



# Microarray analysis refines classification of non-medullary thyroid tumours of uncertain malignancy

Submitted by Emmanuel Lemoine on Wed, 12/11/2013 - 17:08

Titre	Microarray analysis refines classification of non-medullary thyroid tumours of uncertain malignancy
Type de publication	Article de revue
Auteur	Fontaine, Jean-Fred [1], Mirebeau-Prunier, Delphine [2], Franc, Brigitte [3], Triaud, Stéphane [4], Rodien, Patrice [5], Houlgatte, Rémi [6], Malthièry, Yves [7], Savagner, Frédérique [8]
Editeur	Nature Publishing Group
Type	Article scientifique dans une revue à comité de lecture
Année	2008
Langue	Anglais
Date	2008/10/29
Numéro	15
Pagination	2228 - 2236
Volume	27
Titre de la revue	Oncogene
ISSN	0950-9232
Mots-clés	classification [9], microarray [10], thyroid [11], uncertain [12]
Résumé en anglais	<p>Conventional histology failed to classify part of non-medullary thyroid lesions as either benign or malignant. The group of tumours of uncertain malignancy (T-UМ) concerns either atypical follicular adenomas or the recently called 'tumours of uncertain malignant potential'. To refine this classification we analysed microarray data from 93 follicular thyroid tumours: 10 T-UМ, 3 follicular carcinomas, 13 papillary thyroid carcinomas and 67 follicular adenomas, compared to 73 control thyroid tissue samples. The diagnosis potential of 16 selected genes was validated by real-time quantitative RT-PCR on 6 additional T-UМ. The gene expression profiles in several groups were examined with reference to the mutational status of the RET/PTC, BRAF and RAS genes. A pathological score (histological and immunohistochemical) was estimate for each of the T-UМ involved in the study. The correlation between the T-UМ gene profiles and the pathological score allowed a separation of the samples in two groups of benign or malignant tumours. Our analysis confirms the heterogeneity of T-UМ and highlighted the molecular similarities between some cases and true carcinomas. We demonstrated the ability of few marker genes to serve as diagnosis tools and the need of a T-UМ pathological scoring.</p>
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua270">http://okina.univ-angers.fr/publications/ua270</a> [13]
DOI	10.1038/sj.onc.1210853 [14]
Lien vers le document	<a href="http://dx.doi.org/10.1038/sj.onc.1210853">http://dx.doi.org/10.1038/sj.onc.1210853</a> [14]

---

## Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=765](http://okina.univ-angers.fr/publications?f[author]=765)
- [2] <http://okina.univ-angers.fr/delphine.prunier/publications>
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=768](http://okina.univ-angers.fr/publications?f[author]=768)
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=7200](http://okina.univ-angers.fr/publications?f[author]=7200)
- [5] <http://okina.univ-angers.fr/p.rod/publications>
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=773](http://okina.univ-angers.fr/publications?f[author]=773)
- [7] <http://okina.univ-angers.fr/yves.malthiéry/publications>
- [8] [http://okina.univ-angers.fr/publications?f\[author\]=557](http://okina.univ-angers.fr/publications?f[author]=557)
- [9] [http://okina.univ-angers.fr/publications?f\[keyword\]=1301](http://okina.univ-angers.fr/publications?f[keyword]=1301)
- [10] [http://okina.univ-angers.fr/publications?f\[keyword\]=1883](http://okina.univ-angers.fr/publications?f[keyword]=1883)
- [11] [http://okina.univ-angers.fr/publications?f\[keyword\]=1400](http://okina.univ-angers.fr/publications?f[keyword]=1400)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=1884](http://okina.univ-angers.fr/publications?f[keyword]=1884)
- [13] <http://okina.univ-angers.fr/publications/ua270>
- [14] <http://dx.doi.org/10.1038/sj.onc.1210853>

Publié sur *Okina* (<http://okina.univ-angers.fr>)