# Clinical Trials Data BRAF - Document 42

# Vemurafenib Combined With Whole Brain Radiation Therapy or Radiosurgery in Patients With BRAF Mutation-Positive Melanoma and Brain Metastases

## Clinical Trial: https://clinicaltrials.gov/study/NCT02145910

"eligibilityCriteria": "Inclusion Criteria:\n\n1. Age \u2265 18 years\n2. Histological confirmed melanoma (prior diagnosis okay)\n3. BRAFV600 mutation positive (cobas 4800 BRAFV600 mutation test)\n4. ECOG performance status 0 or 1\n5. Craniotomy resection is allowed (a minimum 2 weeks recovery time from surgery to initiation of protocol therapy)\n6. Radiographic evidence of brain metastasis\n7. Ability to understand and the willingness to sign a written informed consent. A signed informed consent must be obtained prior to any study specific procedures.\n8. Adequate organ function:\n\n 1. WBC \u2265 2000/uL\n 2. ANC \u2265 1000/uL\n 3. Platelets \u2265 75 x 103/uL\n 4. Hemoglobin \u2265 9 g/dL (\u2265 80 g/L; may be transfused)\n 5. Creatinine \u2264 2.0 x ULN OR 24-hour creatinine clearance \\>= 50 ml/min\n 6. AST/ALT \u2264 2.5 x ULN for patients without liver metastasis, \u2264 5 times for liver metastases\n 7. Bilirubin \u2264 2.0 x ULN, (except patients with Gilbert's Syndrome, who must have a total bilirubin less than 3.0 mg/dL)\n 8. Total serum calcium (corrected for serum albumin) or ionized calcium \u2265 lower limit of normal (LLN)\n 9. Serum potassium \u2265 LLN\n 10. Serum sodium \u2265 LLN\n 11. Serum albumin \u2265 LLN or 3g/dl\n 12. Patients with any elevated Alkaline Phosphatase due to bone metastases can be enrolled\n9. Women of childbearing potential (WOCBP) must be using an adequate method of contraception to avoid pregnancy throughout the study and for up to 26 weeks after the last dose of investigational product, in such a manner that the risk of pregnancy is minimized. Women of potential child bearing potential include any female who has experienced menarche and who has not undergone successful surgical sterilization (hysterectomy, bilateral tubal ligation, or bilateral oophorectomy) or is not post-menopausal. Post-menopause is defined as:\n\n 1. Amenorrhea \u2265 12 consecutive months without another cause, or\n 2. For women with irregular menstrual periods and taking hormone replacement therapy (HRT), a documented serum follicle stimulating hormone (FSH) level \u2265 35 mIU/mL.\n 3. Women who are using oral contraceptives, other hormonal contraceptives (vaginal products, skin patches, or implanted or injectable products), or mechanical products such as an intrauterine device or barrier methods (diaphragm, condoms, spermicides) to prevent pregnancy, or are practicing abstinence or where their partner is sterile (eg, vasectomy) should be considered to be of childbearing potential.\n 4. WOCBP must have a negative serum or urine pregnancy test (minimum sensitivity 25 IU/L or equivalent units of HCG) within 72 hours before the start of radiation.\n\n Men of fathering potential must be using an adequate method of contraception to avoid conception throughout the study \\[and for up to 26 weeks after the last dose of investigational product\\] in such a manner that the risk of pregnancy is minimized.\n10. Specific eligibility criteria for the two arms:\n\n 1. Arm A (WBRT and Vemurafenib):\n\n \* Patients have 5 or more brain metastases, or patients have any brain metastases exceeding the limit for SRS (maximum diameter is \\> 4 cm).\n \* OR Patient has only one brain metastasis and completely resected, the resection cavity is \\> 5 cm in diameter.\n 2. Arm B (SRS and Vemurafenib):\n\n \* Patients have 4 or fewer brain metastases. All the brain metastases are \u2264 4 cm in diameter.\n \* Patients have only one brain metastasis and completely resected, the resection cavity is \u2264 5 cm in diameter.\n \* OR If a patient is found to have progression of brain metastases that exceed 4 cm in diameter based on the MRI scan on the day of SRS procedure, the patient should be re-assigned to WBRT arm or withdrawn from the study. The study PI should be notified.\n \* OR If a patient is found to have progression of brain metastases that exceed 4 lesions based on the MRI scan on the day of the SRS procedure, the patient can either receive SRS to all the lesions (up to 10 lesions), be re-assigned to WBRT arm, or be withdrawn from the study per the treating physician. The study PI should be notified.\n\nExclusion Criteria:\n\n1. Leptomeningeal involvement\n2. Cardiac disease: Congestive heart failure \\> class II. Patients must not have unstable angina (anginal symptoms at rest) or new onset angina (began within the last 3 months) or myocardial infarction within the past 6 months.\n3. Pregnancy or breastfeeding\n4. Documented history of cranial hemorrhage\n5. Concurrent administration of any anticancer therapies other than those administered in the study\n6. Treatment with any cytotoxic, investigational drug, or targeted therapy within 2 weeks prior to the protocol treatment.\n7. Craniotomy within 2 weeks of protocol treatment.\n8. Prior treatment with other BRAF or MEK inhibitors\n9. Patients who had prior brain radiation. However, prior WBRT is allowed in Arm B.\n10. QTc \\> 450 ms\n11. Patients have a history of any other malignancy from which the patient has been disease-free for less than 2 years, with the exception of adequately treated basal or squamous cell carcinoma of skin, superficial bladder cancer or carcinoma in situ of cervix, AJCC (version 7.0) stage 0 or I breast cancer, AJCC (version 7.0) stage I, or II prostate cancer.",  
 "healthyVolunteers": false,  
 "sex": "ALL",  
 "minimumAge": "18 Years",  
"stdAges": [  
"ADULT",  
"OLDER\_ADULT"  
]

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

Answer:  
Based on the eligibility criteria provided for the clinical trial, a patient with a BRAF gene mutation, specifically the BRAFV600 mutation, would be eligible for this trial, provided they meet all the other inclusion and not exclusion criteria. The inclusion criteria clearly state that patients must be "BRAFV600 mutation positive" as confirmed by the cobas 4800 BRAFV600 mutation test. Thus, having a BRAF gene mutation (specifically the BRAFV600 mutation) is indeed a key eligibility requirement for participation in this trial.