

# THE ROLE OF DNA SEQUENCING AND MOLECULAR TUMOR BOARD COUNSELLING IN THE SELECTION OF THE MOST APPROPRIATED THERAPY IN ONCOLOGY

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## WHAT WAS DONE?

Hospital Pharmacists (HPs) are integrated into the Molecular Tumor Board (MTB), a multidisciplinary group, to select the most appropriated therapy for oncology patients, ensure and facilitate patient access, and demonstrate therapeutic appropriateness found by MTB analysis.

## WHY WAS DONE?

The new DNA sequencing techniques, globally defined “Next Generation Sequencing (NGS)”, allow the parallel sequencing of many samples producing in short times a big amount of data. To enable comprehensive analysis of the data and develop new specific and clinically useful therapies, we have introduced the approach of evaluating the data by the Molecular Tumor Board (MTB), which includes pharmacists as experts in drugs and their use.

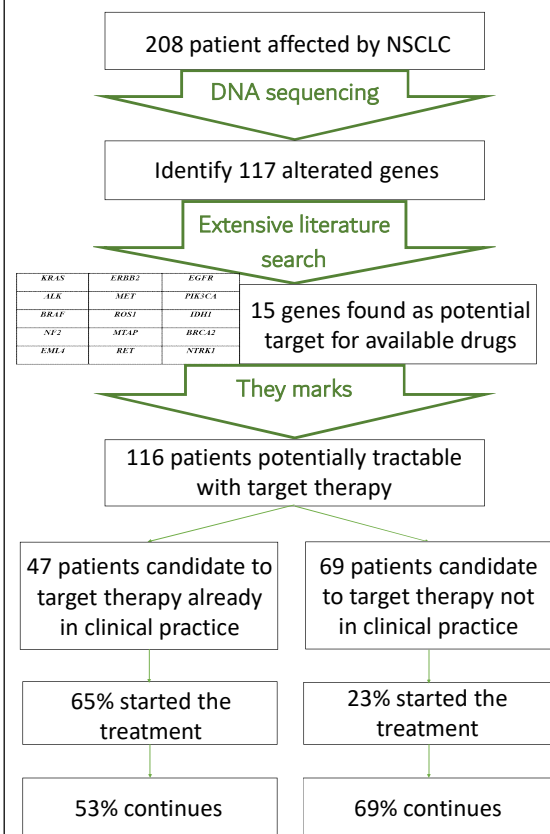
## HOW WAS IT DONE?

MTB members, including HPs, process DNA/RNA sequencing performed on each patient using NGS to identify known/unknown alterations. These data are entered into a database available to all MTB members and are the basic tool for selecting potential target therapy. The MTB meets once a week to discuss and integrate the observed DNA/RNA alterations with the patient’s clinical history. In this way, the most appropriate target therapy for the patient can ultimately be selected. The HPs then assure patient’s access to medications.

## WHAT NEXT?

MTB offers a valid support in the clinical practice and it individuates a target therapy for a greater number of patients. The inclusion of HPs in MTB allows for more deliberate use and better selection of drugs. HPs provide valid support to select drugs and facilitate access to them: HPs individualize the applicable therapy for a larger number of patients through MTB, they analyze the therapeutic outcome (MTB-selected therapy has a bigger chance to last longer) and the cost impact on NHS.

## WHAT HAS BEEN DONE?



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