

***TPMT* and *NUDT15* Variant Analysis**

- I. *TPMT* and *NUDT15* variant analysis (81306, 81335, 0034U, 0169U) to determine drug metabolizer status is considered **medically necessary** when:
 - A. The member is being considered for or is currently undergoing treatment with azathioprine¹ (e.g., Imuran and Azasan), **OR**
 - B. The member is being considered for or is currently undergoing treatment with mercaptopurine² (e.g., Purinethol and Purixan), **OR**
 - C. The member is being considered for or is currently undergoing treatment with thioguanine³ (e.g., Tabloid), **OR**
 - D. The member is on thiopurine therapy and has had abnormal complete blood count results that do not respond to dose reduction.
- II. *TPMT* and *NUDT15* variant analysis (81306, 81335, 0034U, 0169U) to determine drug metabolizer status is considered **investigational** for all other indications.

1 Commonly prescribed for treatment of avoiding rejection of a transplanted organ, and rheumatoid arthritis

2 Commonly prescribed for treatment of acute lymphoblastic or lymphocytic leukemia

3 Commonly prescribed for treatment of acute nonlymphocytic leukemia

REFERENCES

1. Table of Pharmacogenetic Associations. (2022, October 26). FDA. <https://www.fda.gov/medical-devices/precision-medicine/table-pharmacogenetic-associations>. Accessed April 28, 2023.