AIS HR+ metastatic breast cancer treated with a first-line endocrine therapy or chemotherapy in a multicenter national observational study


Oncology, Centre Léon Bérard, Lyon, France. Statistics, Centre Léon Bérard, Lyon, France. Oncology, Gustave Roussy, Villejuif, France. Medical Oncology, Institut Curie, Paris, France. Breast Cancer Group, Institut Gustave Roussy, Villejuif, France. Medical Oncology, Institute Bergonié, Bordeaux, France. Medical Oncology, Centre Oscar Lambret, Lille, France. Medical Oncology, Centre François Baclesse, Caen, France. Oncologie Médicale, Centre Henri Becquerel, Rouen, France. Unité de gestion des données, Institut Paoli Calmettes, Marseille, France. Department of Medical Oncology, KIM Regional Cancer Institute of Montpellier, Montpellier, France. Epidemiology, Institut Claudius Regaud, Toulouse, France. Oncology, Centre Georges-François Leclerc (Dijon), Dijon, France. Department of Medical Oncology, Centre Antoine Lacassagne, Nice, France. Medical Oncology, Institut Jean Godinot, Rennes, France. Department of Medical Oncology, Center Eugène Marquis, Rennes, France. Medical Oncology, Centre Paul Strauss, Strasbourg, France. Research and Development, UNICANCER, Paris, France. ESME Program, UNICANCER, Paris, France. Département d’Oncologie médicale adulte, Centre Léon Bérard, Lyon, France

Background: For HR+/HER2– metastatic breast cancer (mBC), international guidelines recommend the use of endocrine therapy (ET) as first-line (L1) treatment except in case of “visceral crisis” for which chemotherapy (CT) is advised. Few studies directly compare these two treatment options. In 2014, UNICANCER launched the Epistemological Strategy and Medical Economics (ESME) Research program to centralize real-world data in oncology. We sought to use this database to study this question.

Methods: All patients (pts) who initiated treatment for a newly diagnosed mBC between January 2008 and December 2014 in all 18 French Comprehensive Cancer Centers were included in the ESME mBC database. ESME Research program centralized all existing data using retrospective data collection. Primary endpoint of the present study was progression free survival (PFS1) and overall survival (OS) according to L1 treatment for aromatase inhibitors sensitive (AIS) HR+/HER2- mBC pts.

Results: 6265 pts out of 16703 in ESME, had AIS HR+/HER2- mBC. As L1 therapy, 2733 pts (43.6%) received ET alone, while 3532 received CT (56.4%). Among these 3532 pts, 2073 (58.7%) received ET as maintenance treatment after CT. A Cox multivariate analysis with significant prognostic variables identified a lower risk of death in the patients with L1 ET (HR = 0.839, 95% IC [0.772-0.911], p < 0.0001). Patients receiving CT were younger (median age 56.0 vs 66.0, p < 0.001), more likely to have visceral metastasis (61.6% vs 40.1%, p < 0.001) and SBR III primary tumors (31.3% vs 18.8%, p < 0.001). Median PFS1 was 15.18 months for L1 ET (95% CI 14.45-16.20) vs 12.58 months for L1 CT +/− hormone maintenance (95% CI 11.89-13.14), p < 0.0001. Median OS was 60.78 months for L1 ET (95% CI 57.16-64.09) vs 49.64 months for L1 CT (95% CI 47.31-51.64), p < 0.0001.

Conclusions: The results show that despite guidelines, a majority of AIS HR+/HER2- mBC pts still received CT as first-line treatment in the past years. PFS1 and OS data do not suggest any advantage of this aggressive strategy over ET alone. Advanced statistical methods using the propensity score will be presented in order to control for potential selection bias.

Legal entity responsible for the study: UNICANCER

Funding: UNICANCER

Disclosure: All authors have declared no conflicts of interest.

Survival of patients with aromatase inhibitors sensitive, HR+/HER2- metastatic breast cancer treated with a first-line endocrine therapy or chemotherapy in a multicenter national observational study

UNICANCER