Primary endocrine therapy for older women with oestrogen receptor positive early operable primary breast cancer.

Abstract

Background: A recent Cochrane review of seven randomised trials involving 1,446 older women (unselected for oestrogen receptor (ER) status) has shown no significant difference in overall survival between surgery (with or without adjuvant tamoxifen) and primary endocrine therapy (PET) using tamoxifen. We report our experience of using PET in a single centre with a dedicated breast cancer service for older women.

Methods: Over a 20-year period, 825 older (>70 years) women with ER positive early operable primary breast cancer were treated with PET (>80% using tamoxifen as first line agent), due to patient choice or being unfit for surgery. All patients had disease assessable for response according to UICC criteria, and had treatment for ≥6 months unless the disease progressed prior. Analysis was carried out on clinical efficacy (All patients) and for breast cancer specific survival (N=517) according to clinical response status at 6 months and the degree of ER positivity as measured by immunohistochemical H-score.

Results: Median age was 80 (range: 70-99) years. When the disease progressed, some patients received further lines of therapy. The results of clinical efficacy are summarised:

Further analyses (N=517)

1- Five-year breast specific survival was significantly higher in the group who achieved CB when compared to those with PD (88.7% versus 45.5%; P < 0.001)

2- Regardless of the clinical response status patients with tumours having an H-score ≥250 had better 5-year breast cancer specific survival when compared to their counterparts with H-score < 250 (95.6% versus 85%; P = 0.02)

3- A significant correlation between H-score and clinical response at 6 months was also seen, with more patients with tumour having an H-score ≥250 achieving CB (p = 0.033)

Conclusion: Compared to the general use of endocrine therapy reported in advanced breast cancer (where CB rate is around 70%), PET in this context appears to produce superior results. Older women receiving PET for ER positive early operable primary breast cancer appear to have better outcome in terms of breast cancer specific survival if CB can be achieved at 6 months. A stronger ER positivity (as indicated by an H-score ≥250), available pre-treatment, also appears to be an excellent surrogate marker for clinical response and survival outcome. These results support the use of PET as an excellent alternative in older women who refuse or are unfit for surgery.