# Clinical Trials Data KRAS - Document 52

# Trametinib, Combination Chemotherapy, and Radiation Therapy in Treating Patients With Stage III Non-small Cell Lung Cancer That Cannot Be Removed by Surgery

## Clinical Trial: https://clinicaltrials.gov/study/NCT01912625

"eligibilityCriteria": "Inclusion Criteria:\n\n\* Patients must have histologically confirmed, newly diagnosed or recurrent from a previously treated early stage lung cancers that are locally confined, non-small cell lung cancers that are considered unresectable and for which chemoradiation will be considered definitive therapy; patients with recurrent cancer that is amendable for chemoradiation can be eligible only if patients with prior lobectomy for stage I cancer had not had adjuvant chemotherapy, and more than 8 weeks have elapsed from surgery to allow for wound healing; patients who recur from prior X-ray therapy (XRT) or stereotactic body radiation therapy (SBRT) will not be eligible\n\* Patients must have measurable disease, defined as at least one lesion that can be accurately measured in at least one dimension (longest diameter to be recorded for non-nodal lesions and short axis for nodal lesions) as \\>= 20 mm with conventional techniques or as \\>= 10 mm with spiral CT scan, magnetic resonance imaging (MRI), or calipers by clinical exam\n\* Prior thoracic radiation allowed only if there is minimal to no overlap with the treatment area estimated at the time of consultation, and there is no cumulative esophageal dose that exceeds more than 50% of the maximal acceptable dose tolerance\n\* Eastern Cooperative Oncology Group (ECOG) performance status =\\< 1 (Karnofsky \\>= 70%)\n\* Life expectancy of greater than 6 months\n\* Able to swallow and retain orally-administered medication and does not have any clinically significant gastrointestinal abnormalities that may alter absorption such as malabsorption syndrome or major resection of the stomach or bowels\n\* Absolute neutrophil count (ANC) \\>= 1.5 x 10\\^9/L\n\* Hemoglobin \\>= 9 g/dL\n\* Platelets \\>= 100 x 10\\^9/L\n\* Albumin \\>= 2.5 g/dL\n\* Total bilirubin =\\< 1.5 x institutional upper limit of normal (ULN)\n\* Aspartate aminotransferase (AST) and alanine aminotransferase (ALT) =\\< 2.5 x institutional ULN\n\* Serum creatinine =\\< 1.5 mg/dL OR calculated creatinine clearance (Cockcroft-Gault formula) \\>= 50 mL/min OR 24-hour urine creatinine clearance \\>= 50 mL/min\n\* Prothrombin time (PT)/international normalized ratio (INR) and partial thromboplastin time (PTT) =\\< 1.5 x institutional ULN\n\* Left ventricular ejection fraction \\>= institutional lower limit of normal (LLN) by echocardiogram (ECHO) or multi gated acquisition scan (MUGA)\n\* Women of child-bearing potential and men must agree to use adequate contraception (hormonal or barrier method of birth control; abstinence) prior to study entry, during the study participation, and for four months after the last dose of the drug; women of child-bearing potential must have a negative serum pregnancy test within 14 days prior to registration and agree to use effective contraception throughout the treatment period and for 4 months after the last dose of study treatment; should a woman become pregnant or suspect she is pregnant while she or her partner is participating in this study, she should inform her treating physician immediately\n\* Ability to understand and the willingness to sign a written informed consent document\n\* Activating Kirsten rat sarcoma viral oncogene homolog (KRAS) mutation (any G12, G13, Q61) confirmed by Clinical Laboratory Improvement Act (CLIA)-certified testing\n\* The availability of formalin-fixed paraffin embedded archival tissue from core biopsy of tumors is recommended for exploratory analysis\n\nExclusion Criteria:\n\n\* History of another malignancy\n\n \* Exception: patients who have been disease-free for 3 years, or patients with a history of completely resected non-melanoma skin cancer and/or patients with indolent secondary malignancies, are eligible; consult the Cancer Therapy Evaluation Program (CTEP) Medical Monitor if unsure whether second malignancies meet the requirements specified above\n\* History of interstitial lung disease or pneumonitis\n\* Any major surgery, extensive radiotherapy, chemotherapy with delayed toxicity, biologic therapy, or immunotherapy within 21 days prior to enrollment\n\* Use of other investigational drugs within 28 days (or five half-lives, whichever is shorter; with a minimum of 14 days from the last dose) preceding the first dose of trametinib and during the study\n\* Have a known immediate or delayed hypersensitivity reaction or idiosyncrasy to drugs chemically related to trametinib, or excipients or to dimethyl sulfoxide (DMSO) or to either carboplatin or paclitaxel\n\* Current use of a prohibited medication; the following medications or non-drug therapies are prohibited:\n\n \* Other anti-cancer therapy while on study treatment; (note: megestrol \\[Megace\\] if used as an appetite stimulant is allowed)\n \* Concurrent treatment with bisphosphonates is permitted; however, treatment must be initiated prior to the first dose of study therapy; prophylactic use of bisphosphonates in patients without bone disease is not permitted, except for the treatment of osteoporosis\n \* Concurrent use of all herbal supplements is prohibited during the study (including, but not limited to, St. John's wort, kava, ephedra \\[ma huang\\], gingko biloba, dehydroepiandrosterone \\[DHEA\\], yohimbe, saw palmetto, or ginseng)\n\* History or current evidence/risk of retinal vein occlusion (RVO)\n\* History or evidence of cardiovascular risk including any of the following:\n\n \* Left ventricular ejection fraction (LVEF) \\< LLN\n \* A QT interval corrected for heart rate using the Bazett's formula corrected QT (QTcB) \\>= 480 msec\n \* History or evidence of current clinically significant uncontrolled arrhythmias (exception: patients with controlled atrial fibrillation for \\> 30 days prior to registration are eligible)\n \* History of acute coronary syndromes (including myocardial infarction and unstable angina), coronary angioplasty, or stenting within 6 months prior to registration\n \* History or evidence of current \\>= class II congestive heart failure as defined by the New York Heart Association (NYHA) functional classification system\n \* Treatment-refractory hypertension defined as a blood pressure of systolic \\> 140 mmHg and/or diastolic \\> 90 mmHg which cannot be controlled by anti-hypertensive therapy\n \* Known cardiac metastases\n\* Known hepatitis B virus (HBV), or hepatitis C virus (HCV) infection (patients with chronic or cleared HBV and HCV infection are eligible); patients with human immunodeficiency virus (HIV) are not eligible if on anti-retroviral medications\n\* Uncontrolled intercurrent illness including, but not limited to, ongoing or active infection, symptomatic congestive heart failure, unstable angina pectoris, cardiac arrhythmia, or psychiatric illness/social situations that would limit compliance with study requirements\n\* Pregnant women or nursing mothers; women of childbearing potential should be advised to avoid pregnancy and use effective methods of contraception; men with a female partner of childbearing potential must have either had a prior vasectomy or agree to use effective contraception; if a female patient or a female partner of a patient becomes pregnant while the patient receives trametinib, the potential hazard to the fetus should be explained to the patient and partner (as applicable)\n\* HIV-positive patients on combination antiretroviral therapy are ineligible\n\* Patients who do not consent for PK studies to be performed (alternatively: patients who initially consent to be on study but withdraws consent for PK study will be taken off study and replaced)",  
 "healthyVolunteers": false,  
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 "minimumAge": "18 Years",  
"stdAges": [  
"ADULT",  
"OLDER\_ADULT"  
]

Question:  
Based on the following clinical trial information, would a patient with a KRAS gene mutation be eligible for the clinical trial?

Answer:  
Based on the provided eligibility criteria, a patient with a KRAS gene mutation would be eligible for this clinical trial. One of the inclusion criteria specifically requires:  
  
- "Activating Kirsten rat sarcoma viral oncogene homolog (KRAS) mutation (any G12, G13, Q61) confirmed by Clinical Laboratory Improvement Act (CLIA)-certified testing."  
  
Therefore, having a KRAS mutation is not only allowed but is required for participation in the study. If the patient meets all other relevant inclusion and exclusion criteria, they would be eligible to participate.