Tumor Biomarker for Prognosis of Response to Immunotherapy

**Description:**

- Whole-exome sequencing of tumor samples identified a subset of tumors with a disproportionately large number of somatic mutations.
- This hypermutator phenotype is due to somatic mutation in DNA Polymerase epsilon (PoLE).
- Tumors with this phenotype and PoLE mutation are highly immunogenic (see figure).
- Sequencing of tumor PoLE for somatic mutation is an efficient way to select patients who will best respond to immunotherapy.
- A patent application has been filed.

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