

# Histo-epidemiological and molecular profile of breast cancer: About 3131 cases diagnosed in Ouagadougou



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# INTRODUCTION

Breast cancer is a public health problem around the world [1]. It is the leading cancer in women and the leading cause of cancer death in many countries [1,2,3]. We conducted this study with the aim of studying the histo-epidemiological and molecular profile of breast cancers diagnosed in Ouagadougou.

### MATERIALS AND METHODS

This was a transverse and descriptive study with retrospective collection over 31 years from January 1, 1988 to December 31, 2018. The data were collected from the registers of 06 anatomical pathology laboratories in the city of Ouagadougou and were analyzed using the statistical software EPI-INFO 7.2.0.

# **RESULTS**

We collected n=3131 cases of breast cancer in 31 years. The sex ratio was 0.039 with 96.23% of women n=3013 and 3.77% of men n=118. The mean annual incidence was 104.3 cases/year. The mean age was 47.85 years for women and 57.38 years for men. Figure 1 shows the distribution of age groups according to the sex of the patients.

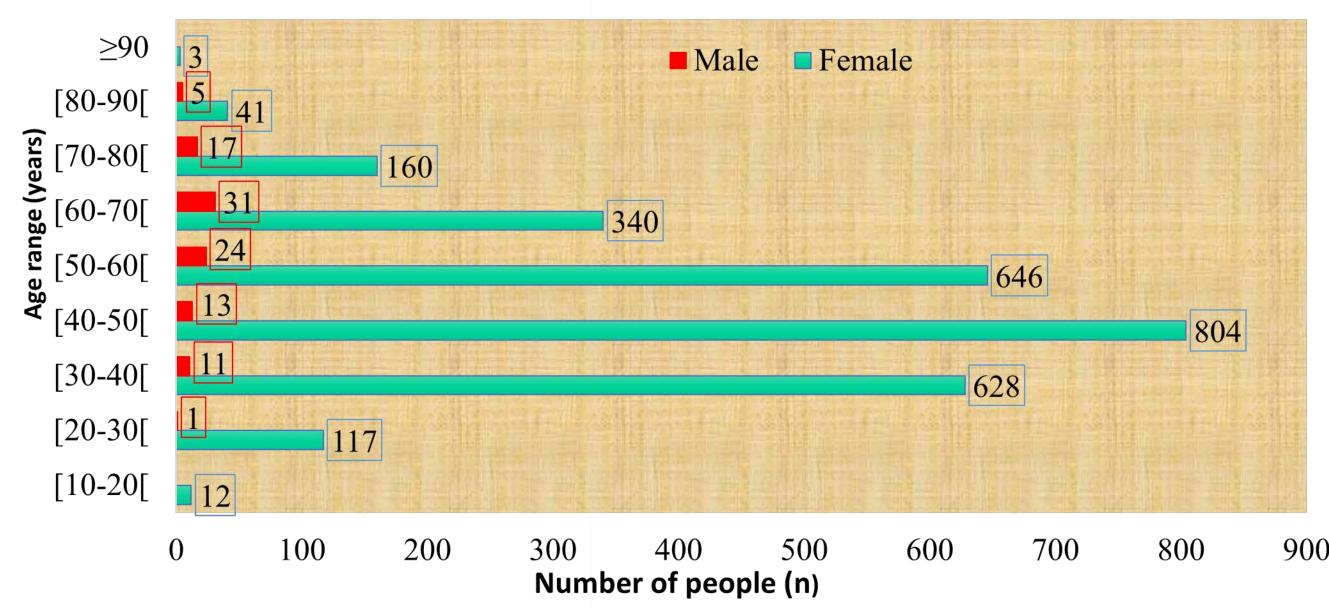


Figure 1: Distribution of breast cancer cases by age and sex

Histologically, the different histogenetic types and their proportions are shown in Table I.

Table I: Distribution of breast cancers according to histogenetic type (n=3131).

Histogenetic type	Number of cases (n)	Percentage (%)
Carcinoma	3069	98,02
Sarcoma	45	1,44
Lymphoma	17	0,54
Total	3131	100

Among the carcinomas, infiltrating carcinoma of non-specific type was the most represented histological type with 82.75% followed by lobular carcinoma (4.06%) and medullary carcinoma (2.81%).

Scarff-Bloom and Richardson (SBR) histopronostic grade revealed a predominance of grade II in 69.58% of cases followed by grade III in 19.88% of cases.

Immunohistochemistry was performed in 10.18% of our patients (n=319 patients).

The molecular profile was: Luminal A 40.43% (n=129), Luminal B 24.45% (n=78), HER2 4.70% (n=15), triple negative 30.40% (n=97).

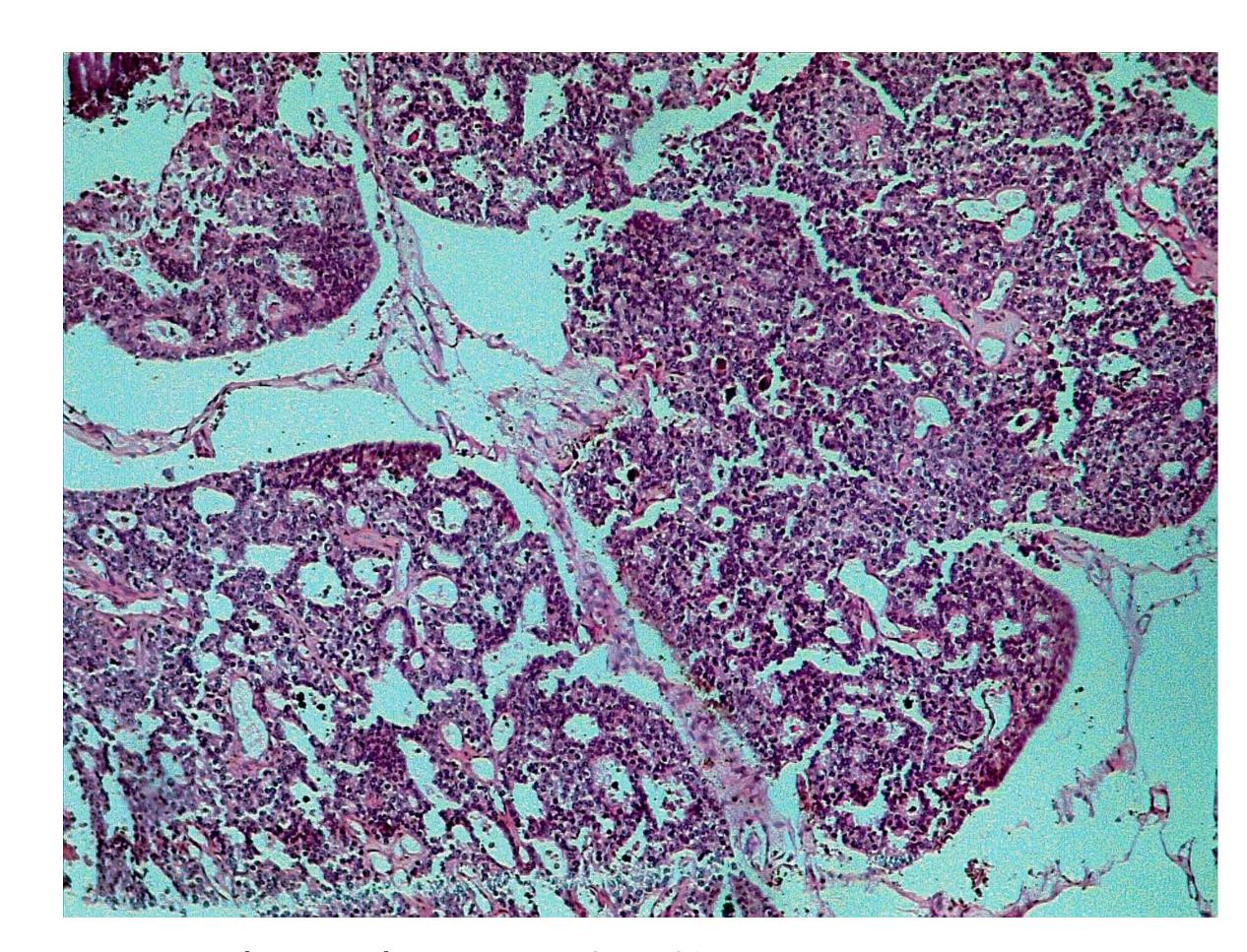


Figure 2: (HEx100): non-specific infiltrating carcinoma grade II SBR

## CONCLUSION

Breast cancers are frequent in Burkina Faso. Their management requires, in addition to histological diagnosis, the determination of prognostic factors.

Immunohistochemistry, which has become indispensable for targeted treatments, is unfortunately still not accessible to most patients in our context..

#### References

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