Molecular markers in thyroid cancer. Current role in clinical practice
"Take home messages"

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Molecular markers in thyroid cancer (nodules?). Current role in clinical practice

I have to investigate all.
I'm going to be rich, rich!
Molecular markers in thyroid cancer (nodules?). Current role in clinical practice

Some basic questions:

• Are any of these malignant? That is, at initial evaluation
• Can we accurately diagnose (rule in), or exclude (rule out) malignancy?
• If so, at what cost?
• Does it matter?
• Or, are we talking risk stratification once cancer has been diagnosed?
If this is the concept of surgery/surgeons, there is certainly room for improvement and alternatives

- Benefits of surgery?
- Benefits of molecular markers?

I told them it was benign!

Wullf & Morgenthaler 2008
Molecular markers in thyroid cancer. Current role in clinical practice?

- You want to discuss reimbursement of cost of molecular analyses for thyroid cancer
- You have sent a 500 page paper to the ministry of health. The minister has read the 2 page synopsis
- She has exceptionally granted you a 15 min. consultation
- The country is poor; she cannot be bribed; she distrusts (Italian) physicians
- She expects short clear answers on which to base her decision
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Minister of health, Beatrice Lorenzin, granted inaugural handshake with President Napolitano
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- Which phenotype to target (one or more nodules?)
- Type and quantity of tissue needed (insufficiency rate? FNA?)
- Time for analyses
- Cost of analyses
- Sensitivity and specificity for thyroid cancer (false negative rate?)
- Type of cancer that can be diagnosed (most hazardous ones?)
- Necessity of time dependent repeat molecular diagnosis
- Expansion to other types of thyroid cancer (non-thyroid cancer?)
- Application on non-thyroid FNA
- Possibility of blood test
- Can you increase sensitivity, specificity and speed with lower cost?
Does molecular classification of thyroid neoplasias constitute a shift in paradigm?

Molecular classification? Established management?

Reduction of superfluous surgery for benign thyroid neoplasias?
Improve survival in thyroid malignancy?
Increase overall quality of life without increase in cost?

Wulff & Morgenthaler, 2011