

Feb 11, 2020

Hematologic alterations and early mortality in a cohort of HIV positive African patients

 [PLOS One](#)

DOI

<https://dx.doi.org/10.17504/protocols.io.bcdfis3n>

Fausto Ciccacci¹, Francesca Lucaroni², Roberto Latagliata³, Laura Morciano², Elisa Mondlane⁴, Moises Balama⁵, Dyna Tembo⁶, Jane Gondwe⁶, Stefano Orlando², Leonardo Palombi², Maria Cristina Marazzi⁷

¹UniCamillus, Saint Camillus International University of Health Sciences, Rome, Italy;

²Department of Biomedicine and Prevention, University of Rome Tor Vergata, Rome, Italy;

³Hematology, Department of Translational and Precision Medicine, University 'Sapienza' and Policlinico Umberto 1, Rome, Italy;

⁴DREAM program, Community of Sant'Egidio, Maputo, Mozambique;

⁵DREAM program, Community of Sant'Egidio, Beira, Mozambique;

⁶DREAM program, Community of Sant'Egidio, Blantyre, Malawi; ⁷LUMSA, Rome, Italy



Fausto Ciccacci

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

[Create free account](#)

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.bcdfis3n>

External link: <https://doi.org/10.1371/journal.pone.0242068>

Protocol Citation: Fausto Ciccacci, Francesca Lucaroni, Roberto Latagliata, Laura Morciano, Elisa Mondlane, Moises Balama, Dyna Tembo, Jane Gondwe, Stefano Orlando, Leonardo Palombi, Maria Cristina Marazzi 2020. Hematologic alterations and early mortality in a cohort of HIV positive African patients. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.bcdfis3n>

Manuscript citation:

Hematologic alterations and early mortality in a cohort of HIV positive African patients

License: This is an open access protocol distributed under the terms of the **[Creative Commons Attribution License](#)**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: In development

We are still developing and optimizing this protocol

Created: February 11, 2020

Last Modified: February 11, 2020

Protocol Integer ID: 32903

Keywords: hiv infection, basic hiv care setting, hiv infection progress data, hiv, advanced hiv infection, routine hiv care service, positive african patients infection, full blood count, human immunodeficiency virus, thrombocytopenia, vl with anaemia, anaemia, platelets count, health facilities in malawi, patients with normal nutritional status, lower red blood cell, hematologic alteration, normal nutritional status, nutritional status, virologic conditions in treatment, malawi, virologic condition, cytopenia

Abstract

Infection with Human Immunodeficiency Virus (HIV) is highly prevalent worldwide, especially in Sub-Saharan Africa, where anaemia is also widespread. HIV infection is known to be associated with anaemia and various other haematologic alterations, but little data on correlation with immunological and virologic conditions in treatment-naïve patients is available. To investigate these associations, we conducted a retrospective analysis of baseline data (general details, nutritional status, full blood count and HIV infection progress data) and 12 months follow-up status for HIV+ adult patients in 22 health facilities in Malawi and Mozambique.

Among the 22.657 patients included, we found associations of sex, nutritional status, CD4 count, and VL with anaemia, leukopenia, and thrombocytopenia. Also, any cytopenia was present in 1/3 of patients with normal nutritional status and less advanced HIV infection, and it wouldn't be diagnosed in a basic HIV care setting.

Moreover anaemia, lower Red blood cells and platelets counts correlated with mortality in the first year of care, independently by BMI, Hb, CD4 count and VL.

Our results emphasize the need for including a full blood count in the routine HIV care services in Sub-Saharan Africa.

Attachments



Hematologic alterati...

9.8MB



1

Dataset

Hematologic alterations and early mortality in a cohort of hiv p^{NAME}