Non-Indigenous group with p-value of 0.03.

Women. The results are divided into 5 and 10yr overall survival, the ARIA system. In addition, the distance from the nearest treatment centres was calculated in kilometers. Overall survivals by Indigenous status and remoteness were calculated by Kaplan-Meier analysis.

Results

The final cohort comprised 250 Indigenous and 261 non-Indigenous women with breast cancer. The aim was to examine the impact of remoteness on survivals of Indigenous and non-Indigenous women with breast cancer.

B. Survival Analysis at 5yrs (Fig 1a) and at 10yrs (Fig 1b) by Indigenous Status

Significant discrepancies in overall survival (OS) between Indigenous and non-Indigenous cohorts were observed both at 5yrs (Fig 1a) and at 10yrs as well (Fig 1b). The 5- and 10-year overall survivals for Indigenous and non-Indigenous patients were 68 v 78%, p=0.03 and 68 v 78%, p=0.03 respectively.

C. Survival Analysis of De-Novo Metastasis diagnosis by Indigenous (Fig 2a) and Non-Indigenous Status (Fig 2b) and combined outcome between Indigenous and Non-Indigenous (Fig 2c)

Cox proportional hazards regression was used and survival curve was drawn by Kaplan Meier curve method.

This study was approved by the South Metropolitan Area Health Service Ethics Committee (Application 473), the SA Diet and Health Ethics Committee and the WAAHC Aboriginal Ethics Committee (Application 838).

All the statistical analyses were done by using SPSS (25.0g rank) and p-value < 0.05 was considered to be significant. On the basis of 95% confidence interval (CI) p-value was 0.05.

Conclusion

Indigenous women in Western Australia with breast cancer have inferior survival outcomes overall as well when diagnosed with metastatic disease than non-Indigenous women. Considering remote communities, only Indigenous patients showed a disadvantage for rural relative to urban patients. Our findings have clinical implications for future research and policy support in terms of breast cancer research and improving survival outcomes in Indigenous patients.

References