The objective of our study was to establish the relationship of the characteristics of the breast cancer patient with mammography breast density. And the specific objectives included warn if there is a characteristic profile of variables associated to women with breast cancer with high breast density by mammography and also check whether these characteristics and their relation to breast density may provide additional clinical information.

Materials and Methods: We studied 118 female patients diagnosed with breast cancer aged 40 and 55 years, who had no previous oophorectomy, breast implants and other hormone-dependent cancers. A survey was conducted with prior written informed consent, and then we proceeded to read the mammogram by a specialized physician. Data were analyzed with Epi Info.

Results: We found that in the study population of 118 women with breast cancer between 40 and 55 years, the average age was found in 47, 8 years. The average BMI was of 27.05. The average age of menarche was 13.4 years and the average age of menopause was 47.7 years. The total time of exposure to endogenous estrogen was 33.3 years. Of 94 patients who were nursing the average was 30.3 months. Mean hormone replacement therapy was for 33.6 months.

A 39% (n = 47) of patients had dense breasts while 60.2% (n = 71) of patients had low breast density. The 41.5% (n = 49) of patients were classified as large cups and 58.5% (n = 69) and small cups. The 79.7% (n = 94) of patients were nursing and 20.3% (n = 24) did not. We found that 6.8% (n = 8) of the patients had type 2 Diabetes Mellitus, and 11.9% (n = 14) of patients had a family history of breast cancer. Of the patients 6.8% (n = 9) received hormone replacement therapy, and 4.2% (n = 5) of the patients were smoking.

The variable nearest statistical significance was the size of the cup, where the cup look great as the risk of increased breast density obtained an OR of 0.51 (0.23-1.10) with a value of p = 0.06.

Conclusions: In the population studied in our research, we found that the variable most closely associated with breast density was the cup size, this means the size of the breast. Although statistical significance was not evidenced, a clear trend between increased density and size of the breasts was found.

After the analysis of variables, we conclude that there is not a clear difference between the characteristics of patients with dense breasts and characteristics of patients with no dense breasts, diagnosed with breast cancer. Therefore we cannot describe a typical characteristic profile for one of these groups of patients. And we cannot just categorize patients as having the characteristic of high
breast density.

Therefore we show that although breast density is a risk factor for cancer, it can not be associated to other variables of the patient.