

15 years Follow Up in a Cohort of Children diagnosed with HIV Cardiomyopathy

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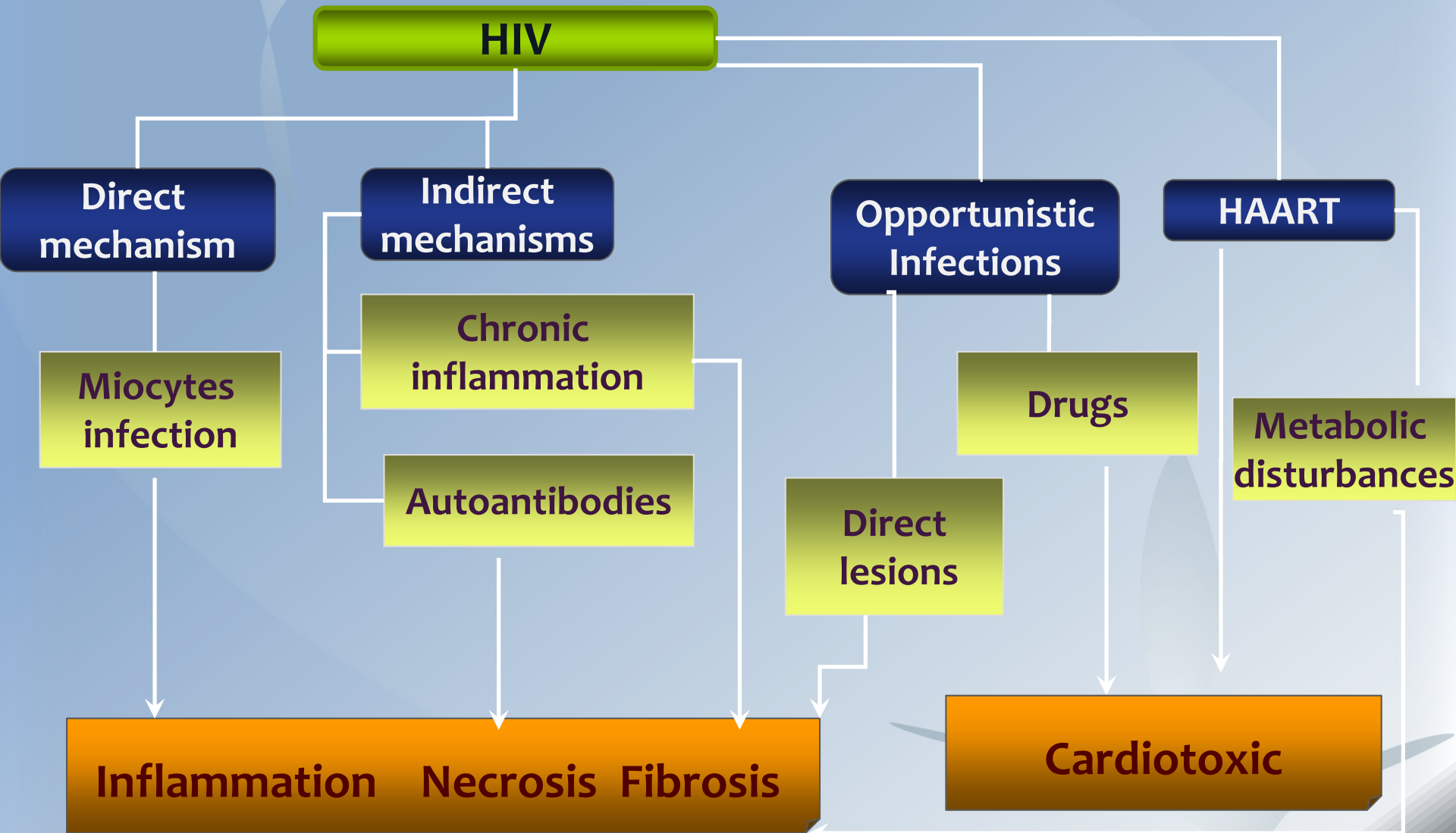
Background


- ❑ **7%** HIV persons (adults and children) develop cardiac failure.
- ❑ Relative risk of death in HIV children with cardiomyopathy is **2,8** times higher compare with other AIDS children

› Pizzo PA, Wilfert CM Pediatric AIDS 1998

- ❑ **7 - 28%** is the 2-5 years incidence of heart failure in HIV patients
- ❑ Asymptomatic patients on HAART have
 - ❑ **18%** left ventricle systolic dysfunction
 - ❑ **6.5%** left ventricle hypertrophy
 - ❑ **40%** left atrial dilatation
- ❑ **74/110** HIV children and adolescents vertically infected had left ventricle hypertrophy and **27/110** had impaired left ventricle function

Pathogenic pathways for Cardiac Lesions in HIV infection





Experience from Paediatric and
Adolescents Department in National
Institute for Infectious Disease “Prof.
Dr. Matei Bals”

OBJECTIVE

to follow up patients diagnosed with HIV cardiomyopathy during childhood.

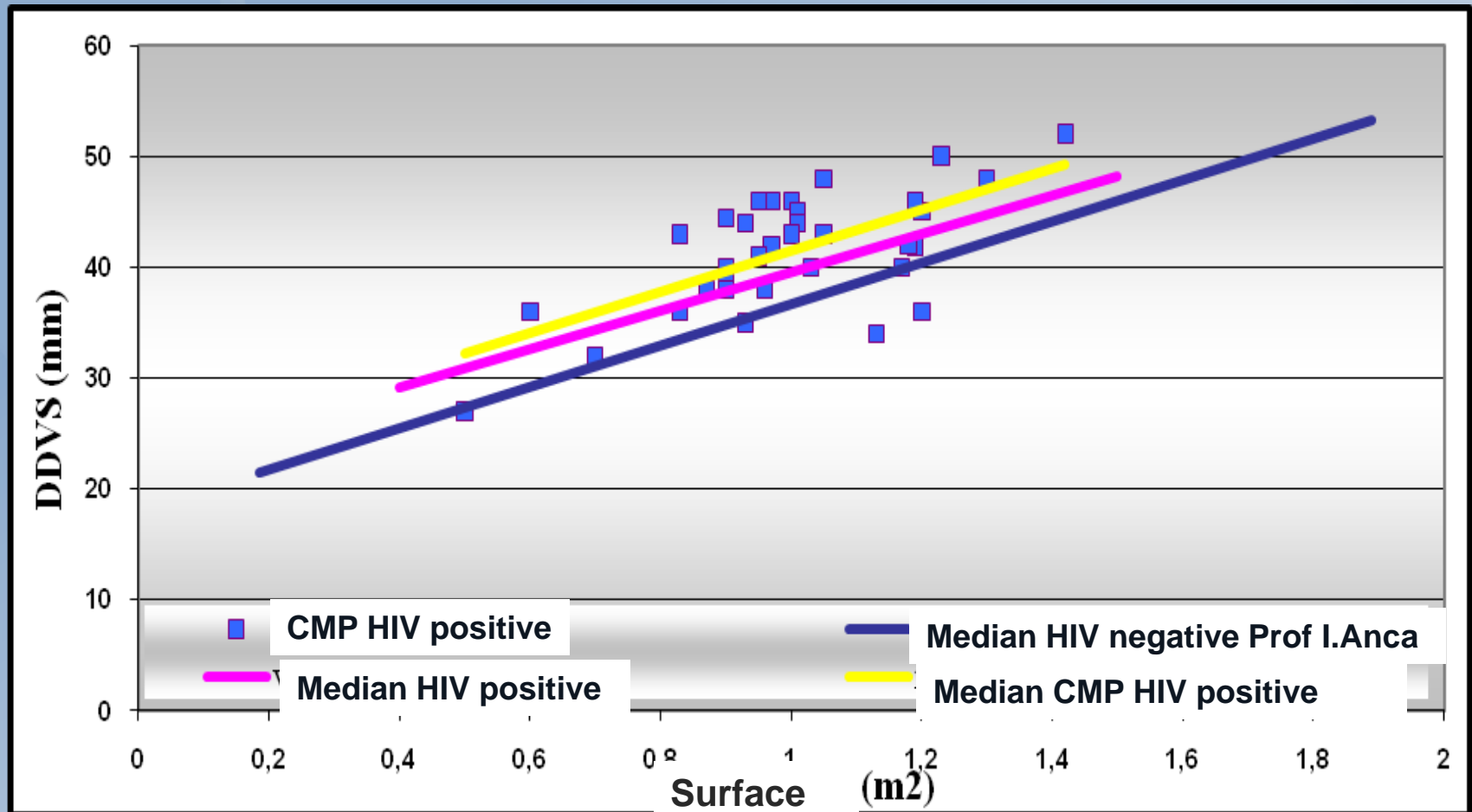
MATERIAL AND METHODS

- follow up **53 children** diagnosed with HIV cardiomyopathy and **35 children** with similar characteristics (age, gender ratio, antiretroviral regimen) but without cardiac lesions.
- compared the rate of AIDS and non AIDS events during the follow up period.

Description of studied patients (N=88)

Parameters	CMP (N= 53)	Normal (N= 35)
Median age	13.28	13.35
Gender ratio M/F	1.1	1.2
Median Body surface (m²)	1.04	1.03

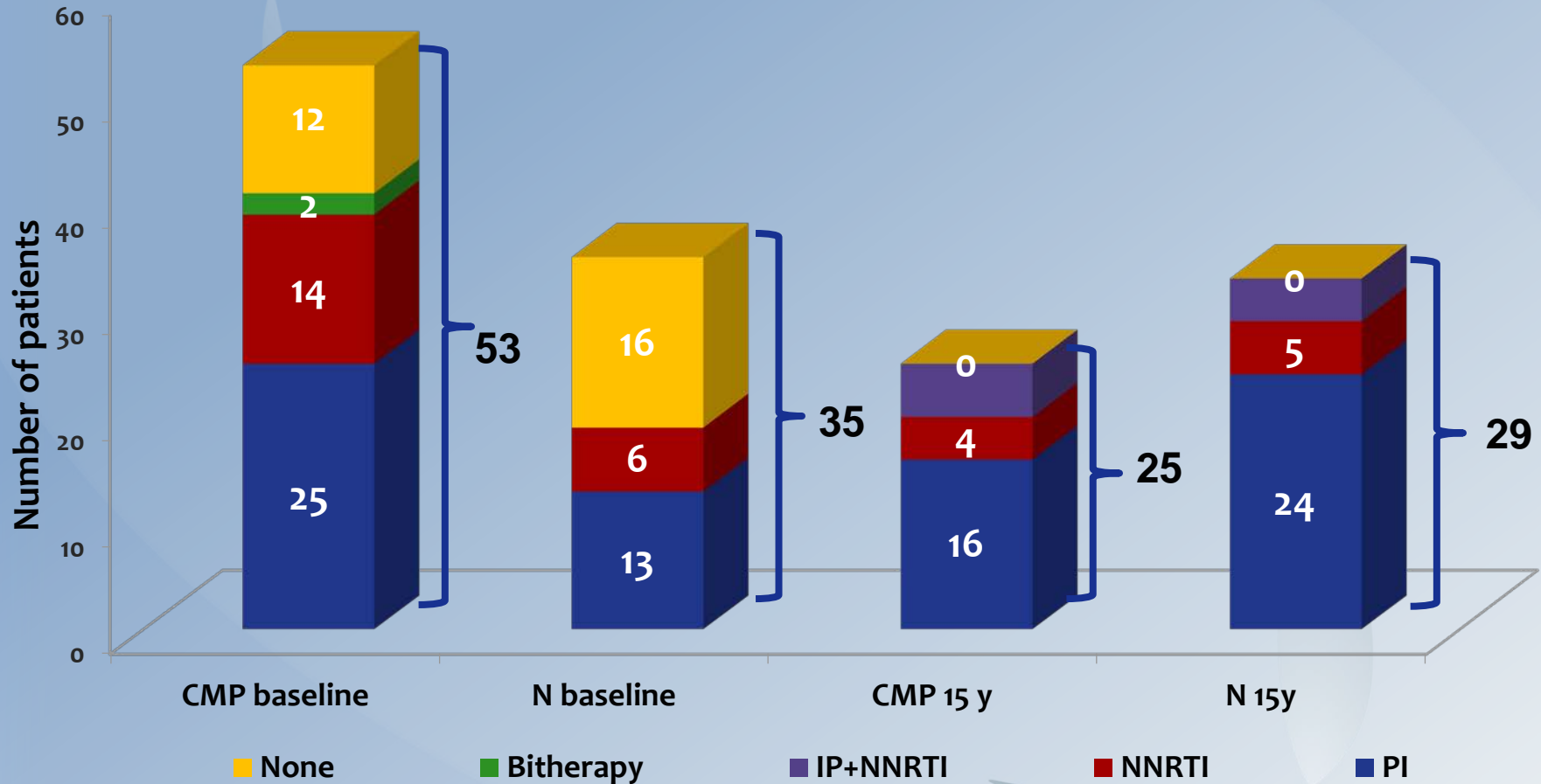
End Diastolic Left Ventricle Diameter in HIV positive and HIV negative patients



HIV markers in studied groups at baseline

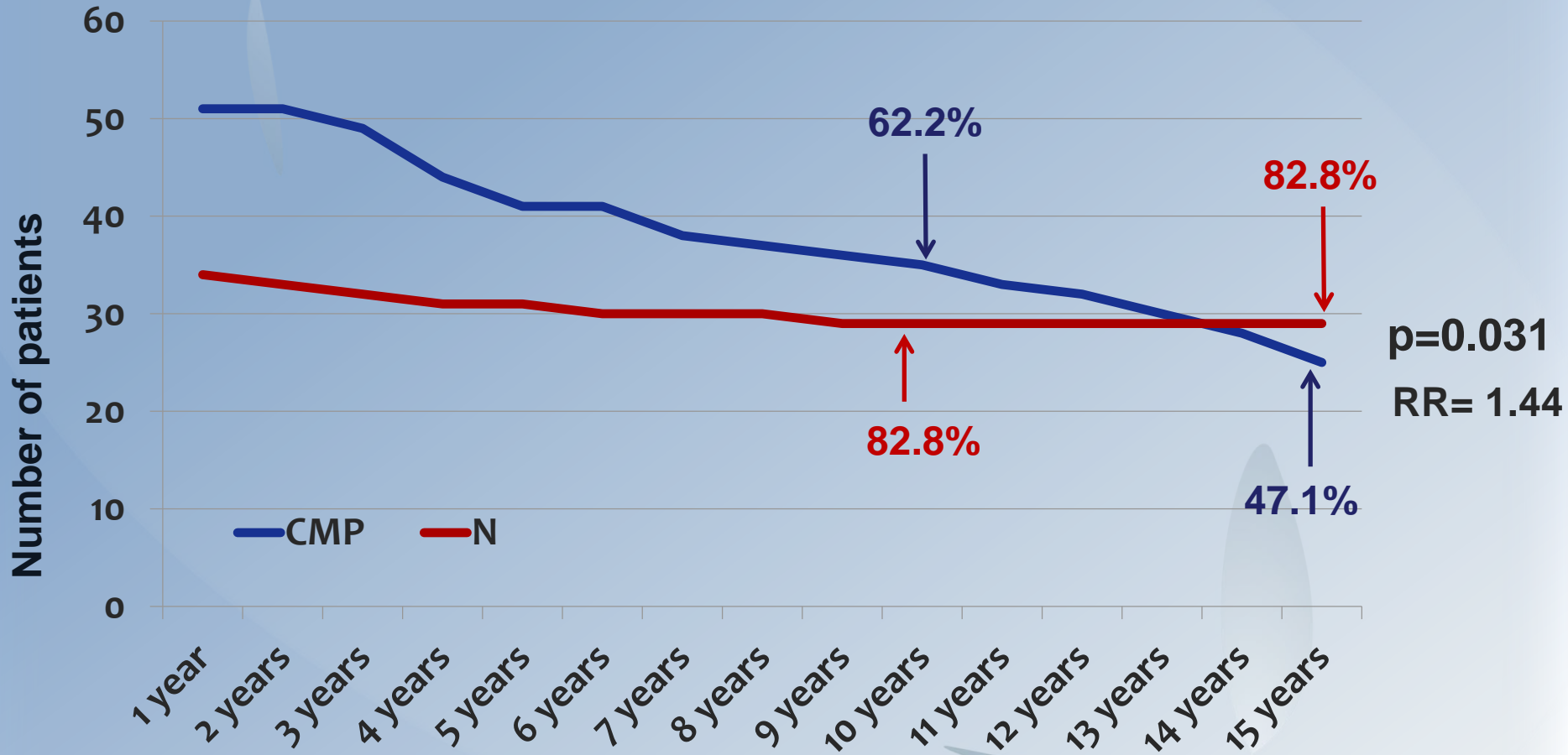
Parameters	CMP (N= 53)	Normal (N= 35)	p
CD4< 200 cell/mm ³	27	17	0.82
CD4>500	9	10	0.26
HIV RNA < 400c/ml	1	7	0.038
HIV RNA> 100000c/ml	21	10	0.84
Median duration cART	26,76	22,29	0.63

Antiretroviral Treatment in Studied Groups



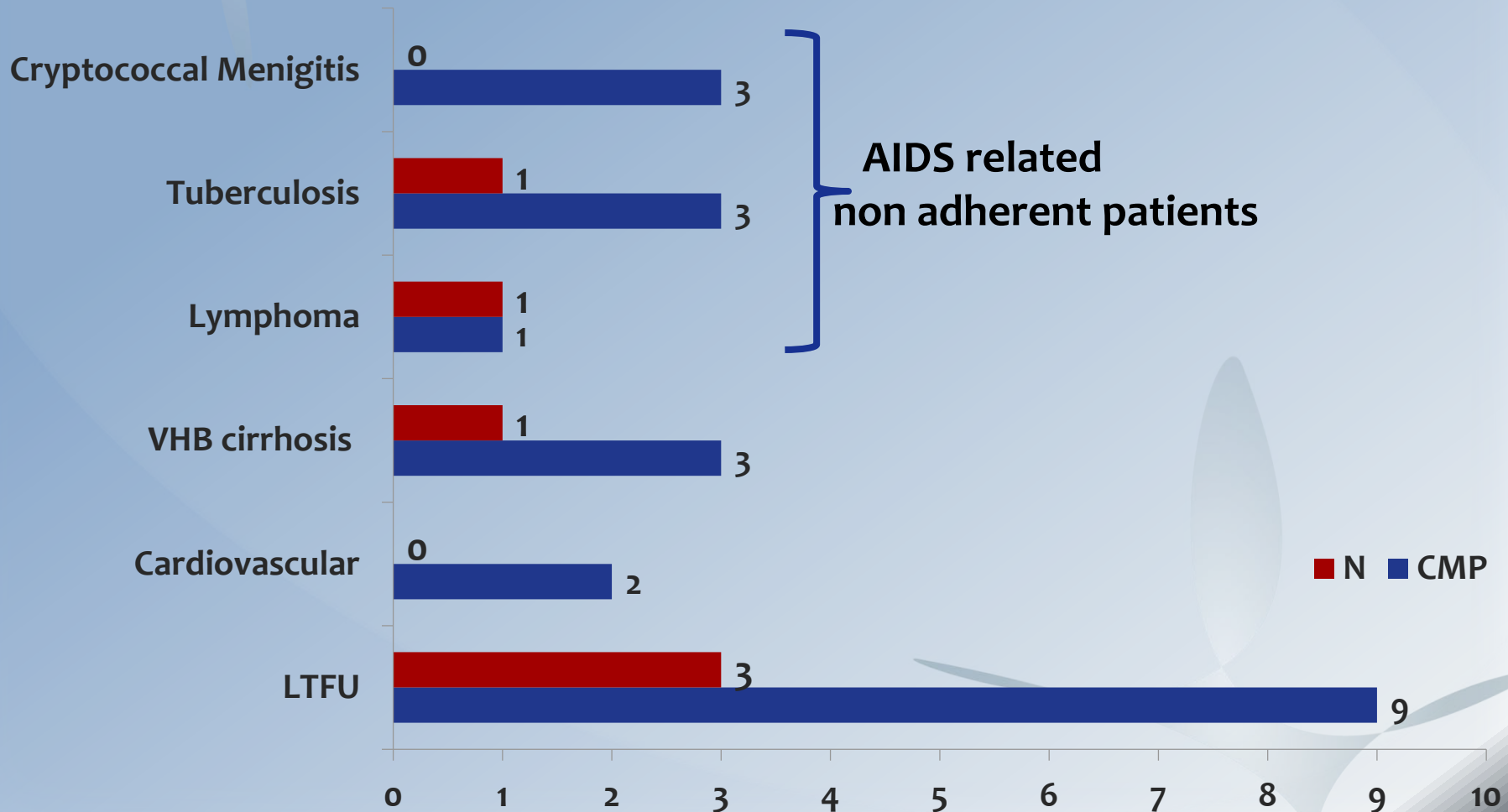
At baseline 7/12 untreated patients with CMP and 12/16 patients without cardiac lesions were new cases

Survival rate in studied patients



no death was encountered in last 5 years in group B

Distribution of cases by cause of death



Conclusions

- › **Cardiomyopathy in HIV infected children was better associated with lack of viral suppression and immunodeficiency in our study**
- › **The rate of survival was 1.44 lower in patients diagnosed with cardiomyopathy during childhood**
- › **The main factor associated with better survival was efficient antiretroviral therapy**

Acknowledgments

- › Patients and their parents
- › Paediatric and Adolescents Department in National Institute for Infectious Disease “Prof. Dr. Matei Bals” team – doctors and nurses
- › National Institute for Mother and Child (IOMC) “Prof. Dr. Alfred Rusescu”.

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References

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