



PROVIDER GUIDE

How can testing tumor tissue for the B-RAF gene change (or mutation) provide information that helps with treatment decisions?

Why it is important to consider having tissue tested?

This provider guide is intended to provide answers and insights for using the *Two Important Reasons to Say Yes to B-RAF Testing* brochure and enhancing its value as a patient education aid. **This guide should be used by the healthcare provider and is not written for nor intended for patients.**

Overall Tips



- ▶ It is important that patients understand the difference between a tissue sample that could affect their treatment and one that is used for future research only. It is also important that patients understand the language used. All of the health care team, who discuss tissue sampling with patients, must use the same terms and words. One of the terms that must be defined for patients is the term **tissue** itself. One definition frequently used is “Tissue is defined as a collection of similar cells that act together in doing a particular function in the body. When a portion of those cells is removed from the body for study, it is called a tissue sample or may be referred to as a biopsy.” Another term is **sample**. Explaining that tissue samples may be taken from the skin, an organ or blood and then a description of exactly where and how often you plan to take samples will diminish confusion later in the patient's treatment. These explanations may have to be repeated. Giving patients information they can understand gives them a sense of control they may feel they have lost. Asking the patient what they heard may help to ensure better understanding.
- ▶ Some patients will be willing to provide tissue samples; others will not. The choice to participate is an individual one and is likely influenced by the type of cancer a patient has and the invasiveness of the tissue sampling procedures. Some patients may be willing to provide an initial tissue sample that is used for diagnosis but may not want to provide a subsequent sample that would be used for research in the future. Research has shown that over 90% of patients are willing to provide a tissue sample if they are asked.
- ▶ As you know from helping your patients cope with their disease, a cancer diagnosis is always a difficult and sometimes a traumatic experience. The lack of highly effective and well-tolerated treatments for cancer is a major cause of fear. To improve these treatments we need research. That research includes studying cancer cells from actual patients to see what abnormalities they show and how they respond to treatment. Patients who participate in a clinical trial that includes tissue samples may help to improve cancer treatments in the future that could benefit others – perhaps even their friends and family. Those same patients have better treatments available to them now than existed ten years ago because patients that came before them participated in clinical trials.
- ▶ If we accept that participation in a clinical trial that includes tissue samples is important in advancing cancer research, the next question becomes how to address this participation with your patients. When speaking with patients, many researchers report that it is best to motivate participation in a clinical trial, before addressing the need for tissue samples. Once patients become interested in the trial, they may perceive the samples as a necessary logistical component instead of as a barrier.
 - Information for patients about clinical trials can be found on the National Cancer Institute and United States Food and Drug Administration websites listed at the end of this document.
 - Information about providing tissue samples can be found on the Research Advocacy Network website listed at the end of this document
- ▶ If multiple biopsies or sample collection are part of the clinical trial, explaining to a patient that they may have already provided a tissue sample as part of their diagnostic procedure and would only be consenting to allow the site to send their stored tumor tissue and thus may only be looking at one additional sample could increase their acceptance of the added procedure.
- ▶ The word biopsy may evoke negative emotions in some patients because it is associated with looking for cancer. Another, more acceptable phrase, is tissue sampling. The word biopsy is defined as the removal of tissue or cells from the body for examination under a microscope, typically to check for signs of cancer. Tissue samples, on the other hand, may be used to screen patients for a particular treatment, determine prognosis and/or examine the action of a potential therapeutic agent on the cells.
- ▶ The person who discusses clinical trial participation and tissue samples with patients should be thoroughly familiar with the study protocol. This tip sheet offers general suggestions, but the specific elements of each trial will differ.
- ▶ At the end of the brochure, there is a space for the name and contact information of the person from whom patients can receive further information. Please add this information to each brochure.

Answers to Questions in the Brochure

• What is the purpose of testing my tissue sample for the B-RAF mutation?

Some new drugs have been developed that may stop or slow the growth of tumor cells which contain a mutation or change in your DNA called a B-RAF mutation. We will request a portion of your tumor that was used to diagnose your cancer be sent to a laboratory for testing for the B-RAF gene mutation. The tissue taken to diagnose your cancer is saved by being stored in hard wax that is called a tissue block. The tissue block is stored in the pathology department of the hospital where you were diagnosed. To test for B-RAF a few small slices will be taken from your tissue block. The laboratory will be able to tell whether your tumor tissue contains this mutation. If it does, you may benefit from these new drugs. This tissue block will be returned to the hospital after testing. If a tumor block is not available, slides with tumor tissue could also be sent for testing.

• What will you learn?

We will learn whether your tumor tissue contains the B-RAF mutation. If so, the growth of your cancer might be slowed or stopped entirely by using a new type of drug targeted at this B-RAF mutation. These drugs are still considered investigational so the Food and Drug Administration (FDA) does not allow doctors to prescribe them to patients. Patients may have access to these drugs by enrolling in a clinical trial.

If you enroll in a clinical trial your participation will help us study how safe the drug is, what side effects patients

experience and how well the drug works for you and others with your type of cancer. To better understand how the drug works, we may ask you to provide blood samples at different times during your treatment. These tests will tell us how

much of the drug is in your body at these different time points and will help the researchers gain more information about side effects of the drug.

• How will it help me?

We will have more information about your type of cancer. If your tumor does contain the B-RAF mutation, you and your doctor may decide a new type of drug would be a good treatment option for you. Your healthcare team will discuss your options with you. We will talk to you about participating in a clinical trial with these new drugs. You may or may not benefit from the drugs. Your participation will help future patients. We will learn which patients benefit most from taking these drugs and which patients have side effects and what those side effects are and how much they affect a patient's quality of life.

• What type of tissue sample is used?

There may be different types of samples required depending upon the clinical trial. Testing of the tumor sample for the B-RAF mutation is required in all trials using this targeted therapy. If a sample of the original tumor is not available or was not taken, a separate biopsy (or sampling) may be needed to obtain a tissue sample prior to enrollment. The testing is required to determine the patient's eligibility for the trial. Blood samples may be taken at specified times during the treatment. A separate tissue sample of the tumor may be required after treatment is begun to evaluate response of the cancer to the drug. Please refer to the protocol for specific requirements.

• How will the sample be obtained?

The tissue sample of your tumor will be obtained from the biopsy procedure that was performed to diagnose your cancer. A section of that tissue will be sent to a central laboratory for testing. If you already have tumor tissue available and agree to have the test done all you will need to do is sign a consent form allowing the study sponsor to have access to the stored tissue. No tests will be done on you directly. If you do not have tissue available your doctor may need to take a biopsy in order to have the test conducted. Your doctor will explain the procedure to you. If blood samples are included in the clinical trial, a blood draw will be required. The amount of blood taken is small (about 1 or 2 teaspoons each). The blood samples may help determine how much of the drug is in your body at different time points, how this is affecting you and whether pieces of your tumor's DNA are circulating through your body. We hope to find biomarkers (a biologic molecule that can be measured to indicate a normal or abnormal process in the body) in your blood to help doctors decide in the future, which patients with your type of cancer may benefit from these drugs, without the need to test tumor tissue.

• Are there any physical risks in having my tissue sampled?

There are no physical risks in allowing us to have access to your stored tumor tissue. When you give blood, you may feel faint, or experience mild pain, bruising, irritation or redness at the site. In rare cases, you may get an infection.

If a biopsy is required, your doctor will explain the procedure in detail to you. You may experience pain at the biopsy site or needle puncture, bruising/swelling at the place where the tissue is taken and there is a small risk of infection.

The website by Dr. Ed Uthman listed in the sources section at the end of this tip sheet provides a patient-friendly overview of different types of tissue sampling procedures. However, note that these procedures are listed under the heading Biopsies, which technically refers only to samples obtained for diagnostic purposes. The procedures, however, are the same. The websites are listed on a separate sheet at the end of this document that can be copied and given to patients.

continued



- **Will my insurance cover the test?**

If the tissue sample is for research purposes only, the procedure will be covered by the study and the cost should be spelled out under the "Cost Section" in the Informed Consent Document. In order to adequately address cost and payment issues, the study coordinator or nurse should be thoroughly familiar with the study protocol.

- **If I decide to be in a clinical trial that requires this type of test, will the study pay for the test?**

As part of the study, you will receive the study drug and study tests and procedures that are not considered standard of care at no cost to you.

Sources of Information For Patients About Tissue Sampling and Clinical Trials

Tissue Sampling Procedures

Note that the many of the procedures listed on these sites can be the same for tissue that is sampled for diagnostic and research purposes.

Mayo Clinic. *Biopsy procedures used to detect cancer*. Available at: <http://www.mayoclinic.com/health/biopsy/CA00083>. Accessed August 14, 2008.

Uthman EO. *The biopsy report: a patient's guide. Types of biopsies*. Available at: <http://www.cancerguide.org/pathology.html>. Accessed August 14, 2008.

Clinical Trials

Coalition of Cancer Cooperative Groups. Available at: <http://www.cancertrialshelp.org/>. Accessed August 15, 2008.

United States Food and Drug Administration. *Clinical trials*. Available at: <http://www.fda.gov/oashi/clinicaltrials/default.htm>. Accessed August 15, 2008.

National Cancer Institute. *What is a clinical trial?* Available at: <http://www.cancer.gov/clinicaltrials/learning/what-is-a-clinical-trial>. Accessed August 15, 2008.

Providing Tissue for Research

National Cancer Institute. *Providing tissue for research. What you need to know*. Available at: <http://www.cancer.gov/clinicaltrials/resources/providingtissue>. Accessed September 2, 2008.

Research Advocacy Network. *Why is it important for me to consider donating my tissue for research?* Available at: <http://www.researchadvocacy.org/publications/posters.php>. Accessed August 14, 2008.

Research Advocacy Network. *The importance of tissue samples in research*. Available at: <http://www.researchadvocacy.org/publications/posters.php>. Accessed August 14, 2008.

Research Advocacy Network. *Understanding pathology and tissue research*. Available at: <http://www.researchadvocacy.org/publications/posters.php>. Accessed August 14, 2008.

Research Advocacy Network

Advancing Patient-Focused Research