

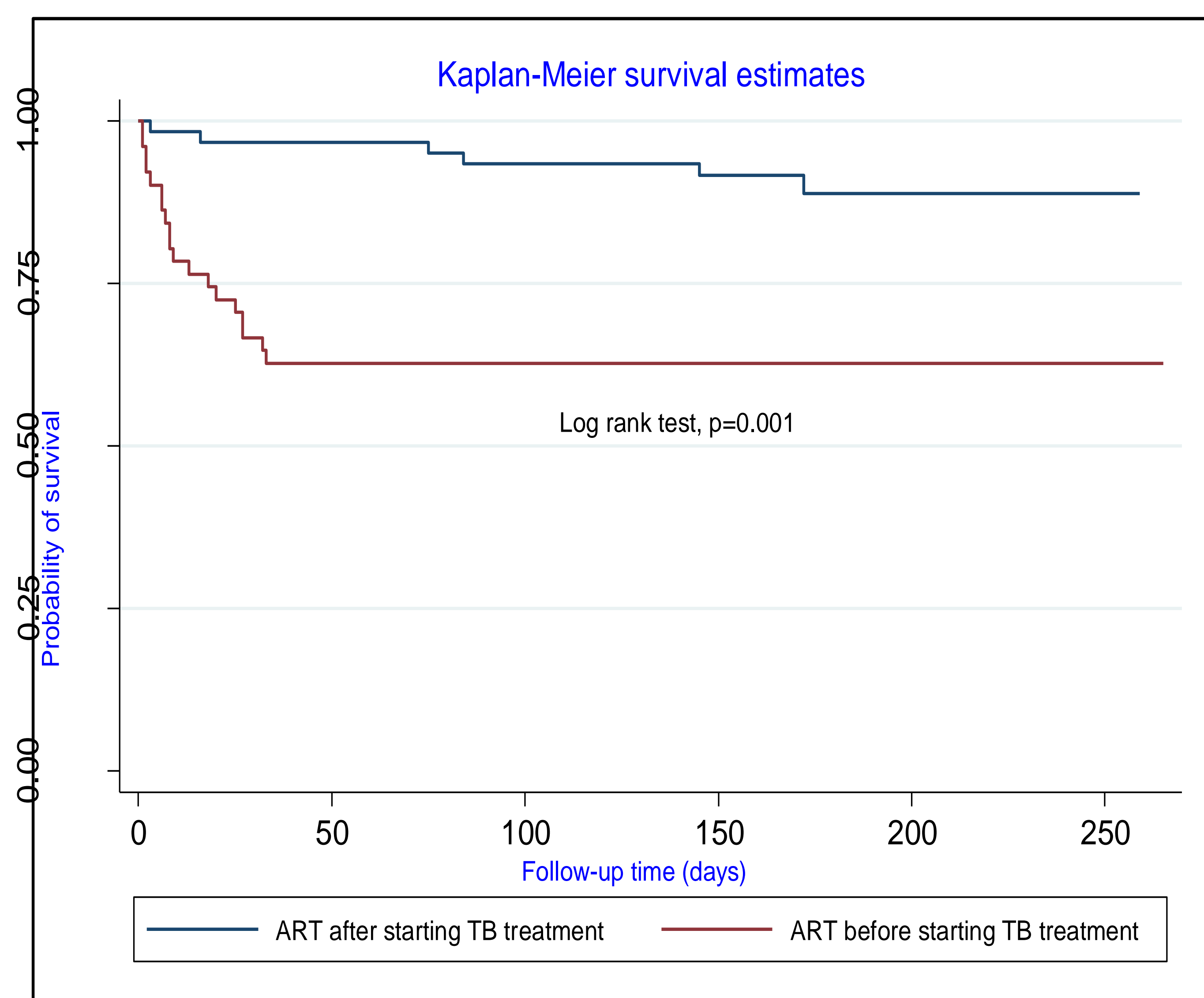
Characteristics and Risk of mortality among TB/HIV co-infected patients at a large HIV clinic in the era of Test and Treat in Uganda. Abstract # TUPEB166

Rogers Ssebunya^{1*}, Winnie Akobye¹, Rosemary Odeke¹, Mathew Kagwisagye¹, Albert Maganda¹, Adeodata Kekitiinwa¹
¹Baylor College of Medicine Children's Foundation, Uganda

Background: Benefits of starting antiretroviral therapy (ART) early among HIV/TB co-infected individuals have been widely documented. However, there is not enough evidence on TB treatment outcomes and their risk of mortality in the test and start era. We therefore characterised and determined risk of mortality among TB/HIV patients at a large HIV clinic in Rwenzori, western Uganda.

Methods: A retrospective cohort review of 521 charts was conducted for all individuals started on TB treatment within the test and treat period i.e. June 2016 and June 2017. Time from starting TB treatment to death as documented in registers was the main outcome. TB treatment outcomes including their characteristics were descriptive analysed. Risk of mortality by timing of ART i.e. (ART before or after TB diagnosis and treatment) was assessed using Kaplan Meier curves and estimates measured as per 1000 person years.

Figure 1: Kaplan Meier curve showing survival experiences among HIV/TB patients



Results: A TB treatment completion and mortality of 84% (437/521) and 14.8% (77/521) were registered at 12 months after starting TB treatment. Males and clients 30 years and above were disproportionately affected; mortalities (64.9%, 50/77) and (68.8%, 53/77) respectively. Of the 521 registered TB clients, 247 (47.4%) were co-infected with HIV and of these 45.3% (112/247) started ART within the test and treat period with 25 registered mortalities. Pulmonary clinically diagnosed (PCD) and bacteriologically confirmed TB cases contributed 88% (22/25) of all mortalities registered among HIV/TB cases.

Mortality was higher among those who started ART before (76%, 19/25) compare to those who started ART after (24%, 6/25) TB diagnosis and treatment. Lower survival experiences were observed among those who started ART before TB treatment compared to those who started after. Risk of mortality among clients who started ART before TB treatment was significantly higher (3.21 per 1000 person-years, 95%CI: 2.04 - 5.04) compared to those who started after TB treatment (0.56 per 1000 person-years, 95%CI: 0.26 - 1.27).

Table 1: Risk rate of mortality among TB patients initiation ART treatment.

Category	N	Events (deaths)	Person years	Rate	95% CI
Incidence rates among patients initiating ART before or after TB treatment					
ART after TB treatment	61	6	10.56	0.57	0.26 - 1.27
ART before TB treatment	51	19	5.91	3.21	2.05 - 5.04
Rates among patients starting ART before TB treatment*					
Within 0-14d	42	2	1.52	1.31	0.33 - 5.25
≥ 14 days	70	4	9.03	0.44	0.17 - 1.18

Conclusion: Results indicate significantly higher mortality among clients already on ART at the time of start of TB treatment and contributes to low treatment success rate among ART/TB clients. Further investigations are needed to determine reasons for the high mortality.

Acknowledgment:

- We acknowledge all HIV/TB co-infected clients whose data has been used in this study.
- We thank centers for disease Control and Prevention for the technical support in facilities where this data was abstracted.
- Appreciation goes to all Baylor Uganda program officers and district health care providers who work tirelessly to ensure HIV/TB clients are managed well including documentation of their details.

