## INCIDENȚA SUBTIPURILOR MOLECULARE ÎN CARCINOMUL MAMAR DUCTAL INVAZIV

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**Introducere.** Intru eficientizarea tratamentului chimioterapeutic și hormonal, cancerul de sân este divizat în 4 subgrupuri moleculare de bază: Luminal A, Luminal B, Her2<sup>+</sup> și triplu negativ. Datele privind incidența acestor subtipuri rămân a fi controversate.

**Scop.** Determinarea incidenței celor 4 subtipuri moleculare în cancerul mamar ductal invaziv (CMDI). **Material și metode.** A fost studiat materialul biologic prelevat de la 74 paciente cu CMDI, supuse tratamentului chirurgical, fără un tratament specific medicamentos anterior. Secțiunile au fost colorate tradițional cu hematoxilină-eozină și imunohistochimic pentru ER (clone 1D5, ready to use (RTU), DakoCytomation) și PR (clone Pgr636, RTU, DakoCytomation,), markerul HER2/neu (HercepTest PharmDx Kit, DakoCytomation) utilizînd BOND Autostainer System. În secțiunile imunocolorate au fost cuantificate zece câmpuri microscopice (40x) cu cel mai înalt număr de celule pozitive. Tumora a fost considerată ER, PR pozitivă, la colorare nucleară specifică a cel puțin 30% din celulele tumorale. Her2/neu a fost apreciat în baza recomandărilor ASCO, 2013. Cazurile cu scorul +2, +3 au fost considerate drept Her2<sup>+</sup>. Structura subtipurilor: Luminal A-ER<sup>+</sup> și/sau PR<sup>+</sup>, Her2/neu<sup>-</sup>; Luminal B-ER<sup>+</sup> și/sau PR<sup>+</sup>, Her2/neu<sup>+</sup>; Her2<sup>+</sup>- ER-, PR-, Her2/neu<sup>+</sup>; Triplu negativ- ER<sup>-</sup>, PR<sup>-</sup>, Her2/neu<sup>-</sup>.

Rezultate: Subtipul Luminal A a fost determinat în 77,27% cazuri, Luminal B și triplu negativ în 10,23%, Her2+ în 2,27%.

**Concluzii.** Rata majoră o constituie subtipurile luminale, ceea ce permite aplicarea eficace a tratamentului hormonal.

Cuvinte cheie. Subtipuri moleculare, cancer mamar.

## THE INCIDENCE OF MOLECULAR SUBTYPES IN INVASIVE DUCTAL BREAST CANCER

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**Introduction.** In order to develop a more effective chimiotherapeutical and hormonal treatment, mammary cancer is divided in 4 basic molecular subgroups: Luminal A, Luminal B, Her2<sup>+</sup> and triple negative. Data about the incidence of these subtypes are scattered.

**Purpose.** To determine the incidence of 4 molecular subtypes in invasive ductal breast cancer (IDBC). **Material and Methods.** Was studied the biological material collected from 74 patients, with IDBC, which underwent a surgical treatment and without any specific drug therapy before. The sections were stained traditionally with hematoxilin-eosin and immunohistochemically with antibodies for ER (clone 1D5, ready to use (RTU), DakoCytomation), PR (clone Pgr636, RTU, DakoCytomation,), HER2/neu marker (HercepTest PharmDx Kit, DakoCytomation) by using BOND Autostainer System. Ten microscope fields (40X) of immunostained section, with the greatest number of positive cells, were counted. A tumor was considered ER, PR positive if at least 30% of tumor cells in a section exhibited nuclear staining. Her2/neu was appreciated in accordance with ASCO recommendations, 2013. Cases scored as +2 and +3 were considered positive.

The structure of subgroups: Luminal A-ER<sup>+</sup> and/or PR<sup>+</sup>, Her2/neu<sup>-</sup>; Luminal B- ER<sup>+</sup> and/or PR<sup>+</sup>, Her2/neu<sup>+</sup>; Her2<sup>+</sup>- ER-, PR-, Her2/neu<sup>+</sup>; Triple negative ER<sup>-</sup>, PR<sup>-</sup>, Her2/neu<sup>-</sup>.

**Results.** The Luminal A subtype was determined in 77.27% cases, Luminal B and Triple negativ in 10.23%, Her2<sup>+</sup> in 2.27%.

**Conclusion.** The major established rates have luminal subtypes, which allow an effective application of hormonal treatment.

**Key words.** Molecular subtypes, breast cancer.