

Global KRAS Inhibitors Market & Clinical Trials Forecast 2028

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Abstracts

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'Global KRAS Inhibitors Market & Clinical Trials Forecast 2028' Report Highlights:

KRAS Inhibitors Market Opportunity: > USD 4.5 Billion by 2028

US To Dominate Global KRAS Inhibitors Market: >50% Market Share

Number of KRAS Inhibitors In Trials: > 45 Drugs

Number of Approved Drugs: 1 (Lumakras)

Lumakras Dosage, Sales, Patent & Price Insight

Solid Tumors Targeted Drugs Dominating The Clinical Trials

Global KRAS Inhibitors Market Trends & Dynamics

Global KRAS Inhibitors Market Future Opportunity Outlook

The advancement in the field of clinical research has led to identification of several oncogenes which are generally mutated in cancers. Kirsten rat sarcoma 2 viral oncogene homolog (KRAS) is the most frequently mutated oncogene in lung carcinomas, accounting for 25% of total incidence, with half of them being KRASG12C mutations. Therefore, suitable research and development activities were carried out by



pharmaceutical companies to develop novel KRAS inhibitor. To date, Lumakras developed by Amgen is the only KRAS inhibitor which haven approved for the management of non-small cell lung cancer.

The approval of Lumakras for the treatment of patients with advanced KRAS G12C mutated non-small cell lung cancer marks a milestone for cancer therapy. Apart from small molecule inhibitor approach, researchers are also utilizing several other novel mechanisms to directly target KRAS including vaccines, adoptive T cell therapy, PROTACs, and CRISPR/Cas9 are emerging. Amid these approaches, a few KRAS vaccines have entered initial phase of clinical trials. ELI-002 developed by Elicio Therapeutics is a structurally novel AMP vaccine targeting KRAS driven cancers. The company is currently enrolling patients in AMPLIFY-201, phase-I/II clinical trial of ELI-002 in patients with solid tumors, including colorectal cancer and pancreatic ductal adenocarcinoma.

Since the entry of Lumakras in the market, the drug has shown high adoption rates in the market with global sales of about US\$ 90 Million in 2021. The encouraging response of the novel drug has propelled the further research and development activities in this segment. The pipeline of KRAS inhibitor is highly crowded and consists of several potential candidates including Adagrasib, JQ443, GDC-6036, BI 1823911, JNJ-74699157, MK-1084, and others. Among them, Adagrasib is one of the most advanced KRAS inhibitor in phase-III clinical trial while the others are mainly present in phase-I/II clinical trial.

Although KRAS G12C inhibitors offer an important new therapeutic option for a subset of patients with cancers, clinical trial experience suggests that fewer than half of patients respond and responses can be short-lived. To mitigate these challenges, ongoing clinical trials of KRAS inhibitors are largely focused on the evaluating novel rational combinations based on positive preclinical results. For instance, Bridge Bio Pharma in collaboration with Amgen is evaluating the combination of BBP-398, SHP2 inhibitor in combinations. In addition to this, Mirati Therapeutics also announced a nonexclusive clinical collaboration agreement with Sanofi to evaluate the combination of adagrasib with Sanofi's investigational SHP2 inhibitor SAR442720 (RMC-4630).

With advances in precision medicine, there is unmet need for biomarker testing as it informs the treatment options during the course of disease. For KRAS mutations, Qiagen in 2021 announced the launch of an expanded scope of companion diagnostic (CDx) claims for the therascreen KRAS RCQ PCR kit (therascreen KRAS Kit) after it



received US regulatory approval as a companion diagnostic to aid in the identification of non-small cell lung cancer (NSCLC) patients that may be eligible for treatment with Lumakras. The company has collaborated with Labcorp to market the diagnostic test in US.

As per report findings, it is estimated that global KRAS inhibitor market will surpass US\$ 4.5 Billion by 2028 driven by growing demand of targeted therapies and high acceptance in cancer management. The report offers comprehensive insights of the pipeline therapeutics scenario and growth prospects across KRAS Inhibitor development. The report provides detailed coverage of the pipeline landscape for this mechanism of action, commercial information of already available KRAS inhibitor, and sales forecast till 2028. The report also provides regional analysis of the KRAS inhibitor market in US, Europe, China, Japan, Canada, Brazil, and other promising region.



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