



Leading the way in experimental and clinical research in hematology


[Advanced Search](#)

Advertisement

Home | About *Blood* | Authors | Submit to *Blood* | Subscriptions

f t in

Current Issue

First Edition

Collections

All Issues

Abstracts

Video Library

Home / December 3, 2015; Blood: 126 (23)

Descriptive Analysis of Azacitidine Use in Four Adult University Teaching Hospitals in Quebec, Canada

Ghislain Bérard, B.Pharm. M. Sc^{*},¹, Nathalie Marcotte, B.Pharm, MSc^{*},², Marie-Claude Michel[†],², Paul Farand, MD^{*},³, Louise Deschenes, MD^{*},², Daniel Froment, MD^{*},⁴, France Varin^{*},⁴, Pierre Gaudreault, MD^{*},⁵, Elaine Pelletier^{*},⁵, Chantal Guévremont^{*},⁶, Raghu Rajan, MD^{*},⁶, Nathalie Letarte, BPharm, MSc, BCOP^{*},⁷, and Harold J. Olney, MD CM⁸

+ [Author Affiliations](#)

Advertisement

Article

Info & Metrics

E-Letters

PDF

December 03, 2015 [Table of Contents](#)

← Previous

Abstract

Background: Azacitidine (5-AZA; Vidaza[®]), a pyrimidine nucleoside analog, is used in the treatment of myelodysplastic syndrome (MDS) and other hematological malignancies. Pharmacy directors gave the Therapeutic Drug Management Program (TDMP - www.pgtm.qc.ca) the mandate to evaluate 5-AZA use in four University Hospitals in Quebec, Canada.

Objectives: Describe and review 5-AZA use for all indications in our hospitals.

Methods: A review of pharmacy databases was performed to identify patients who received 5-AZA between January 1st 2010 and May 31st 2013. Files and medical records of every patient who received 5-AZA during the study period were reviewed to assess diagnostic (including International Prognostic Scoring System (IPSS) scores), treatment, response and non-hematological adverse events.

Results: A total of 77 patients received 5-AZA during the study period, 56 (72.7 %) for the treatment of MDS, 15 (19.5 %) for acute myeloid leukemia (AML) and 6 (7.8 %) for chronic myelomonocytic leukemia (CMML). At the end of the study period, 31 patients were alive (14 were still on treatment), 35 patients had died and 11 were lost to follow up. Excluding the 14 patients still on treatment, 32 patients (50.8 %) received at least 6 cycles of 5-AZA.

In the MDS population (76.7 % with an intermediate-2 or higher IPSS score), patients received a mean of 8.0 cycles (median = 6) and the overall benefit rate (OBR) (complete remission, partial remission, hematological improvement or stable disease) was 48.2 %. The median overall survival (OS) was 17.8 months and the median time to progression (TTP) was 9.7 months. MDS transformation to AML occurred in 16 patients after a mean of 9.9 months. Median time to transformation or death in the MDS population was 14.4 months.

In the AML population, patients received a mean of 6.6 cycles (median = 5) and

Volume: 126

Issue: 23

Pages: 5244 - 5244

DOI: <http://dx.doi.org/>

Email

Save to My Folders

Citation Alert

Request Permissions

Correction Alert

Share

Citation Tools

Article

Info & Metrics

E-Letters

Related Articles

No related articles found.

Cited By ...

the OBR was 26.7 %. The median OS was 12.2 months and the median TTP was 6.5 months.

In the CMML population, patients received a mean of 10 cycles (median = 5.5) and the OBR was 50% (3 of the 6 patients achieved stable disease).

Across all patient populations, a 5-AZA dose of 75 mg/m² for 7 days every 28 days was used in 77.8% of patients. Non-hematological adverse events were seen in 67 patients (87 %) but were mostly mild and most did not lead to delays or dose reductions (treatment intensity of 96 %).

Conclusions: Our results show that 5-AZA had a more limited benefit in our real-life population when compared to published clinical trials (OBR of 44.2 % in MDS, AML and CMML populations combined compared to 60% and 61% and a mean exposition of 8.1 months compared to 10.3 to 11.4 months in the pivotal clinical studies (AZA-001 and CALGB 9221 respectively)). Considering that 5-AZA is often the only treatment we can offer these patients and considering its high cost, it would be of highest importance to wisely choose patients to whom we offer this treatment and to periodically re-evaluate its use (at least after the 6th cycle) to confirm the patient is benefiting from treatment.

Disclosures Olney: *Cellgene*: Honoraria; *Pfizer*: Consultancy; *BMS*: Consultancy; *Novartis*: Consultancy.

- ↵* Asterisk with author names denotes non-ASH members.

© 2015 by The American Society of Hematology

Articles by [Bérard, G.](#)

Articles by [Olney, H.](#)

Articles by [Bérard, G.](#)

Articles by [Olney, H.](#)

Advertisement

[^ Back to top](#)

Advertisement



Leading the way in experimental and clinical research in hematology

American Society of Hematology
2021 L Street NW, Suite 900, Washington, DC 20036
Phone 202-776-0544 | Fax 202-776-0545

[Current Issue](#)

[First Edition](#)

[Collections](#)

[All Issues](#)

[Abstracts](#)

[Video Library](#)

[Subscriptions](#)

[About *Blood*](#)

[Newsroom](#)

[Public Access](#)

[Permissions](#)

[Order Reprints](#)

[Submit to *Blood*](#)

[Alerts](#)

[RSS](#)

[Blood App](#)

[Contact Us](#)

[Feedback](#)

Information for:

[Authors](#)

[Subscribers](#)

[Institutions/Librarians](#)

[Advertising in *Blood*](#)

[ASH Privacy Policy](#)

[ASH Home](#) | [Research](#) | [Education](#) | [Advocacy](#) | [Meetings](#) | [ASH Store](#)

[f](#) [t](#) [in](#)

Copyright © 2016 by American Society of Hematology