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## Papillary Thyroid Cancer: Genetic Alterations and Molecular Biomarker Investigations

By: **Abdullah, MI** (Abdullah, Mardiaty Iryani)<sup>[1,5]</sup>; **Junit, SM** (Junit, Sarni Mat)<sup>[1]</sup>; **Ng, KL** (Ng, Khoon Leong)<sup>[2]</sup>; **Jayapalan, JJ** (Jayapalan, Jaime Jacqueline)<sup>[3]</sup>; **Karikalan, B** (Karikalan, Barani)<sup>[4]</sup>; **Hashim, OH** (Hashim, Onn Haji)<sup>[1,3]</sup>

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### Abstract

Papillary thyroid cancer (PTC) is the most prevalent form of malignancy among all cancers of the thyroid. It is also one of the few cancers with a rapidly increasing incidence. PTC is usually contained within the thyroid gland and generally biologically indolent. Prognosis of the cancer is excellent, with less than 2% mortality at 5 years. However, more than 25% of patients with PTC developed a recurrence during a long term follow-up. The present article provides an updated condensed overview of PTC, which focuses mainly on the molecular alterations involved and recent biomarker investigations.

### Keywords

**Author Keywords:** papillary thyroid cancer; molecular alteration; genetic signature; biomarker; diagnostics

**KeyWords Plus:** FINE-NEEDLE-ASPIRATION; BRAF V600E MUTATION; ONCOGENE REARRANGEMENTS; EXPRESSION PROFILES; CLINICAL-FEATURES; TUMOR PROGRESSION; NUCLEAR FEATURES; GROWTH-FACTOR; UP-REGULATION; CARCINOMA

### Author Information

**Reprint Address:** Hashim, OH (reprint author)

+ Univ Malaya, Fac Med, Dept Mol Med, Kuala Lumpur 50603, Malaysia.

### Addresses:

- + [ 1 ] Univ Malaya, Fac Med, Dept Mol Med, Kuala Lumpur 50603, Malaysia
- + [ 2 ] Univ Malaya, Fac Med, Dept Surg, Kuala Lumpur 50603, Malaysia
- + [ 3 ] Univ Malaya, Ctr Prote Res, Fac Med, Kuala Lumpur 50603, Malaysia
- + [ 4 ] Perdana Univ, Jalan MAEPS Perdana, Serdang 43400, Selangor, Malaysia
- + [ 5 ] Int Islamic Univ Malaysia, Kulliyah Allied Hlth Sci, Dept Biomed Sci, Kuantan 25200, Pahang, Malaysia

**E-mail Addresses:** [onnhashim@um.edu.my](mailto:onnhashim@um.edu.my)

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