



INTERVIEW

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Tracks 1-15

- Track 1** Management of lower-risk myelodysplastic syndromes (MDS) with isolated anemia
- Track 2** Hypomethylating agents in lower-risk MDS
- Track 3** Therapeutic options for elderly patients with acute myelogenous leukemia
- Track 4** **Case discussion:** A 30-year-old woman is diagnosed with acute promyelocytic leukemia (APL) after experiencing refractory bleeding in the postpartum setting
- Track 5** DIC-related mortality and urgent ATRA initiation with suspected APL diagnosis
- Track 6** Incorporation of arsenic trioxide into the front-line management of APL
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- Track 14** Efficacy of lenalidomide in del(5q) MDS
- Track 15** Potential biomarkers for lenalidomide/azacitidine in MDS

Select Excerpts from the Interview

Tracks 9-11

► **DR LOVE:** Would you describe your findings from the AVIDA registry evaluating the use of 5-azacitidine in MDS?

► **DR SEKERES:** AVIDA is a prospective, longitudinal, multicenter registry that collects data from community-based hematology-oncology clinics in the United States on patients with MDS treated with 5-azacitidine. Currently it has enrolled nearly 500 patients, and we presented data at ASH 2009 on 331 patients.

Treating physicians made the decision to administer 5-azacitidine and also chose the route and the regimen. Approximately 17 percent of patients received the FDA-approved seven-day continuous regimen. Most patients either received 5-azacitidine on fewer than seven days in a cycle or on seven days with breaks in between (Sekeres 2009; [3.1]).

Examining the route of administration in the database, we found that about half of the patients received 5-azacitidine by the subcutaneous route and the other half received it intravenously. Rates of hematologic improvement are similar whether 5-azacitidine is administered by subcutaneous or by intravenous dosing (Sekeres 2009; [3.2]).

3.1

AVIDA: Use of Different 5-Azacitidine Regimens in the Community Setting

	FDA-approved seven-day continuous regimen	Seven days with breaks	Less than seven days	Greater than seven days
Overall population¹ n = 217	17.5%	29.0%	52.1%	1.4%
Lower risk¹ n = 150	14.0%	27.3%	58.0%	0.7%
Higher risk¹ n = 67	25.4%	32.8%	38.8%	3.0%

¹ 114 patients with missing IPSS or dosing information were excluded from this analysis.

Sekeres MA et al. *Proc ASH* 2009; **Abstract 3797**.

3.2

AVIDA: Hematologic Improvement (HI) by Route of 5-Azacitidine Administration

	All patients receiving 5-azacitidine (n = 319) ¹	Intravenous 5-azacitidine (n = 181) ¹	Subcutaneous 5-azacitidine (n = 138) ¹
Any HI	24.4%	24.1%	24.8%
HI-E²	10.4%	10.3%	10.3%
HI-P²	25.6%	23.0%	29.2%
HI-N²	19.8%	19.0%	21.2%

¹ Patients on the study fewer than 56 days were excluded from HI measurements.

² Individual cell-line denominators E, P and N include only patients eligible for the improvement in that line.

Sekeres MA et al. *Proc ASH* 2009; **Abstract 3797**.

Track 14

▶ **DR LOVE:** What do we know about lenalidomide in MDS with chromosome 5q deletion?

► **DR SEKERES:** The pivotal Phase II study (List 2006; [3.3]) produced high rates of transfusion independence and complete cytogenetic response. The median duration of transfusion independence has been reported to be as high as 2.2 years.

3.3

Lenalidomide in MDS with the Chromosome 5q Deletion

Transfusion independence	Complete cytogenetic response	Partial cytogenetic response
67%	45%	38%

List A et al. *N Engl J Med* 2006;355(14):1456-65.



Track 6

► **DR LOVE:** How do you approach the initial management of APL?

► **DR SEKERES:** Our approach at Cleveland Clinic is to follow the Intergroup C9710 protocol evaluating arsenic trioxide consolidation, as results from that study showed a survival benefit with arsenic trioxide as initial postremission therapy for patients with newly diagnosed APL (Powell 2010; [3.4]).

I think arsenic trioxide is an active agent in APL, and for an older person who cannot tolerate chemotherapy/ATRA/arsenic combinations, I would consider administering ATRA or arsenic trioxide alone in the up-front setting. ■

3.4

Consolidation with Arsenic Trioxide (As₂O₃) in Newly Diagnosed APL Following Standard Induction with Treatinoin, Cytarabine and Daunorubicin

	As ₂ O ₃ consolidation x 2 cycles	No As ₂ O ₃ consolidation	p-value
Three-year EFS	80%	63%	<0.0001
Three-year DFS	90%	70%	<0.0001
Three-year OS	86%	81%	0.059

EFS = event-free survival; DFS = disease-free survival; OS = overall survival

Powell BL et al. *Blood* 2010;[Epub ahead of print].

SELECT PUBLICATIONS

List A et al. **Lenalidomide in the myelodysplastic syndrome with chromosome 5q deletion.** *N Engl J Med* 2006;355(14):1456-65.

Powell BL et al. **Arsenic trioxide improves event-free and over-all survival for adults with acute promyelocytic leukemia: North American Leukemia Intergroup Study C9710.** *Blood* 2010;[Epub ahead of print].

Sekeres MA et al. **A study comparing dosing regimens and efficacy of subcutaneous to intravenous azacitidine for the treatment of myelodysplastic syndromes (MDS).** *Proc ASH* 2009;**Abstract 3797.**