

Overall survival in metastatic breast cancer patients according to different follow up strategies for early breast cancer

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Introduction

- Two randomized trials, conducted in the late 1980s, demonstrated no increased overall survival (OS) for early breast cancer patients receiving intensive follow up (IFU) as compared to patients receiving standard follow up (SFU)^{1,2}
- Current guidelines recommend physical examination and annual mammography during the follow-up period of early breast cancer patients^{3,4}
- We evaluated survival outcomes of metastatic breast cancer patients (mBC pts) according to the type of diagnosis of metastatic disease (SFU or IFU)

Materials and methods

- GIM14/BIO-META (NCT02284581) is an ongoing Italian retrospective/prospective observational multicenter study enrolling consecutive mBC pts
- SFU = suspicious signs or symptoms of metastatic disease detected at routine follow up visits
- IFU = increased tumor markers or metastatic lesion detected with routine radiological exams
- Primary objective was to compare OS between SFU and IFU groups

Results

- STROBE diagram is shown in Fig.1
- Baseline characteristics are reported in Table 1
- Patients in the IFU group had a shorter median disease-free interval compared to patients in the SFU group (60.6 vs 52.9 months, p=0.01)
- No differences in OS were observed for patients in SFU and IFU groups (Fig.2)
- No differences in OS were observed according to nodal involvement of primary tumor (Fig.3) and among HER2-positive and luminal-like breast cancer patients (Fig.4)
- A worse outcome was demonstrated for triple negative breast cancer patients diagnosed through IFU (Fig.4)
- Among the 157 HER2-positive mBC pts diagnosed after 2015, no differences in OS were demonstrated for patients diagnosed through SFU or IFU (HR 0.86 95%CI 0.44-1.67)

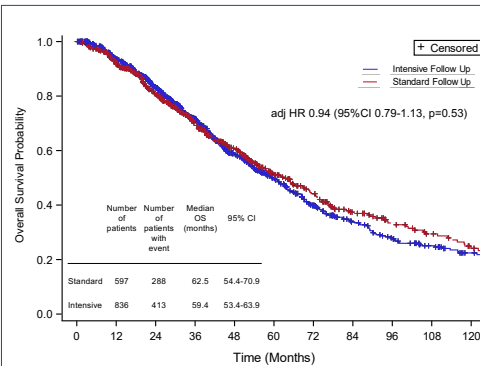


Fig. 2 – OS according to type of diagnosis of mBC

Conclusions

- IFU seems to anticipate diagnosis of metastatic disease without increasing survival
- Further randomized trials are needed to evaluate the role of different IFU strategies considering the current advances in imaging and anticancer treatments available nowadays

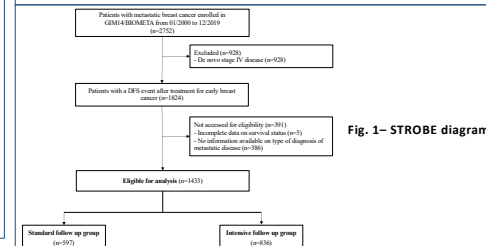


Fig. 1 – STROBE diagram

| | SFU group N = 597 (%) | IFU group N = 836 (%) | p |
|--|-----------------------------|-----------------------------|--------|
| Median age (years - range) | | | |
| At primary tumor diagnosis | 52 (24-102) | 53 (23-93) | 0.26 |
| At metastasis diagnosis | 59 (26-102) | 60 (26-94) | 0.96 |
| Stage at primary breast cancer diagnosis | | | 0.02 |
| I | 98 (16.4) | 156 (18.7) | |
| II | 198 (33.2) | 243 (29.1) | |
| III | 156 (26.1) | 277 (33.1) | |
| Unknown | 145 (24.3) | 160 (19.1) | |
| Tumor subtype | | | 0.01 |
| Luminal-like | 339 (56.8) | 537 (64.2) | |
| HER2 positive | 178 (29.8) | 191 (22.9) | |
| Triple-negative | 55 (9.2) | 66 (7.9) | |
| Unknown | 25 (4.2) | 42 (5.0) | |
| Median disease-free interval (months - IQR) | 60.6 (31.3-115.1) | 52.9 (27.5-101.8) | 0.01 |
| Number of metastatic sites | | | 0.55 |
| 1 | 338 (56.6) | 456 (54.6) | |
| 2 | 153 (25.6) | 236 (28.2) | |
| ≥3 | 105 (17.6) | 143 (17.1) | |
| Unknown | 1 (0.2) | 1 (0.1) | |
| Visceral metastasis | | | <0.001 |
| Non visceral | 161 (27.0) | 141 (16.9) | |
| Bone (+/- non visceral) | 194 (32.5) | 287 (34.3) | |
| Visceral | 229 (38.4) | 403 (48.2) | |
| Unknown | 13 (2.2) | 5 (0.6) | |
| No. of CT- and/or OT-lines* | | | 0.06 |
| 1 | 49 (17.0) | 50 (12.1) | |
| 2 | 62 (21.5) | 70 (17.0) | |
| 3 | 48 (16.7) | 67 (16.2) | |
| 4 | 40 (13.9) | 63 (15.3) | |
| ≥5 | 82 (28.5) | 155 (37.5) | |
| Unknown | 7 (2.4) | 8 (1.9) | |

Tab. 1 – Baseline characteristics

* calculated including only patients who had died and had undergone complete follow-up

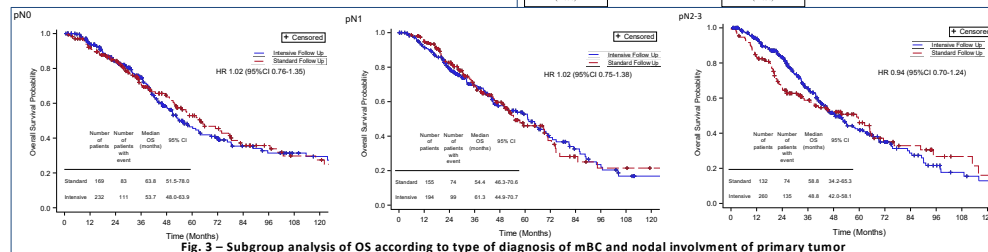


Fig. 3 – Subgroup analysis of OS according to type of diagnosis of mBC and nodal involvement of primary tumor

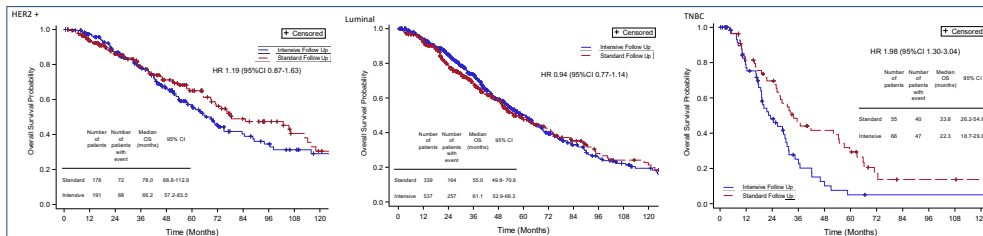


Fig. 4 – Subgroup analysis of OS according to type of diagnosis of mBC and tumor subtype

References

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No conflict of interest to declare