Understanding the Value of PCR Testing in the Management of CML, a Rare Blood Cancer

**Chronic Myeloid Leukemia (CML)** is a slow-growing cancer of the blood and bone marrow. The **Real-Time Quantitative Polymerase Chain Reaction** (RT-Q-PCR or PCR) is a very sensitive blood test which measures cancer cells in patients with CML. Current guidelines recommend patients receive a PCR test **every three months**.

The most sensitive PCR tests can detect as few as **one single cancer cell in 1,000,000 cells**.

A survey conducted by The Leukemia & Lymphoma Society (LLS) and Novartis found the majority of patients with CML and physicians have a reasonable understanding of the best way to manage this disease.

However, PCR testing does not take place as often as guidelines recommend.

**PHYSICIANS SURVEYED**

- 100% agree PCR testing is an ideal test for monitoring CML
- However, 35% test their patients once every 6 months or less often. 60% say the infrequency in testing is either because guidelines are unclear or because they believe testing 1-2 times a year is sufficient

**PATIENTS SURVEYED**

- 89% say PCR test results tell them they are on track with their goals
- 1 in 3 patients are unaware of why the PCR test is needed and how often it should be performed
- Almost 80% switched from one treatment to another based on PCR test results

**WHO WAS INTERVIEWED**

- 100 Physicians, including 62 Hematological Oncologists and 38 Medical Oncologists
- 75 CML patients who have lived with disease for seven years on average

**ABOUT CML AND PCR TESTING**

- 95% of patients with CML have a chromosomal abnormality called the **Philadelphia chromosome**
- This chromosome produces **BCR-ABL**, a gene that signals the bone marrow to continue making abnormal white blood cells
- The **PCR test measures levels of this gene** to precisely assess response to treatment

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1. CML Molecular Testing Survey, GfK Roper, sponsored by Novartis Oncology (2014)