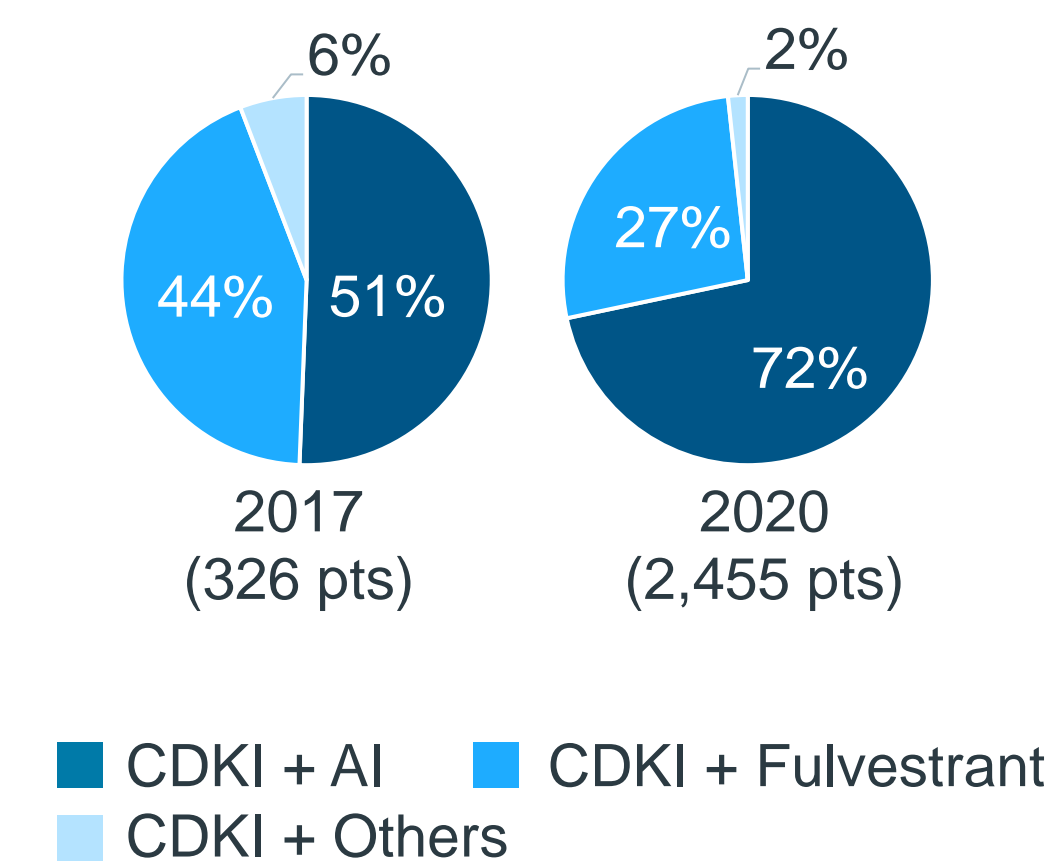


Figure 3 – Aromatase Inhibitors Based Regimens

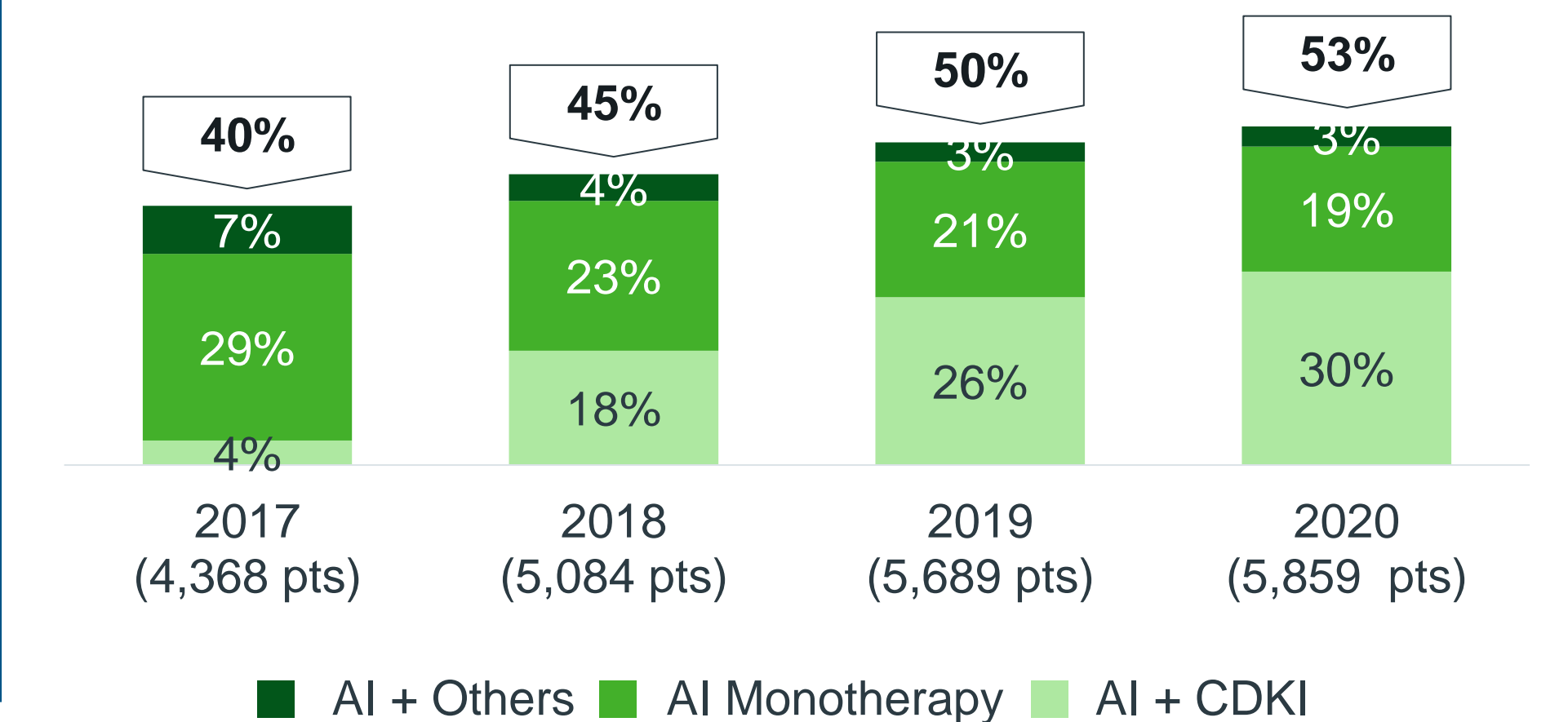


Figure 4 – CDKI Use by Line of Therapy

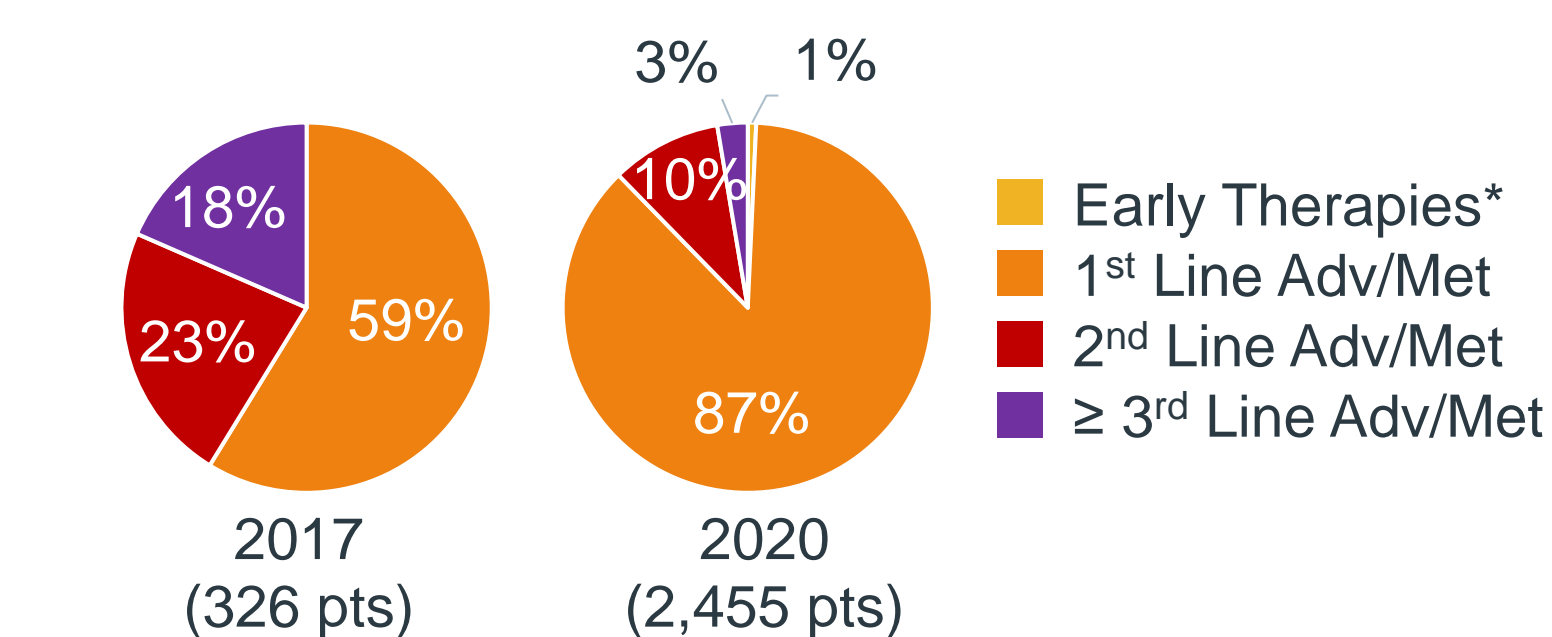
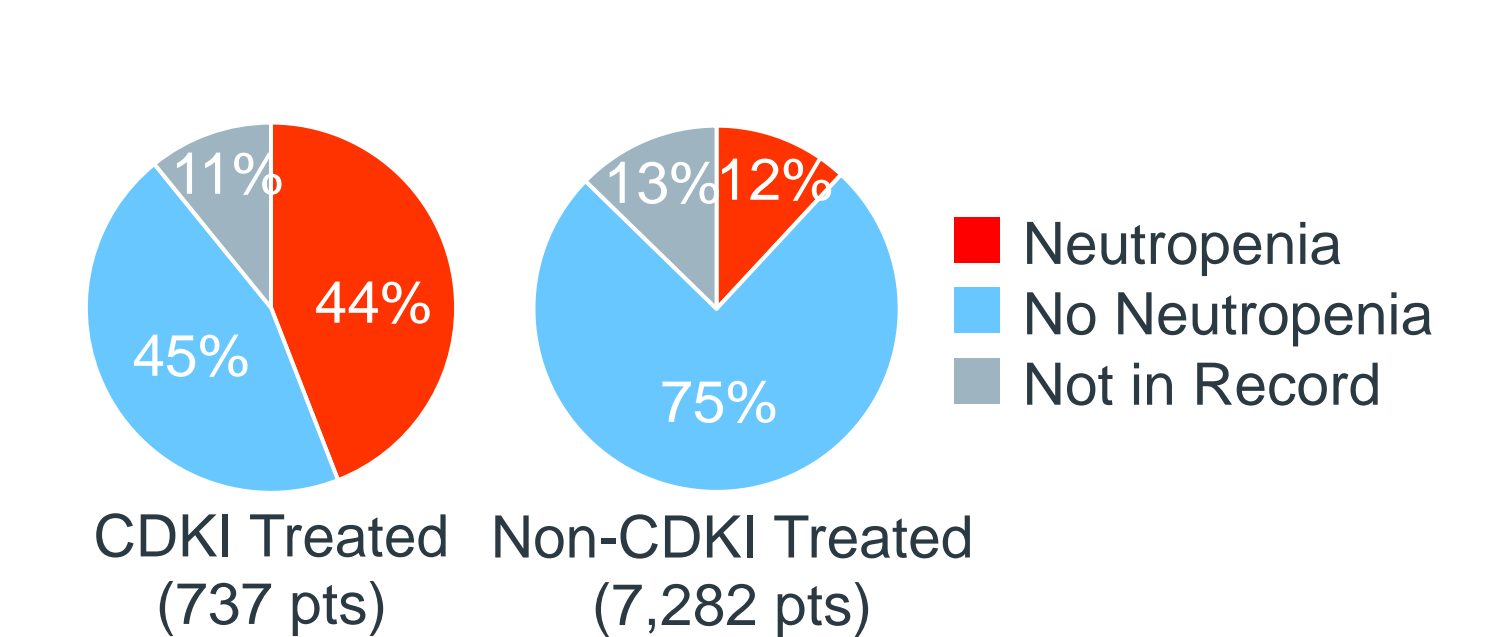


Figure 5 – Side Effects by Treatment Type



\*Early Therapies = neo-adjuvant / adjuvant / early-stage therapy

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