KINNATE BIOPHARMA

RAF Clinico-Genomic Landscape Study

November 2021

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RAF Clinico-Genomic Landscape Study Executive Summary

Genomic Landscape Study conducted in collaboration with Guardant Health (GuardantINFORM™) focused on characterizing the prevalence of patients with advanced & metastatic solid tumors bearing BRAF Class I, II and III alterations as identified via liquid biopsy

Key findings include:

- Among the nearly 6,000 patients identified in GuardantINFORM™ as having BRAF alteration-positive cancers across all tumor types**, approximately 55% were found to be harboring Class II and III alterations**
  - Suggests that Class II and III alterations, across patients with advanced and metastatic solid tumors, may be higher than prior publicly disclosed datasets have identified*
  - When looking across the most common tumor types (NSCLC, Melanoma and Colorectal Cancer (CRC)), approximately 65%, 20% and 30% of oncogenic BRAF alterations, respectively, are BRAF Class II & III
  - In addition to NSCLC, melanoma and CRC, BRAF Class II & III alterations are also detected at substantial rates in other common and rare tumor types such as prostate, breast, duodenal adenocarcinoma, renal pelvis urothelial carcinoma, cholangiocarcinoma
- Currently, patients with Class II and III BRAF alterations have no available targeted therapies and represent a significant and potentially greater unmet clinical need than previously understood
  - The 2020 sales for the 3 approved products for Class I BRAF alterations were US$1.8B
  - Liquid biopsy-based screening may increase the identification of Class II & III alterations in cancer patients, pointing to a potentially larger need for therapies that target not only Class I, but also Class II & III alterations

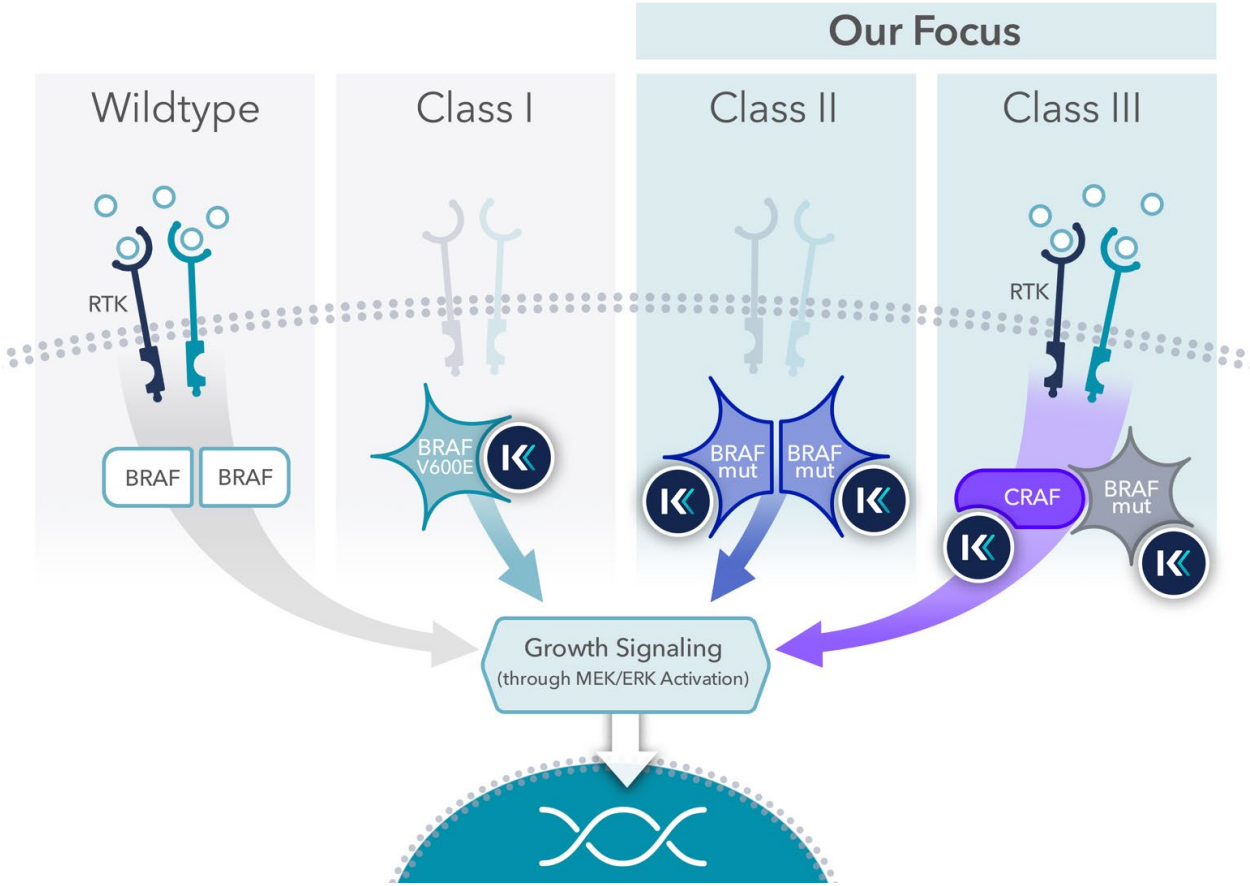
The study will also assess real-world clinical outcomes stratified by BRAF Class and by treatment which will be presented at a future date

*E.g. AACR Project GENIE Consortium. AACR Project GENIE: Powering Precision Medicine through an International Consortium. Cancer Discov. 2017 Aug;7(8):818-831. doi: 10.1158/2159-8290.CD-17-0151. Epub 2017 Jun 1. PMID: 28572459; PMCID: PMC5611790; Owsley J, Stein MK, Porter J, In GK, Salem M, O'Day S, Elliott A, Poorman K, Gibney G, VanderWalde A. Prevalence of class I-III BRAF mutations among 114,662 cancer patients in a large genomic database. Exp Biol Med (Maywood). 2021 Jan;246(1):31-39. doi: 10.1177/1535370220959657. Epub 2020 Oct 5. PMID: 33019809; PMCID: PMC7797994.

BRAF Class II & III Alterations Define Distinct Patient Populations

These Patients have no Approved Targeted Therapies and Poor Clinical Outcomes

- Patients with BRAF Class I alterations, represented by $BRAF^{V600E/K}$, can be treated with approved RAF inhibitors vemurafenib, dabrafenib & encorafenib
- BRAF Class II & III alterations include SNVs, Indels & gene fusions, and activate MAPK signaling by BRAF homodimer (Class II) or BRAF/CRAF heterodimer (Class III) formation
- Patients with BRAF Class II & Class III BRAF alterations have no available targeted therapies & represent a significant unmet clinical need
- Kinnate's approach targets dimer signaling in these patient populations while minimizing MAPK pathway rebound in normal wild type RAF signaling



RAF Genomic Landscape Study Design and Objectives

- Kinnate's collaboration with Guardant utilizing GuardantINFORM™ to **understand the real-world occurrence, characteristics & outcomes of patients with oncogenic BRAF alterations across solid tumors**
- GuardantINFORM™ combines de-identified longitudinal clinical information and genomic data collected from the Guardant360® liquid biopsy test which has been provided to more than 175,000 patients to date in the United States. Over 80% of the patients are linked to treatment and procedural data
- Guardant360® is a commercial 73 Gene DNA panel optimized for analysis of ctDNA (liquid biopsy)

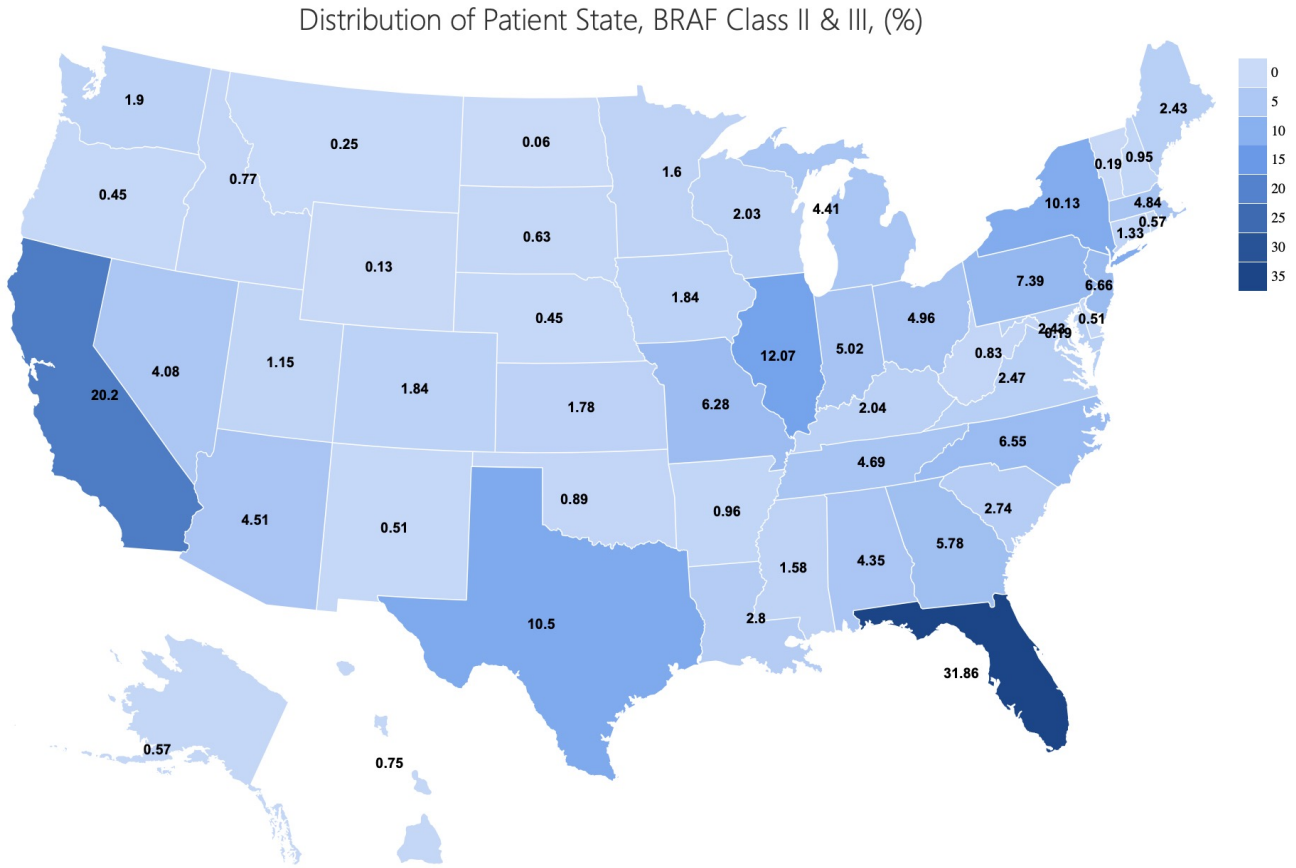
Key Study Objectives:

1. **Determine Occurrence Rates**
   - Calculate the occurrence rates of BRAF Class I, II, III alterations in advanced solid tumors
2. **Explore Relationships Between BRAF Class, Patient Characteristics and Outcomes**
   - Characterize attributes of **patients** & **tumors** bearing BRAF Class I, II or III alterations
     - Patient Demographics (Location, Age, Sex, Smoking Status)
     - Cancer Treatments
     - Co-occurrence with other mutations
   - Real world outcomes

Preliminary analysis is focused on the occurrence rates of BRAF Class I, II, III alterations (SNV's & Indels)

Demographics of Patients Bearing BRAF Class I, II or III Alterations

GuardantINFORM™ identified nearly 6,000 patients with BRAF Alteration-positive cancers



Patient demographics by BRAF class, across all cancer types

Parameter		BRAF Class		
		Class I	Class II	Class III
	n	2,643	1,524	1,622
Age				
	Mean	64.90	68.93	67.47
	SD	12.94	10.65	11.80
	Median	66	69	68
	Min	16	23	16
	Max	85	85	85
Gender				
Female	Frequency	1,396	718	802
	Percent (%)	52.82	47.11	49.45
Male	Frequency	1,247	806	820
	Percent (%)	47.18	52.89	50.55
Vital Status				
Unknown/ Still Alive	Frequency	1,540	865	923
	Percent (%)	58.27	56.76	56.91
Date of Death Known	Frequency	1,103	659	699
	Percent (%)	41.73	43.24	43.09
Smoking Status				
Ever Tobacco Product User	Frequency	1,140	869	851
	Percent (%)	43.13	57.02	52.47
Unknown	Frequency	1,503	655	771
	Percent (%)	56.87	42.98	47.53

Note: Patients with multiple BRAF alterations across functional classes (I/II/III) were excluded from the demographic summary.

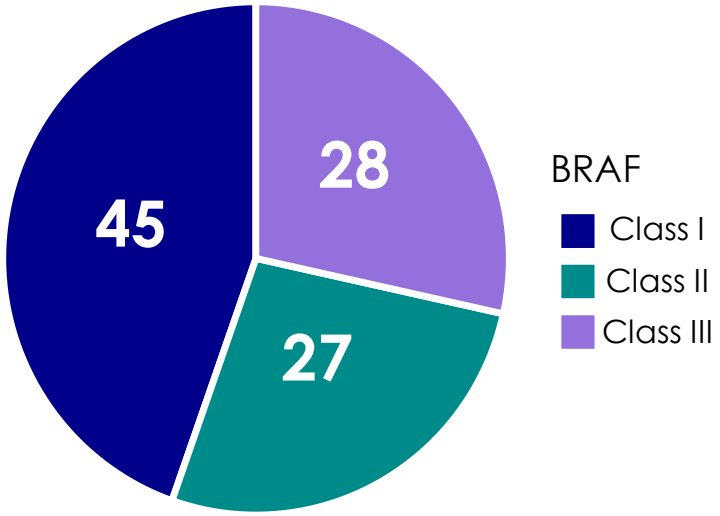
- **Patients with BRAF Alteration-positive cancers originate from all states in the U.S.**
- **Age distribution & gender balance are broadly similar across all 3 patient Populations (BRAF Class I, II & III)**

Pan-Cancer Prevalence of Patients Bearing BRAF Alterations

Majority of oncogenic BRAF alterations (~55%) are Class II or III

Guardant360 ® analysis of **~143,000** ctDNA positive samples from cancer patients with advanced or metastatic disease

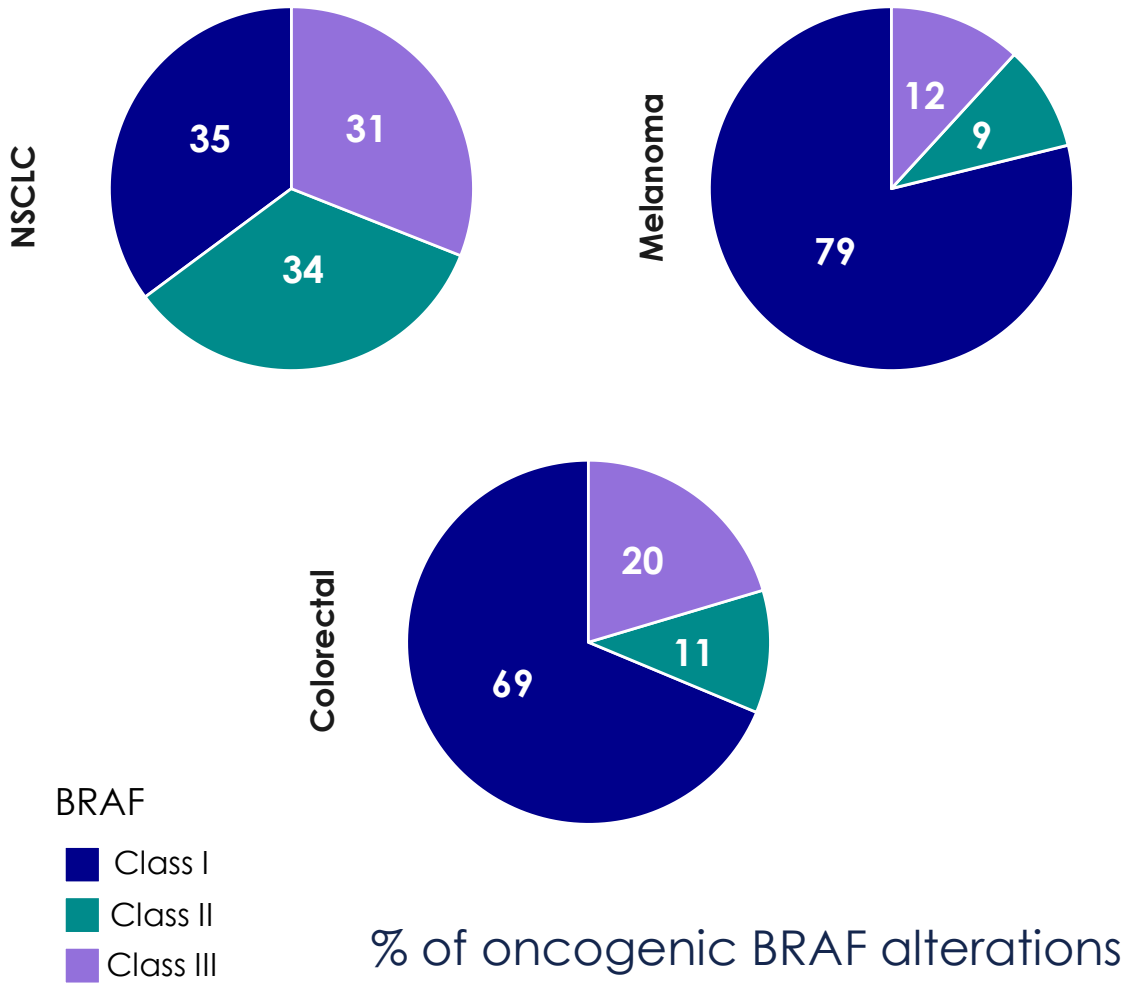
- **2.2%** of ctDNA positive patients had BRAF Class II or III



% of Oncogenic BRAF Alterations

Across all tumor types, liquid biopsy analysis in GuardantINFORM™ identified that the majority of patients with BRAF alterations have Class II & III alterations versus previous public sources based on smaller sample set showed a minority

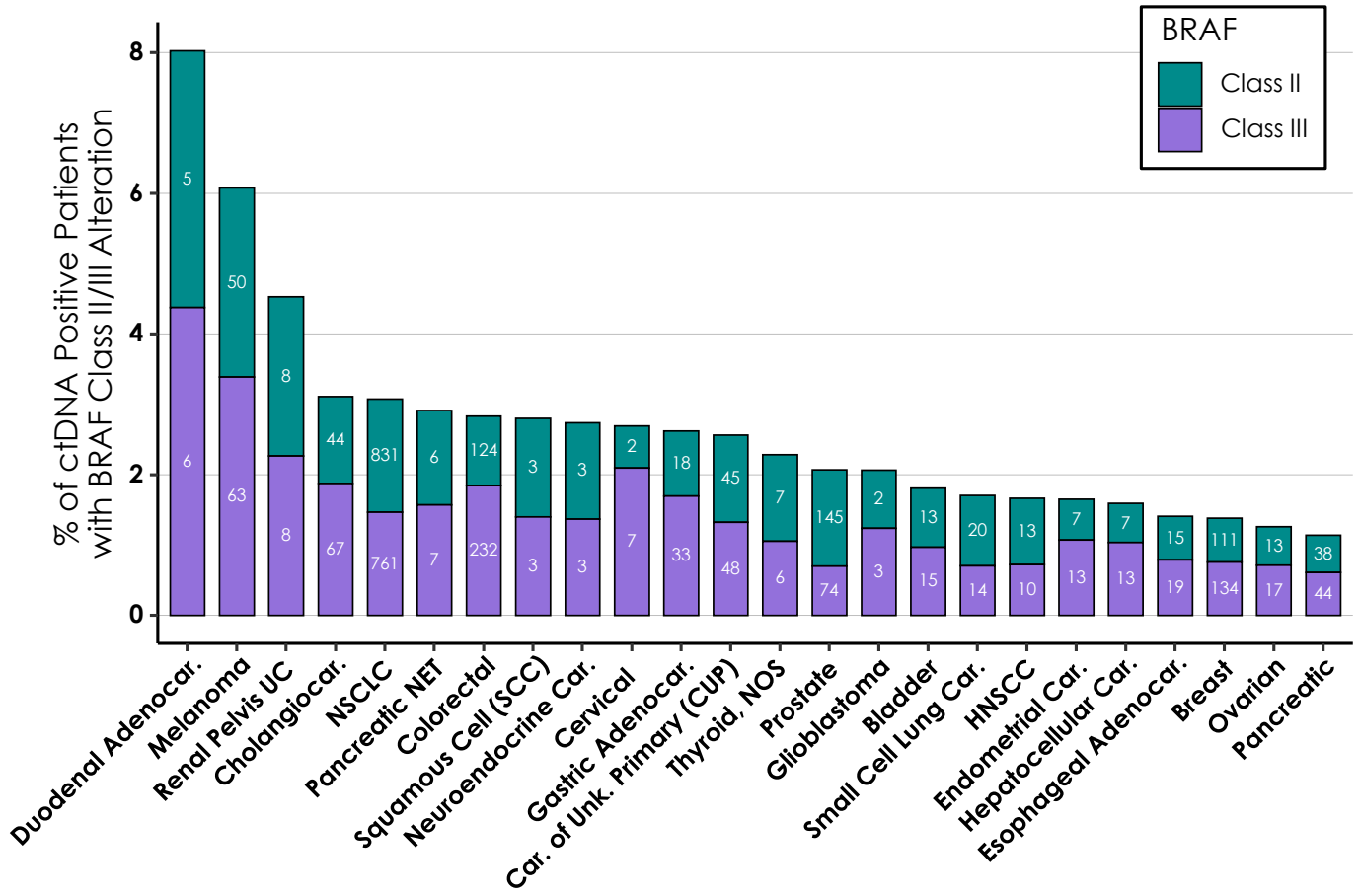
BRAF Alteration Prevalence by Tumor Type based on GuardantINFORM™



% of oncogenic BRAF alterations

- **Greater proportion** of patients with Class II or Class III alterations across NSCLC, Melanoma and Colorectal versus prior public databases
- **Majority** of patients with BRAF alterations with **NSCLC** are Class II or Class III
- Percent of oncogenic BRAF alterations that are Class II or III:
  - NSCLC: 65%
  - Melanoma: 21%
  - Colorectal: 31%

BRAF Class II & III Alterations are Common Across Tumor Types



white labels indicate the # of patients
Figure includes tumor types with:

- ≥ 130 tested patients & ≥ 2% BRAF Class II/III or
- ≥ 1,000 tested patients & ≥ 1% BRAF Class II/III

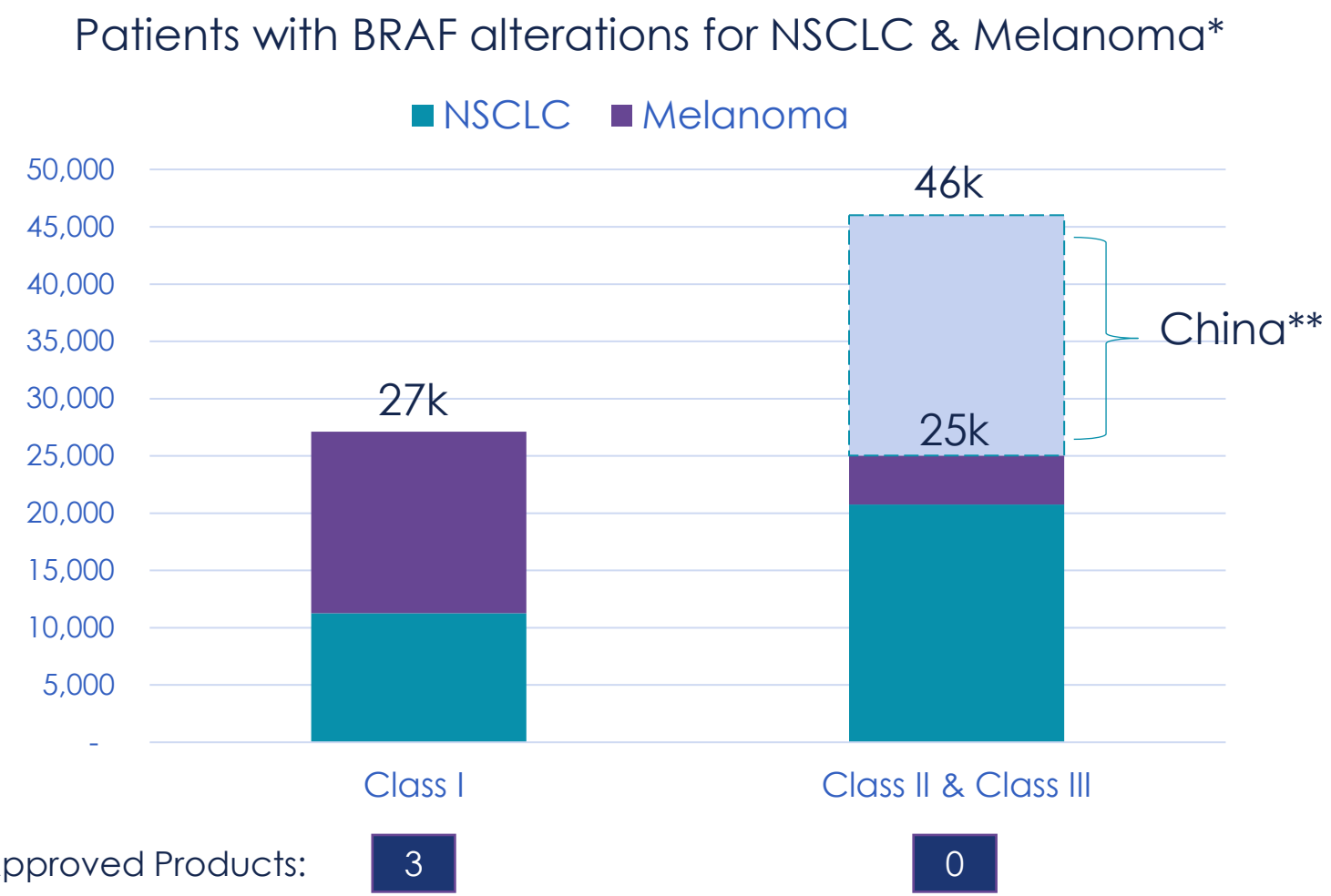
A broad survey identified many tumor types with BRAF Class II & III occurrence rates > 1%

Tumor types with >100 patients each with BRAF Class II & III alterations in GuardantINFORM™:

- NSCLC
- Colorectal
- Breast
- Prostate
- Melanoma
- Cholangiocarcinoma

BRAF Class II & III alterations represent a sizable unmet need across a variety of tumor types

Class II & Class III Population **Across Tumor Types** is **Greater than** Class I But Without Any Approved Drugs



- 2020 sales of the 3 approved products for Class I BRAF alterations were $1.8B
  - 20% growth from 2019 sales
- Substantial opportunities for growth
  - Class II & III may have higher pricing, in-line with newer drug launches
  - Class II & III drug may not require combination therapy and/or have better profile
  - Broader use of NGS identifying more Class II & III patients
  - Additional tumor types with significant prevalence

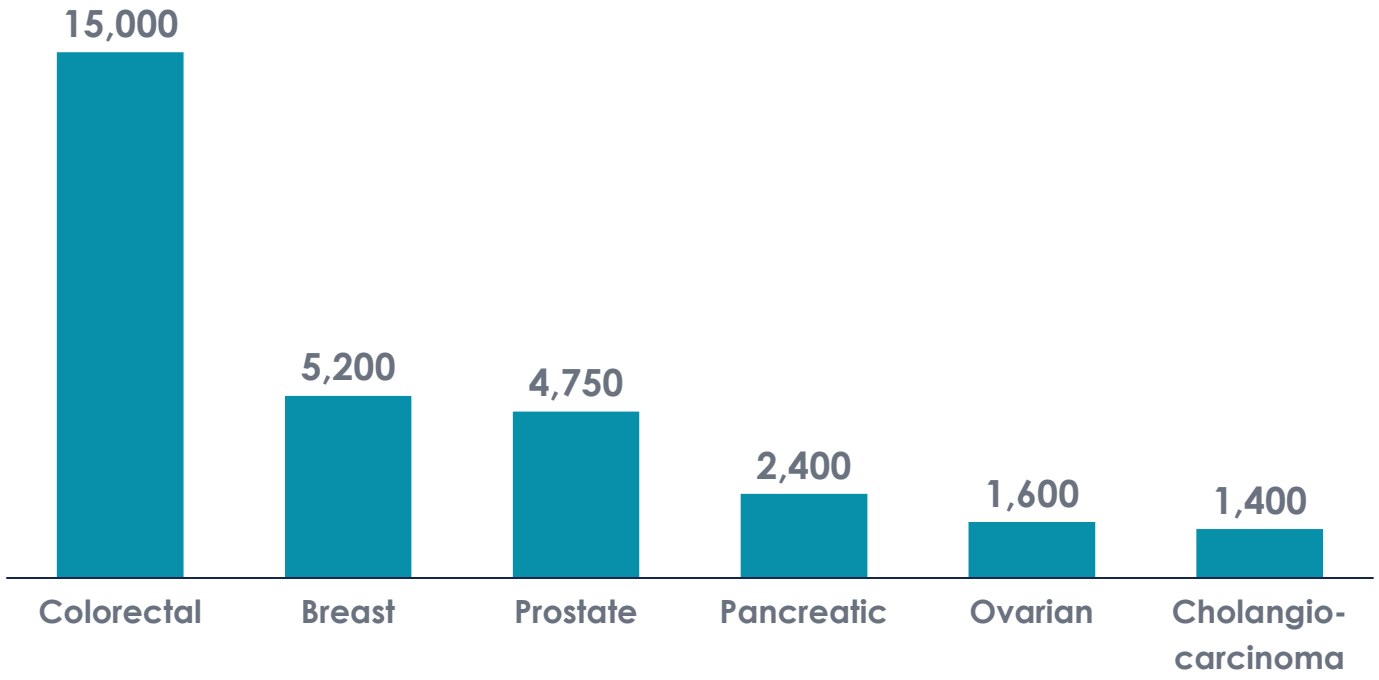
*US, EU5 and Japan; Stages IIIb and IV for NSCLC and Stage IV for Melanoma
** Stage IIIb and IV NSCLC in Urban Markets only

Kinnate calculations based on 2021 Kantar data and data generated from 2021 genomic landscape study with Guardant Health utilizing GuardantINFORM™

BRAF Program Opportunities for Expansion

Opportunities to Expand Beyond Current Target of ~46k patients

Additional Tumor Types with significant BRAF Class II or Class III alteration prevalence:



- Additional opportunities in various cancer types beyond NSCLC & Melanoma with Class II / Class III alterations
- Earlier treatment lines and less advanced disease settings
  - 2,700 patients have **Stage IIIa NSCLC** with Class II & Class III alterations
  - 3,200 patients have **Stage III** Melanoma with Class II & Class III alterations
- Class I BRAF alterations, including both first line and second line for intrinsic and acquired resistance
  - 27,000 patients have advanced NSCLC and Melanoma with Class I alterations + China
  - ~25% of acquired resistance may be dimer based
- Expanding into other geographies with high disease burden (e.g. South Korea, Australia, Canada)

Assumes unresectable or advanced metastatic disease. Kinnate calculations based on Kantar data, 2021 DRG data and data generated from 2021 genomic landscape study with Guardant Health utilizing GuardantINFORM™