

CML Today and Tomorrow

Global Survey of Chronic Myeloid Leukemia (CML) Treaters Across 9 Countries and 4 Continents Suggests Many Physicians Are Ambitiously Managing the Disease Despite Its Chronic Nature



Chronic myeloid leukemia, or CML, is a cancer of the blood and bone marrow in which the body overproduces white blood cells¹.



CML affects approximately **1.2 to 1.5** million people worldwide².



Survival rates from CML have significantly increased over the past decades³.



95% of CML patients have an abnormality known as the Philadelphia chromosome (Ph) – a rearrangement in the genetic material on chromosomes 9 and 22⁴. The Ph chromosome produces an abnormal gene called BCR-ABL that signals the bone marrow to keep making abnormal white blood cells¹.

Even with the evolution of CML from a deadly disease to a chronic condition for most patients, physicians' responses in a recent survey suggest desire for continued advancements

Survey Results By The Numbers

TREATMENT IN CML TODAY: Current Practices in the Treatment of CML

57%

The availability of 2nd generation TKIs was the biggest change in CML management in the last five years, selected by 57% of physicians surveyed⁵.

**76% & 66%
respectively**

Achieving a deeper molecular response (76%) and a quicker molecular response (66%) were the top two factors influencing surveyed physicians' decision to prescribe a 2nd generation TKI to newly diagnosed patients⁵.

Tyrosine kinase inhibitors (TKIs) are a type of drug that targets and blocks the ability of the abnormal BCR-ABL gene to send signals that drive production of the leukemic blood cells⁵. With TKI treatment, the amount of BCR-ABL decreases⁶.

MONITORING IN CML TODAY: Current Practices in the Monitoring of CML

96%

agreed that regular molecular monitoring for CML patients is important to ensure patients are managed adequately⁵.

88%

agreed not performing regular monitoring puts patients at risk for treatment failure and progression⁵.

61%

indicated existing technology used for testing and monitoring CML is only somewhat effective and there is room for advancement⁵.

Routine, or regular, monitoring of the level of leukemic cells in the body is a critical component of CML management and helps drive timely treatment decisions⁷.

CML TOMORROW: The Evolution of CML

92%

agreed Treatment-free Remission (TFR) is a new objective for some CML patients⁵.

Treatment-free Remission is a new concept in which some eligible patients may be able to discontinue treatment after achieving a sustained deep molecular response⁸. Stopping CML treatment is currently not a clinical recommendation and should only be attempted in the context of a clinical study. An important part of TFR clinical trials is regular and frequent monitoring with a well-validated assay able to measure very deep levels of response. Frequent patient monitoring during TFR allows timely determination of loss of response levels as outlined in study protocols and need for treatment re-initiation.

ABOUT CML TODAY AND TOMORROW

The CML Today and Tomorrow survey was conducted online by Harris Poll on behalf of Novartis Oncology. The global double-blinded, close-ended survey aimed to identify current practices in CML management and gain a better understanding of factors that impact physicians' treatment decisions. The main objective of the survey was to obtain insight on evolutions in the field and the future of CML management. CML Today and Tomorrow took place between May 4 –July 29, 2016, among 903 hematologists/oncologists ages 18+ who have seen at least two CML patients in the past year in the US, Canada, Brazil, Mexico, the UK, Germany, Japan, South Korea, and Taiwan. The survey was designed and results were analyzed in collaboration with independent physician consultants and Harris Poll to identify key findings and trends.

References:

1. National Cancer Institute. General Information About Chronic Myelogenous Leukemia (PDQ). <http://www.cancer.gov/cancertopics/pdq/treatment/CML/patient/>. Accessed October 2013.
2. Kantarjian, H. The Price of Drugs for Chronic Myeloid Leukemia (CML): A Reflection of the Unsustainable Prices of Cancer Drugs: From the Perspective of a Large Group of CML Experts. *Blood*. 2013;121(22):4439-42. Accessed August 2016.
3. Faderl, S. et al. The Biology of Chronic Myeloid Leukemia. *The New England Journal of Medicine*. 1999;341(3):164-72. Accessed August 2016.
4. Rea D, et al. *Curr Hematol Malig Rep*. 2012;7:103-8.
5. Data on file. Novartis Pharma AG. Basel, Switzerland.
6. American Cancer Society. Detailed Guide: CML. <http://www.cancer.org/acs/groups/cid/documents/webcontent/003112-pdf.pdf>. Accessed May 2014.
7. National CML Society: Monitoring and Tests. <http://www.nationalcmlsociety.org/living-cml/monitoring-tests>. Accessed March 2015.
8. Hughes, H.P. and Ross, R.M. Moving treatment-free remission into mainstream clinical practice in CML. *Blood*. 2016. Advance online publication. doi# 10.1182/blood-2016-01-694265.

