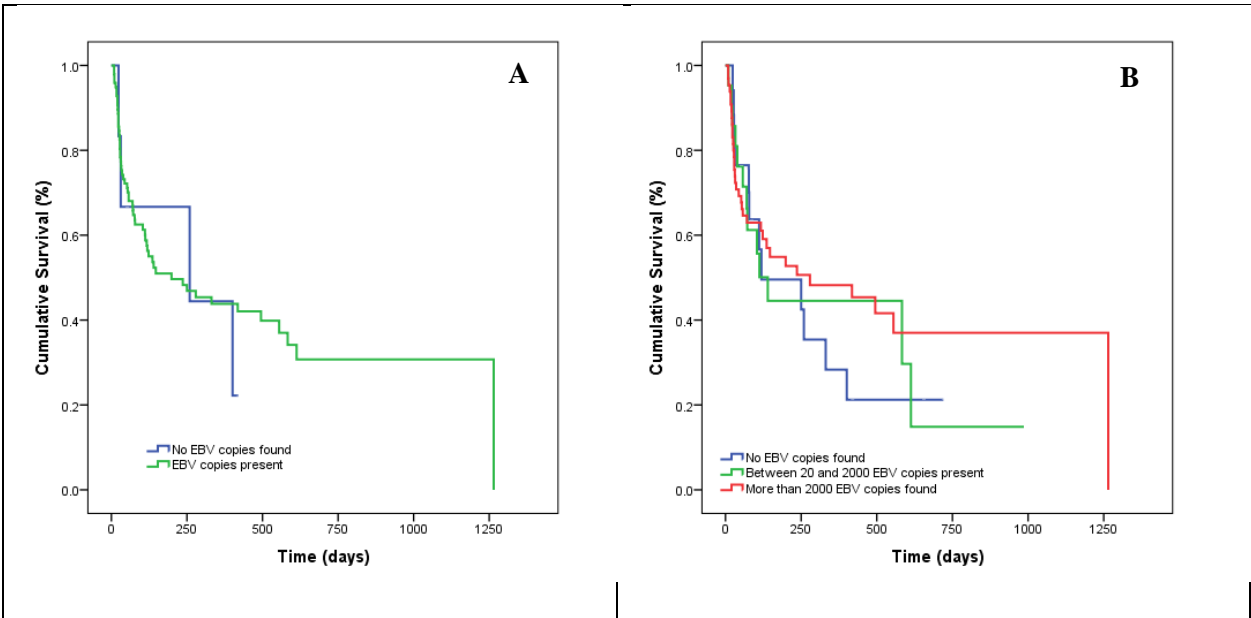


Supplemental Figure 1



**Supplemental Table 1.** Chemotherapy dosage status among 428 children with Burkitt lymphoma at Jaramogi Oginga Odinga Teaching and Referral Hospital in Kisumu, Kenya, 2003-2011

<b>Chemotherapy</b>	<b>N (%)</b>	<b>Mean dose (mg/m<sup>2</sup>) [min-max Range]</b>
Cyclophosphamide	428	
Accurate dose	378 (88.3)	1180.8 [649.5-1986.8]
Underdosed <sup>1</sup>	36 (8.4)	
Overdosed <sup>2</sup>	14 (3.3)	
Vincristine	428	
Accurate dose	384 (89.7)	1.5 [0.8-5.0]
Underdosed <sup>1</sup>	27 (6.3)	
Overdosed <sup>2</sup>	17 (4.0)	
Methotrexate <sup>3</sup>	359	
Accurate dose	282 (78.6)	8.6 [3.2-25.3]
Underdosed <sup>1</sup>	20 (5.6)	
Overdosed <sup>2</sup>	57 (15.9)	
Doxorubicin <sup>4</sup>	318	
Accurate dose	277 (87.1)	59.5 [1.4-201.2]
Underdosed <sup>1</sup>	9 (2.8)	
Overdosed <sup>2</sup>	32 (10.1)	

<sup>1</sup> Children who received less than 15% of the recommended drug dose based on their BSA

<sup>2</sup> Children who received greater than 15% of the recommended drug dose based on their BSA

<sup>3</sup> Methotrexate data available for 359 children; the remaining 69 (16%) children were administered methotrexate but exact doses were not documented

<sup>4</sup> Doxorubicin data available for 318 children; drug not given to 110 (26%)

**Supplemental Table 2.** Associations between chemotherapy dose and in-hospital death among Kenyan children with endemic Burkitt lymphoma

Dosage status	Cases	In-Hospital Deaths	Relapsed/died after discharge*	Continued clinical remission**	Lost to Follow-up	Univariate HR and 95% CI	Multivariate *** HR and 95% CI
Cyclophosphamide							
Accurate Dose	378	84 (22)	60 (16)	118 (31)	116 (31)	1.0 (ref)	1.0 (ref)
>115% correct dose	14	5 (36)	3 (21)	5 (36)	1 (7)	1.50 (0.90 to 2.49)	1.43 (0.84 to 2.43)
<85% correct dose	36	5 (14)	5 (14)	11 (31)	15 (42)	0.67 (0.42 to 1.08)	0.68 (0.42 to 1.11)
Vincristine							
Accurate Dose	384	87 (23)	60 (16)	119 (31)	118 (31)	1.0 (ref)	1.0 (ref)
>115% correct dose	17	3 (18)	3 (18)	7 (41)	4 (24)	0.91 (0.51 to 1.62)	0.85 (0.47 to 1.53)
<85% correct dose	27	4 (15)	5 (19)	8 (30)	10 (37)	0.95 (0.57 to 1.59)	1.01 (0.60 to 1.70)
Methotrexate							
Accurate Dose	282	55 (20)	84 (30)	47 (17)	96 (34)	1.0 (ref)	1.0 (ref)
>115% correct dose	57	17 (30)	9 (16)	23 (40)	8 (14)	1.07 (0.69 to 1.65)	0.97 (0.62 to 1.50)
<85% correct dose	20	3 (15)	4 (20)	5 (25)	8 (40)	1.11 (0.54 to 2.28)	1.09 (0.53 to 2.25)
Doxorubicin							
Accurate Dose	277	65 (23)	45 (16)	85 (31)	82 (30)	1.0 (ref)	1.0 (ref)
>115% correct dose	9	4 (44)	1 (11)	3 (33)	1 (11)	1.35 (0.72 to 2.51)	1.25 (0.66 to 2.35)
<85% correct dose	32	4 (13)	7 (22)	9 (28)	12 (38)	0.79 (0.48 to 1.29)	0.81 (0.49 to 1.34)

\* 28 missing dates

\*\* 4 missing dates

\*\*\*Models adjusted for age at admission, gender, nutritional status, and tumor stage (stage I vs. stage II or more).

## **Supplemental Materials**

### **JOOTRH Burkitt lymphoma Protocol:**

Induction-Consolidation schedule:

- Cyclophosphamide ( $1200\text{mg}/\text{m}^2$ ) and vincristine ( $1.5\text{mg}/\text{m}^2$ ) IV weekly for six doses
- Doxorubicin ( $60\text{mg}/\text{m}^2$ ) IV on days 1 and 22
- Methotrexate ( $7.5\text{mg}/\text{m}^2$ ) intrathecal (IT) weekly for four doses
- Tapering dose of oral prednisone

Maintenance schedule:

- Cyclophosphamide ( $300\text{ mg}/\text{m}^2$ ) and vincristine ( $1.5\text{mg}/\text{m}^2$ ) IV monthly for the next 24 months as out-patient.

## Laboratory reference ranges

Lactate dehydrogenase (LDH) reference values<sup>1</sup>:

Age	Age-adjusted normal LDH range (U/L)
1-30 days	135-750
31 days-11 months	180-435
1-3 years	160-370
4-6 years	145-345
7-9 years	143-290
10-12 years	120-293
13-15 years	110-283
16-17 years	105-233
≥ 18 years	122-222

Hemoglobin reference values<sup>1</sup>:

HEMOGLOBIN		
Age range	Males	Females
Birth -7 days	13.5-22.0 g/dL	13.5-22.0 g/dL
8-14 days	12.5-21.0 g/dL	12.5-21.0 g/dL
15 days-1 month	10.0-20.0 g/dL	10.0-20.0 g/dL
2-5 months	10.0-14.0 g/dL	10.0-14.0 g/dL
6 months-2 years	10.5-13.5 g/dL	10.5-13.5 g/dL
2 years	11.0-14.0 g/dL	11.0-14.0 g/dL
3-5 years	11.0-14.5 g/dL	11.8-14.7 g/dL
6-11 years	12.0-14.0 g/dL	12.0-14.5 g/dL
12-15 years	12.8-16.0 g/dL	12.2-14.8 g/dL
Adults (> 16 years)	13.5-17.5 g/dL	12.0-15.5 g/dL

<sup>1</sup> Mayo Medical Laboratories, Rochester, Minnesota, US. (<http://www.mayomedicallaboratories.com/>)