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SUPPLEMENTARY MATERIAL

Nutritional status of pediatric patients living with human immunodeficiency virus in Bogotá, Colombia

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Supplementary methods

Several definitions of therapeutic failure were used:

WHO definitions for therapeutic failure to ART[1], as follows:

- **Virological failure:** Plasma viral load > 1000 copies/mL based on 2 consecutive tests taken 3 months apart; and not attributed to poor adherence.
- **Immunological failure:** CD4 count persistently < 200 cells/uL or < 10% for children under 5 years of age. For the remaining pediatric population the criteria used was a CD4 count fall to the baseline or below it; or a CD4 count persistently below < 100 cells/uL.
- **Clinical failure:** A new or recurrent clinical event, indicative of advanced or severe immunodeficiency (Clinical stage 3 or 4, except for tuberculosis), after 6 months of effective therapy in children under 15 years of age. For the remaining pediatric population the criteria used was a new or recurrent clinical event, indicative of advanced or severe immunodeficiency (Clinical stage 4), after 6 months of effective therapy.

Definitions from the Panel on Anti-retroviral Therapy of the Department of Health and Human Services of the United States[2], as follows:

- **Virological failure:** Plasma viral load ≥ 200 copies/mL after 6 months of therapy.
- **Immunological failure:** Sub-optimal immunological response to therapy or an immunological impairment state during therapy (no standardized definition).
- **Clinical failure:** New opportunistic infections onset (except for immunological reconstitution inflammatory syndrome) and/or other evidence of disease progression during therapy.

Definitions from the Expert Panel of the Spanish Society of Pediatric Infectology and the National Plan Against AIDS[3], as follows:

- **Virological failure:** Plasma viral load ≥ 50 copies/mL after 6 months of therapy or a new detectable viral load (in two tests separated 2-4 weeks) after undetectability has been reached.
- **Immunological failure:** CD4 count persistently < 200 cells/uL for children over 5 years of age, or a < 5% increase in CD4 percentage in children under 5 years of age, after 6 months of ART starting.
- **Clinical failure:** No standardized definition.

Clinical follow-up interval was defined as the number of days elapsed between baseline medical evaluation and one year later. In the same way, paraclinical follow- up interval was defined as the number of days elapsed between baseline laboratory immuno-virological tests processing and the ones processed one year later.

Laboratory information: Laboratory variables are mentioned as follows with respective technique an reference range:

- **Viral load:** Real time PCR COBAS® 6800 (Roche); reference value: < 20 copies/mL or < 1,3 Log10.
- **CD4 absolute count:** Flow cytometry; reference value: 404 – 1612 cells/uL
- **CD4 percentage:** Flow cytometry; reference value: 22 – 58 %
- **Hemoglobin concentration:** Absportion spectrophotometry; reference value: 12 – 16 g/dL (♀) y 14 – 17,5 g/dL (♂).
- **Total cholesterol:** Colorimetry; reference value: 50 - 200 mg/dL
- **LDL cholesterol:** Colorimetry; reference value: 0 - 120 mg/dL
- **HDL cholesterol:** Colorimetry; reference value: 45 - 65 mg/dL
- **Triglycerides:** Colorimetry; reference value: 40 - 200 mg/dL
- **Creatinine:** Enzymatic technique; reference value: 0,29 – 0,72 mg/dL

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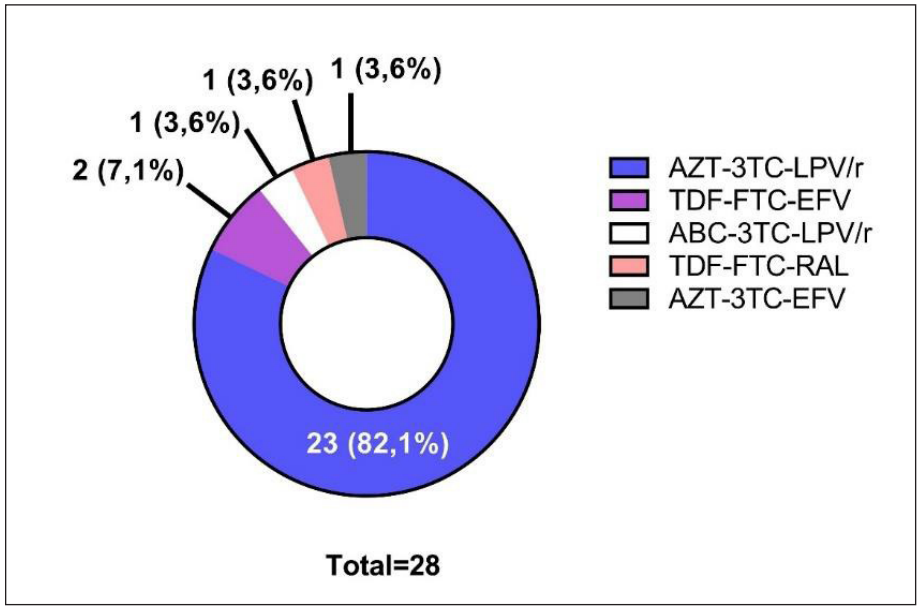
Recibido: 17/05/2021; Aceptado: 19/07/2021

Cómo citar este artículo: J. García-Ortiz, *et al.* Supplementary material: Nutritional status of pediatric patients living with human immunodeficiency virus in Bogotá Colombia. Infectio 2022; 26(1)

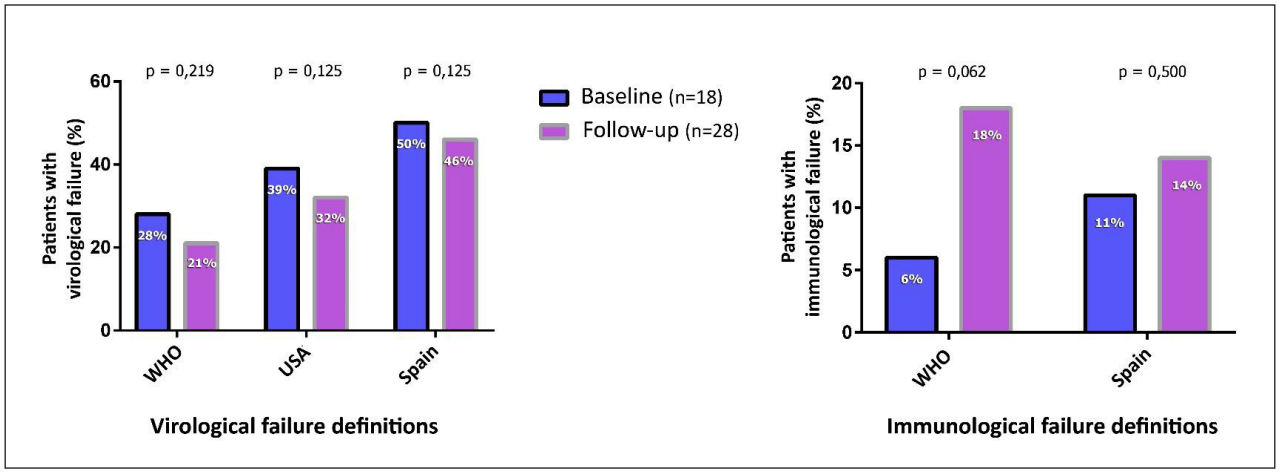


Supplementary Figure 1. Proportion of patients with different art at program entry.
Percentage distribution of different ART in the moment of HIV program entry. AZT: Lamivudine; 3TC: Zidovudine; LPV/r: Lopinavir/ritonavir; TDF: Tenofovir; FTC: Emtricitabine; EFV: Efavirenz; ABC: Abacavir: RAL: Raltegravir.

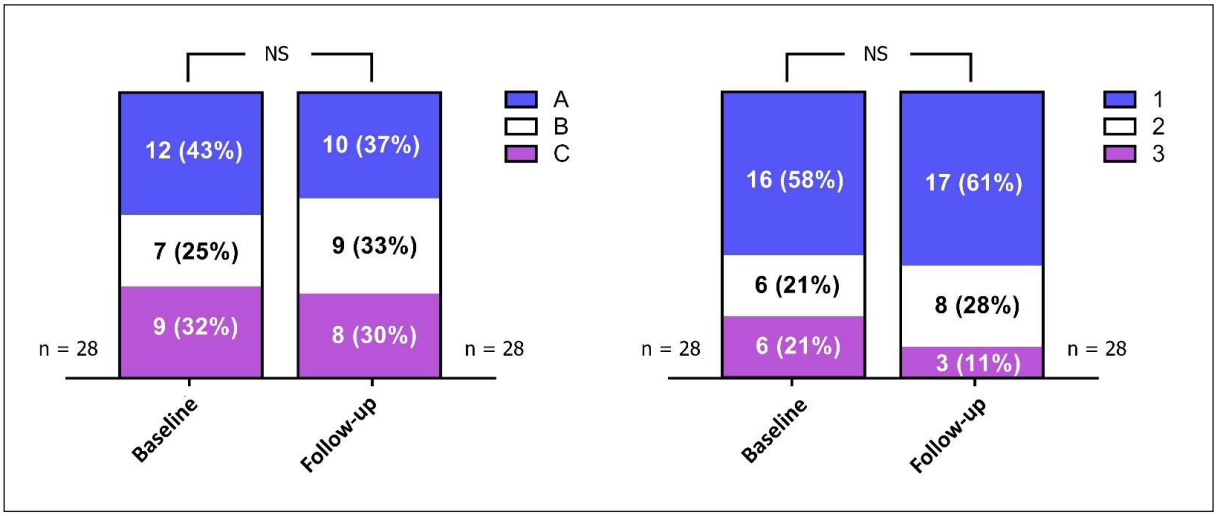
Supplementary Table 1. HIV infection stage at program entry

Clinical category*	Immunological category*			Total
	1	2	3	
A	8 (28,6)	4 (14,3)	0	12 (42,9)
B	4 (14,3)	1 (3,6)	2 (7,1)	7 (25)
C	4 (14,3)	1 (3,6)	4 (14,3)	9 (32,1)
Total	16 (57,2)	6 (21,4)	6 (21,4)	28 (100)

Classification of HIV infection at program entry, according to the Centers for Disease Control and Prevention (CDC)[4, 5]. * number of subjects (%)



Supplementary Figure 2. proportion of patients with virological and immunological failure according to different definitions in pediatric patients of an HIV program in Bogota, Colombia.
Changes in the percentage of patients with virological (left) and immunological (right) failure during follow-up, according to available standardized definitions. n: number of pairs of observations; WHO: World Health Organization; USA: Department of Health and Human Services of the United States of America; Spain: Expert Panel of the Spanish Society of Pediatric Infectology and the National Plan for AIDS[1-3].



Supplementary Figure 3. Changes in cdc category of pediatric patients of an hiv program in bogotá colombia Changes in clinical (left) and virological (right) control classification during follow-up, according to CDC categories. n: number of pairs of observations; NS: one-tailed p>0,05.

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