



Case #639

Identification of Aggressive Papillary Microcarcinomas of the Thyroid

The most common type of thyroid cancer is papillary thyroid cancer (PTC) and papillary microcarcinomas (PMC), PTC tumors of less than 1.0 cm, now account for about 40% of all PTC tumors. PMC tumors are thought to be relatively innocuous, however a PMC has an incidence of metastases of 20-50% and currently there is no ability to clearly determine if a PMC is indolent or aggressive at diagnosis. Consequently, many patients undergo surgery and may end up overtreated, increasing morbidity, while others may be undertreated, increasing morbidity from re-operation and worse outcomes.

UVM researchers have identified a micro RNA signature in resection samples that distinguishes aggressive from indolent PMC. They are currently validating the signature profiles with a larger cohort of samples and determining of these signatures will be detectable in both fine needle biopsy and in serum samples.

Applications:

- Identification of aggressive PMC of the thyroid.
- Monitor breast cancer patients post-treatment for PMC.
- Platform for the development of novel therapeutics for PMC.

Advantages:

- Distinguishes aggressive from indolent PMC.
- Reduces morbidity from over/under-treatment of PMC.
- Reduces costs from over/under-treatment of PMC.
- Identifies and personalizes specific thyroid cancer treatments.

Intellectual Property and Development Status:

US Non-Provisional US20180105887A1

Looking for research and development collaborations and licensing partners.

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