

ITMIG Biology Working Group

ITMIG is a multidisciplinary group currently gathering surgeons, pathologists, imaging specialists, oncologists, and neurologists aiming for a better management of patients with thymic tumors through an optimized interaction

between the MDs involved in the diagnosis and treatment. The aim of the biology working group is to gather within the ITMIG, MD and/or PhD interested in a better understanding of the biology of these tumors and to facilitate projects either to be evaluated and/or validated at an international level.

This working group should work on the sample collections (blood, serum, tumor) linked to the ITMIG database and their possible availability through a collaborative project. The aim is to constitute a virtual tumor bank that could foster international projects thanks to the ITMIG organization.

Many subtypes of thymic epithelial tumors (TET) are characterized by an important immature thymic T-cell component, a high frequency of auto-immune disorders such as myasthenia gravis as well as some pattern of immunodeficiency (e.g. Good's syndrome). Immunologists as well as hematologists interested in T-cell differentiation could be implicated within our network to address some questions related to immunology, and ITMIG might represent a network which could foster some projects with an international clinical relevance.

The role of molecular tools in the real-life diagnosis and management of patients with TET is not yet fully defined although numerous genomic, epigenetic, transcriptional, and proteomic signatures have been found in different subtypes. New tools such as spatial transcriptomic are more and more implemented and the biology working group should address with the help of the contributors how to progress in these important fields. The role of liquid biopsy in the diagnosis and follow-up of the patients began to emerge and it could be interesting to evaluate at an international level how we can progress in the implementation of the tools.

In addition, how these tools could be used in relation with response to targeted therapies, radiotherapy, chemotherapy might represent important questions to address within this working group.

If you are interested in this group, please let us know by emailing myself (<u>Thierry Molina</u>) and <u>Pam</u> <u>Bruce</u>.

Kind regards,

Thierry Molina, Paris Descartes, CPSC, France