Abstract: Objective: The aim of this study was to address some aspects of locally advanced breast cancer (LABC), such as diagnosis, therapeutic approaches and health care practices related to patients. Method: A review was performed based on the search of literature data published in the Pubmed/Medline database in the last 10 years to assess parameters regarding diagnosis and treatment approaches related to LABC. Results: Several diagnostic procedures are employed for the clinical confirmation of LABC. Breast tissue biopsy is the most precise method to diagnose tumor development, however, breast biopsy is an aggressive procedure. Therefore, other approaches may be necessary. Conventional methods, such as mammography and ultrasonography can also be used, although high mammary tissue density offers a challenge for breast evaluation. In the specific case of LABC, magnetic resonance imaging (MRI) suits better to reveal LABC extension and staging of tumor than mammography and ultrasonography, and therefore is frequently used for LABC diagnosis. When it comes to LABC treatment, all offered procedures are performed to control disease locoregionally and to eliminate distant metastasis. In this context, some of the methods employed for LABC and breast cancer treatment, in general, include surgery, radiotherapy, chemotherapy and

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immunotherapy. There are no standard therapeutic procedures for LABC patients’
management, due to the many aspects that should be taking into account to choose an
appropriate treatment, such as lymph node invasion, tumor size and local extension, and
expression of estrogen and progesterone receptors, for example. Moreover, LABC treatment
represents a great task after diagnosis because there is a high risk of metastasis at this stage,
also known as breast cancer stage III. One possibility is to submit the patient to a complete
breast removal, called mastectomy. Also, chemotherapy and radiotherapy are also potentially
used as therapeutic procedures for breast cancer and LABC management. More recently,
immunotherapy has arrived as a complementary technique. Ideally, the treatment strategy of
choice should take into account patient characteristics, making it more personalized. Although
there are many strategies employed for the treatment of LABC and breast cancer, patients still
deal with a lot of side effects such as pharmacological resistance, metastasis, nausea,
vomiting, fatigue, psychological complications, among others. Especially in the case of
LABC, the development of lesions and wounds due to tumor progression, extensive
involvement of the lymph node system and development of metastasis result in poor
prognosis and low survival rates. Also, LABC progression does not have effective topical or
palliative treatment for skin lesions and wounds and conventional treatment are still not
effective and have various side effects. Conclusion: In summary, the results presented here
indicate that there are a lot of efforts in terms of LABC and breast cancer diagnosis and
treatment. Nevertheless, patients still present a lot of side effects due to treatment
management, especially in the advanced cases, with the occurrence of metastasis. In this
sense, many health care practices are still needed to improve patient’s survival rates and
quality of life.

Keywords: Breast cancer; Locally advanced breast cancer; Diagnosis; Therapeutics; Health
care.