INCIDENCE OF BREAST CANCER IN NORTHERN TUNISIA: TRENDS AND PROJECTION INTO 2024

Breast cancer is the most frequent cancer localisation in Tunisian women. With ageing of population, combined to a generation effect, it is very likely that we will see in near future an important rise in breast cancer incidence. Also all the Tunisian data have always shown a high rate of young patients (ages below 35 years) around 11%. This study is designed to establish a forecast of the level of the incidence and of a numbers of cases of breast cancer until 2024 in the North of Tunisia. We also tried to foresee the evolution of the percentage of young women.

Methods
Data given by the Cancer Registry of Northern Tunisia (CRNT) from 1994 to 2003 are used as a baseline for further prediction. This cancer register is covering half of the Tunisian population. Data of the incidence have been estimated for the periods 2004–2008, 2009–2013, 2014–2018, 2019–2024. Predictions were based on a Bayesian Age-Cohort model. The implementation of this analysis was realised by a sampling of Gibbs by means of the software WinBUGS.

Results
Between 1994 and 2003, we observed negative annual average spleen of standardised incidence evolution in men and women (~3.5% vs 2.7%) also for the standardised incidences which showed a rather important decline (26.4% at the man and ~22.3% at the woman). Between periods 1994–1998 and 2019–2024, at the man the number of annual average case could decrease in 56%. At the woman, the number of annual average case could remain stable, the specific rates according to the age increase from the age bracket 65 to 69 but decrease rather sharply at the child’s and the adults whose age is 65-year-old subordinate. Then an important decrease of 70% in men and 45% in women was observed. NPC acknowledged a favourable evolution from 1994 to 2003 probably due to a better socioeconomic level. If this tendency is maintained, it could be an interesting area of research.