

BCR-ABL RNA Quantitative RT-PCR Testing and ABL Sequencing SPECIMEN REQUIREMENTS

1. DIRECTIONS FOR SPECIMEN COLLECTION.

- a) 20-30 ml whole blood drawn into an EDTA tubes (preferred) or an ACD (either A or B) tubes. **Mix the specimen thoroughly to prevent clotting, as testing cannot be performed on clotted specimens.**
- b) For samples arriving from *outside* the Oregon Health & Science University System, combine the volume of whole blood in a 1:1 ratio (i.e., mix in equal volumes) with RPMI tissue culture media. For example, mix 20 ml whole blood, which has been drawn into a tube containing anti-coagulant, with an equal volume (20 ml) of the RPMI tissue culture media.
- c) Samples arriving from *within* the OHSU System do not need to be mixed with the RPMI media as long as they are kept cold and received the same day they were collected.
- d) Bone marrow is also an acceptable specimen source but please note, the lower volume of bone marrow specimens reduces the number of cells we extract and therefore, the probability of detecting very low-level leukemia burdens in patients with minimal residual disease. Bone marrow samples should be drawn in a heparinized syringe and then transferred to an EDTA or ACD collection tube. Mix the specimen thoroughly in anticoagulate tube. The specimen should then be mixed with an equal volume of RPMI media, as in step b.

2. The OHSU DNA Lab can provide RPMI tissue culture media to locations outside of OHSU upon request. Please contact us at least 1 week prior to the patient's appointment, so that we have ample time to process your request for RPMI and ship it to you. **Upon receipt, the RPMI media must be stored at 4 degrees Celsius until use and is good until expiration date.** This media may be purchased from Invitrogen (RPMI Media 1640 cat # 11875-093).
3. All specimen containers must be clearly labeled with the patient's name, date of birth, the sample collection date and time, and the specimen type (whole blood or bone marrow). Please record the volume of RPMI media added to the specimen on the test request form, under specimen type. The specimen must also be accompanied by a completed requisition slip to provide billing information, the name of the requesting physician, and the names of any others who should receive a copy of the report. Please call, fax, or e-mail us if you need an updated OHSU requisition form. Completely fill out all the requested information on the requisition form and submit with the specimen.
4. The sample should be kept cold during transport to the Clinical Genetics Laboratories. **DO NOT ALLOW THE SPECIMEN TO FREEZE – ABSOLUTELY DO NOT SHIP ON DRY ICE!** For specimens arriving from outside of Oregon Health & Science University, shipping packages on wet ice is discouraged because ice melts quickly and results in wet packages and illegible paperwork. If cold packs are needed, the Clinical Genetics Lab may supply them. Ship the specimen overnight express, using the UPS overnight label provided, or another express carrier such as Federal Express, but do not use US mail. The specimen must arrive at the Lab no longer than 24 hours after the collection time. **Please include all paperwork (completed requisition) in a sealed bag (or another waterproof material), when you ship the specimen to the Lab. See letterhead above for shipping address.**

NOTE: Specimens must be shipped Monday through Thursday only, as the lab is closed weekends (and national holidays). Please call when you have an air bill tracking number and notify the DNA lab that the specimen is enroute. Also note that any specimen that has leaked out of its primary container will not be accepted and a new specimen will be requested.

For billing and technical questions, please contact the Genetics Lab Office at (503) 494-5400. Thank you for your referral.