

E. NOI FELLOWSHIP REPORT – LONG-TERM BENEFITS

NOI Fellowship Report concerning the evaluation of the long-term benefits must be sent no later than 12 months after the end of the fellowship to grant@noisk.sk. Specifically, indicate the scope of work during the fellowship in the report and highlight the achievement of goals together with the possibility of knowledge transfer for the Oncology in Slovakia.

NOI Grant with its assigned number must be acknowledged in all publications or presentations related to the fellowship results, and a citation of the publication or information about the conferences needs to be sent to grant@noisk.sk.

Name and titles of NOI Fellow:

Lucia Vanovčanová, MD., PhD.

Contact Address of the Home Institution:

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NOI Fellowship Title and Objectives:

Prediction of breast tumor response to neoadjuvant chemotherapy based on identification of specific MR parameters

NOI Fellowship Dates: 1.9.2022 – 30.9.2022

Contact Address of the Host Institution:

Champalimaud Centre, Av. Brasília, 1400-038 Lisbon, Portugal

Overview of NOI Fellowship experience

- Refinement of tumor staging through core-cut biopsy of axillary lymph nodes with pathological changes prior to deciding on optimal therapy.
- Marking of breast tumors and pathological lymph nodes using carbo adsorbens solution before commencing neoadjuvant therapy, along with associated surgical approaches after completion of neoadjuvant chemotherapy.
- Maintenance of clear documentation and utilization of schemes and structured descriptions in patients with breast carcinoma.
- Verification of hypotheses and prediction of non-responders to administered chemotherapy based on MRI indications of breast tumors.
- Activities and roles of the multidisciplinary team in the preoperative management of patients with breast carcinoma.

Possible Knowledge Transfer for the Improvements in Oncology in Slovakia:

We gradually implemented the experiences gained during our professional internship into daily practice at the radiology clinic.

- We introduced preoperative histologization of axillary lymph nodes, refining the staging for the treatment planning of patients with breast carcinoma.
- Histologized lymph nodes are successfully marked with clips for targeted histologization post neoadjuvant chemotherapy.
- The method of marking tumors and lymph nodes using carbo adsorbens solution is currently under discussion with surgeons and pathologists. We are working to address the issues that arose after the initial pilot attempts.

- We continue to verify hypotheses regarding the prediction of breast tumor responses to neoadjuvant chemotherapy, based on the fusion of morphological, functional, and immunohistochemical tumor parameters. Currently, we are using these experiences to make therapeutic decisions in contentious cases.
- We successfully transformed the multidisciplinary team for breast carcinoma, optimizing diagnostic and therapeutic procedures. This speeds up the entire process from diagnosis to the conclusion of treatment.
- We created a preoperative document that succinctly summarizes all important information about imaging examination results, biopsies, planned preoperative lesion marking, and agreed-upon surgical procedures.
- We continue to present the acquired experiences at educational events and in the training of colleagues as part of certified professional activities in breast diagnostics.

Place and Date

Bratislava, August 31th, 2023

Signature