

Thiopurine Methyltransferase (TPMT)



testing at ARUP Laboratories



www.aruplab.com

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keyword: TPMT

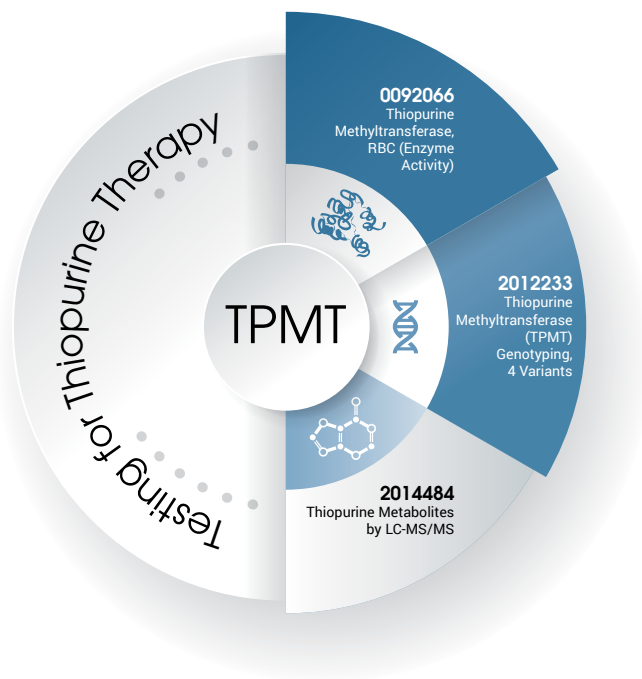
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[www.aruplab.com/
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For clinicians considering **thiopurine drug therapy**, ARUP offers a full menu of testing to support patient care.



Predict patient response by assessing thiopurine methyltransferase (TPMT) activity.

test code test name

- | | |
|---------|-----------------------------------|
| 0092066 | Thiopurine Methyltransferase, RBC |
|---------|-----------------------------------|
- Phenotype test that assesses risk for severe bone marrow toxicity with standard dosing of thiopurine drugs
 - Performed before thiopurine therapy is initiated
 - Can detect rapid metabolizer phenotype

3001535 *TPMT* and *NUDT15*

- Assesses genetic risk for severe bone marrow toxicity with standard dosing of thiopurine drugs
- May be used for pre or post-therapeutic assessment.



Optimize drug concentrations by measuring drug metabolites.

test code test name

- | | |
|---------|------------------------------------|
| 2014484 | Thiopurine Metabolites by LC-MS/MS |
|---------|------------------------------------|
- Allows clinicians to optimize therapy for thiopurine drugs
 - Identifies thiopurine metabolite concentrations that may lead to toxicity
 - May be used for post-therapeutic assessment

Guidelines for thiopurine dosing by the Clinical Pharmacogenetics Implementation Consortium (CPIC) can be found at: www.pharmgkb.org/gene/PA356

“The phenotype (enzyme assay) or genotype tests should be performed prior to thiopurine drug therapy to identify patients with abnormal TPMT enzyme activity. Dose adjustments may be required to minimize the risk for toxicity and to optimize therapy.”

Kamisha Johnson-Davis, PhD, DABCC

