# Article information:

MRI-Based Texture Analysis for Preoperative Prediction of BRAF V600E Mutation in Papillary Thyroid Carcinoma - PubMed  
<https://pubmed.ncbi.nlm.nih.gov/36636144/>

# Article summary:

1. This study aimed to investigate the relationship between texture analysis features based on magnetic resonance imaging (MRI) and BRAF V600E mutation in papillary thyroid carcinoma (PTC).

2. A total of 80 PTCs were included in the study, with 22 BRAF V600E wild-type and 58 BRAF V600E mutant.

3. The area under the ROC curves (AUCs) for the T2WI model, CE-T1WI model, and combined model were 0.83, 0.83, and 0.88 respectively.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

This article is a retrospective analysis of patients with postoperative pathology confirmed papillary thyroid carcinoma from 2017 to 2021 that aimed to investigate the relationship between texture analysis features based on magnetic resonance imaging (MRI) and mutations. The authors used univariate, minimum redundancy maximum relevance (mRMR), and multivariate analyses for feature selection to construct 3 models (T2WI, CE-T1WI, and combined model) to predict mutation. The results showed good interobserver agreement on texture features selected with all ICCs >0.75; AUCs for the T2WI model, CE-T1WI model, and combined model were 0.83 (95% CI: 0.75-0.91), 0.83 (95% CI: 0.73-0.90), and 0.88 (95% CI: 0.81-0

# Topics for further research:

* Papillary Thyroid Carcinoma
* Magnetic Resonance Imaging
* Univariate Analysis
* Minimum Redundancy Maximum Relevance
* Multivariate Analysis
* Interobserver Agreement

# Report location:

<https://www.fullpicture.app/item/06ebbc768f0ecb71ad4f698a783b3c2e>