

### Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: <https://reachmd.com/programs/medical-industry-feature/understanding-unmet-needs-in-the-frontline-ph-all-treatment-landscape/13965/>

### ReachMD

www.reachmd.com  
info@reachmd.com  
(866) 423-7849

### Understanding Unmet Needs in the Frontline Ph+ ALL Treatment Landscape

#### Announcer:

This medical industry feature, "Understanding Unmet Needs in the Frontline Ph+ ALL Treatment Landscape" is sponsored by Takeda Oncology. As a Takeda consultant, compensation is being provided for delivery of this presentation. This video is intended for informational purposes only and is not a substitute for your clinical knowledge or professional judgment. Here's your host, Dr. Charles Turck.

#### Dr. Turck:

Every year in the United States, more than 1,000 adults are diagnosed with Philadelphia chromosome-positive acute lymphoblastic leukemia, also known as Ph+ ALL. Yet, there aren't any approved targeted treatments for patients newly diagnosed with this disease.

This is ReachMD, and I'm Dr. Charles Turck. Joining me to take a look at the treatment landscape for Ph+ ALL is Dr. Hagop Kantarjian, who's a Professor and Chair of the Department of Leukemia at The University of Texas MD Anderson Cancer Center.

To start, Dr. Kantarjian, can you give us some background on Ph+ ALL?

#### Dr. Kantarjian:

Of course. Acute lymphoblastic leukemia is an uncommon leukemia. Traditionally, the treatment before 2000 was with intensive chemotherapy followed by allogeneic transplantation. Since 2000, we started using BCR::ABL tyrosine kinase inhibitors, which target the molecular abnormality of Philadelphia-positive ALL.

#### Dr. Turck:

Now what treatment options are currently approved for newly diagnosed Ph+ ALL?

#### Dr. Kantarjian:

Today there are no frontline BCR::ABL tyrosine kinase inhibitors approved as a frontline therapy for Philadelphia-positive acute lymphocytic leukemia, although the standard of care, as published in the NCCN guidelines is to use a BCR::ABL1 tyrosine kinase inhibitor with intensive chemotherapy, get the patients in the complete remission, and then move to transplant.

There are questions as to whether we should use a first or a second or a third generation BCR::ABL - kinase inhibitor. What we know is that if we use a first or a second generation BCR::ABL kinase inhibitor, then some patients will relapse, have T315I mutated clone, which is insensitive to the first and second generation BCR::ABL kinase inhibitors. In the more recent studies, we have used BCR::ABL kinase inhibitors in combination approaches.

#### Dr. Turck:

And are there challenges associated with treating Ph+ ALL?

#### Dr. Kantarjian:

There are significant challenges in treating Philadelphia-positive ALL. If we follow the traditional route of using the BCR::ABL kinase inhibitors with intensive chemotherapy followed by allogeneic transplant, these are toxic regimens that can cause mortality, either in the

context of intensive chemotherapy or in the context of the transplantation. Moreover, there are no FDA-approved BCR::ABL kinase inhibitors to be used in the frontline setting. So, what we need to do is develop strategies that take out the intensive chemotherapy, and perhaps the transplant.

**Dr. Turck:**

What are the current largest care gaps in the treatment of patients with Ph+ ALL?

**Dr. Kantarjian:**

Today, the biggest issue in the treatment of Philadelphia-positive ALL is that we are combining intensive chemotherapy with BCR::ABL kinase inhibitor, and we're requiring the allogeneic transplant for a curative modality. Another major gap is the lack of any regulatory approval of the BCR::ABL tyrosine kinase inhibitors as frontline therapy for ALL, even though, such approaches are listed in the NCCN guidelines.

**Dr. Turck:**

Before we close, Dr. Kantarjian, do you have any final thoughts or takeaways on treating Ph+ ALL?

**Dr. Kantarjian:**

It's important to remember the past, and compare it to the present or the future. Before 2000, Philadelphia-positive ALL was the most fatal subset of acute lymphocytic leukemia, so it's very important that the current research focuses on comparing those newer strategies.

**Dr. Turck:**

It's a great comment for us to think on, as we come to the end of today's program. I wanna thank my guest, Dr. Hagop Kantarjian, for helping us better understand treating Ph+ ALL acute lymphoblastic leukemia.

**Announcer:**

This program was sponsored by Takeda Oncology. If you missed any part of this discussion, visit [reachmd.com/industryfeature](https://reachmd.com/industryfeature). This is ReachMD. Be Part of the Knowledge.

**References:**

1. Gozgit J, Schrock A, Chen TH, et al. Comprehensive analysis of the in vitro potency of ponatinib, and all other approved BCR-ABL tyrosine kinase inhibitors (TKIs), against a panel of single and compound BCR-ABL mutants. *American Society of Hematology*. 2013. 2. Ravandi F. Current management of Philadelphia chromosome positive ALL and the role of stem cell transplantation. *Hematology Am Soc Hematology Education Program* 2017; 1: 22–27.
2. National Comprehensive Cancer Network. NCCN Guidelines Acute Lymphoblastic Leukemia. 2021; Version 4.
3. TASIGNA® (nilotinib) (prescribing information) Novartis Pharmaceuticals, November 2021.
4. SPRYCEL® (dasatinib) (prescribing information) Bristol-Myers Squibb Company, March 2021.
5. GLEEVEC® (imatinib) (prescribing information) Novartis Pharmaceuticals, March 2022.
6. SCEMBLIX® (asciminib) (prescribing information) Novartis Pharmaceuticals, October 2021.
7. ICLUSIG® (ponatinib) (prescribing information) Takeda Pharmaceuticals, February 2022.
8. Saleh K, Fernandez A, Pasquier F. Treatment of Philadelphia Chromosome-Positive Acute Lymphoblastic Leukemia in Adults. *Cancers*. 2022; 14(7), 1805. 2. Bachanova V, Marks, D, Zhang J, Wet al. Ph+ ALL patients in first complete remission have similar survival after reduced intensity and myeloablative allogeneic transplantation: impact of tyrosine kinase inhibitor and minimal residual disease. *Leukemia*. 2014; 28 (3), 658–665.