Tumor Microenvironment Types

a component of the BostonGene Tumor Portrait™ test

Proprietary algorithm estimates cancer prognosis

Informed clinical decisions surpassing genetic data boundaries


- **Immune enriched/Fibrotic**
  - High levels of immune infiltrate
  - The most immune-active TME
  - High angiogenesis
  - High CAFs activation

- **Desert**
  - Minimal immune infiltration
  - Highest malignant cell percentage

- **Fibrotic**
  - Minimal immune infiltration
  - High angiogenesis and CAFs activation

Overall survival and progression-free survival are consistent across several solid cancer types.

**Cancer Cell**

Conserved pan-cancer microenvironment subtypes predict response to immunotherapy

Bagaev et al., Cancer Cell, 2021

1 of 10 research articles that represent cutting-edge areas of cancer research and oncology in 2021 by Cancer Cell.
Tumor Immunity Portrait™

a component of the BostonGene Tumor Portrait™ test

AI-driven molecular predictor for IO-therapy response

Immune profiling beyond single factors

43% of US cancer patients eligible for immunotherapy

10% of eligible patients achieve complete response

16% of patients who will respond to IO therapy are not identified

This highlights the critical need for a new approach to identify immunotherapy responders.

The Tumor Immunity Portrait™ combination of the tumor microenvironment subtype and TMB status provides precise response prediction to immunotherapy.

Increase response rate
Identification of non-responders to IO more specifically, avg NPV=97%

Avoid unnecessary adverse effects
Prevent adverse events for non-responders to IO-therapy

Reduce wasted spend
Average annual cost of IO is about $180,000 per patient. Reduce financial burden for non-responders