

# The results of treatment of children with metastatic Wilms' tumor in an African setting

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# Background

- The impact of liver metastases on survival is controversial in reports from developed countries
- No data are available from Africa, with different socio-economic circumstances



The surgeons constant battle against malnutrition, infectious disease, and HIV...

# Aim

- To determine the prognostic significance of liver metastases in an African setting
- To audit treatment results
  - Survival: OS, EFS
  - Toxicity
  - Abandonment of treatment

# Patients (1)

- 2002-2011
- 150 new patients with Wilms' tumor
- 54 stage IV disease (abstract!)
- 45 stage IV disease at diagnosis
  - Including 7 with stage V and visceral metastases
- Site of metastasis and pretreatment biopsies were obtained in all

## Patients (2)

- 20 males and 25 females
- Age: median 3,8 years (range 2 days - 12,8 yrs)
- FUP: median 15,4 mo (range 3 days - 5,7 yrs)
- Lost to FUP: 8 (17%) of whom
  - 5 were receiving palliative care only
  - 3 were in complete remission
- 2 pts died of chemotoxicity,  
2 died of complications after biopsy

# Methods

- Neo-adjuvant chemo following SIOP principles in all
- Nutritional resuscitation in all
- TB-prophylaxis
- Anti-helminthics
- Anti retrovirals
- Anti hypertensives
- Postop treatment determined by local stage and histology
  - 25 pts received radiotherapy (local stage III in 15)

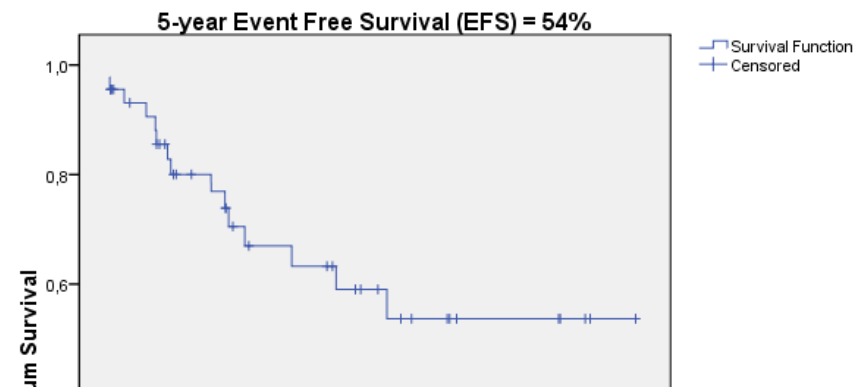
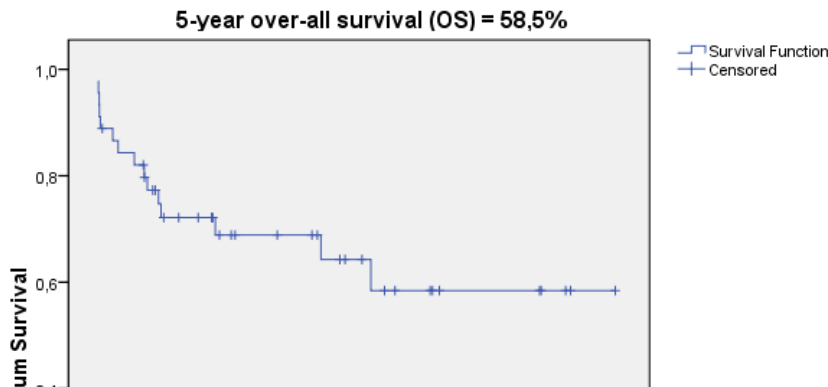
# Co-morbidity

- hypertension n=25 (56%)
- clinically malnourished n=14 (31%)
- anti-helminthics n=36 (80%)
- TB prophylaxis n=34 (76%)
- Twenty-eight (62%) patients consented to HIV testing of whom 2 (7%) were positive and started on antiretroviral treatment



# Metastases

- Liver metastases were present in 19 (42%):
  - Liver only n= 4 ( 9%)
  - Liver + lung n=15 (33%)
  - Lung only n=26 (58%)



Literature - Wilms stage IV:

Cape Town (2006)

OS 54%

SIOP/GPOH (2006)

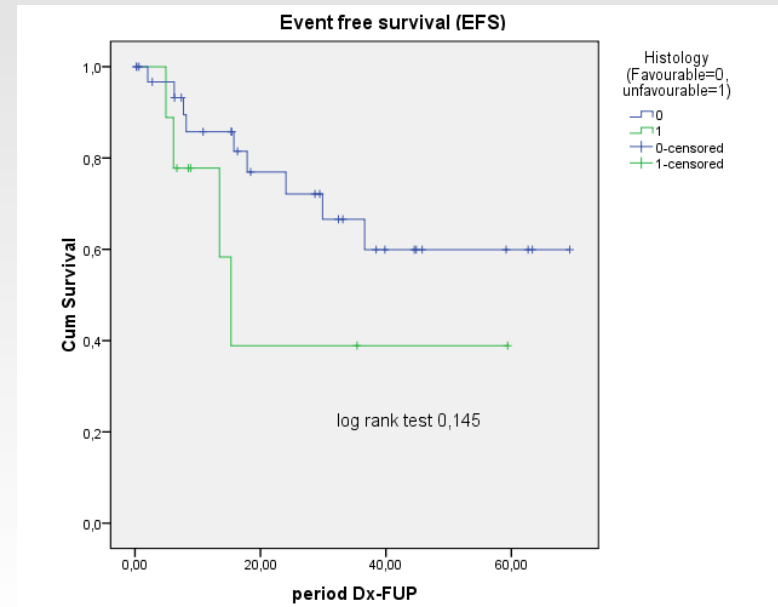
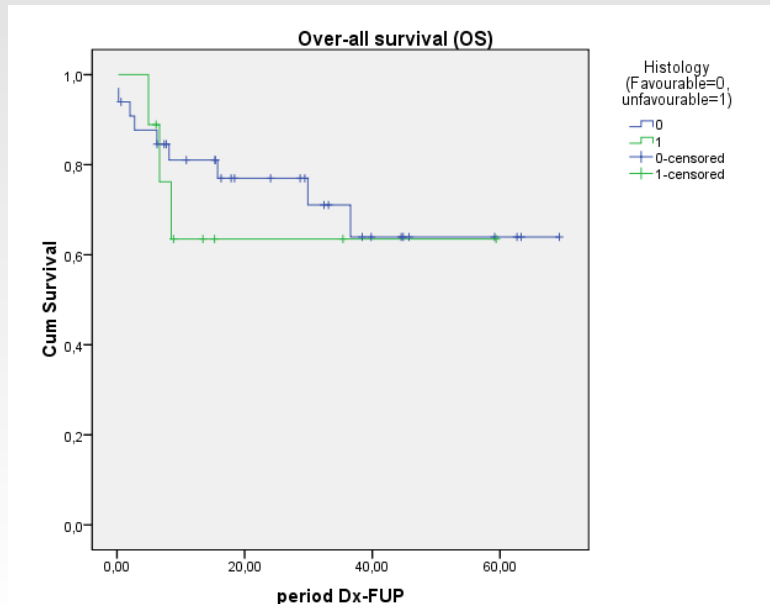
OS 76.3% (with liver mets OS 63%)

NWTS (2009)

OS 75% (FH)

# Histology

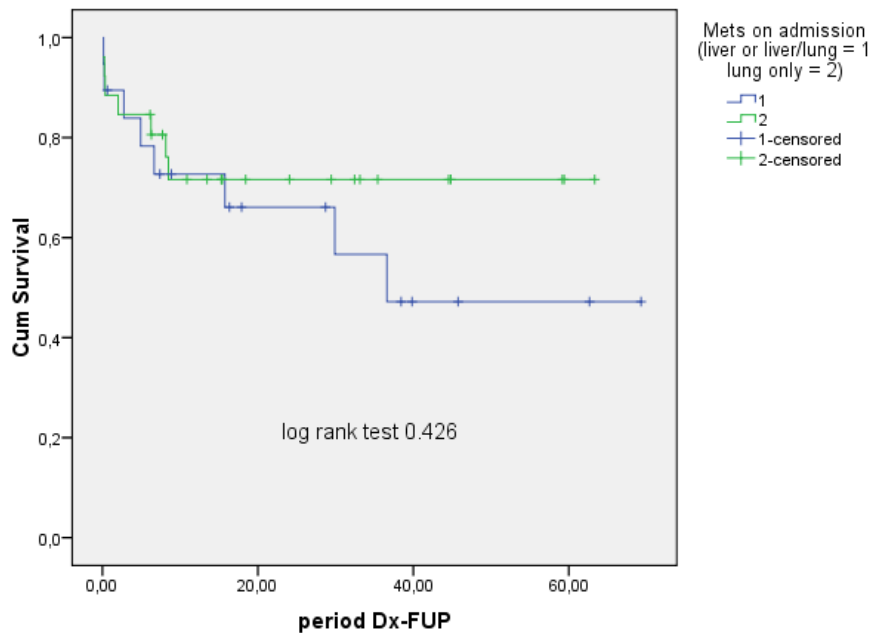
- Favourable n=33 (73%)
- Unfavourable n= 9
- Undetermined n= 3
- No influence of histology on outcome was evident



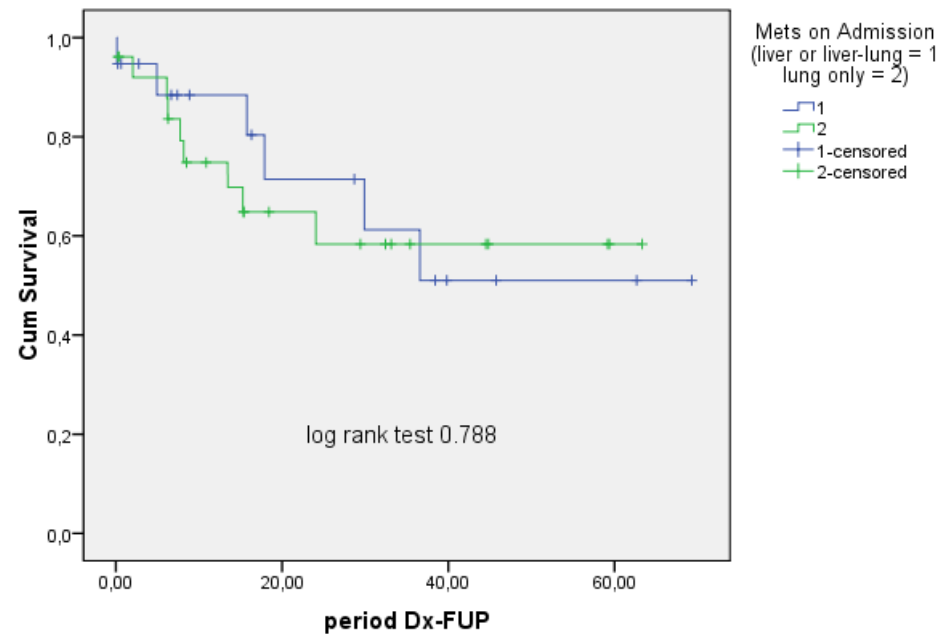
# Liver metastases

- Persisted in 4/19 patients, 3 had a resection

Overall survival



Event free survival (EFS)



# Conclusions

- Isolated liver metastases from Wilms tumour are rare (9%)
- Liver metastases do not worsen the prognosis for children with Stage IV disease
- Despite the poor socio-economic circumstances of an African setting, survival was comparable to data from other centres, with acceptable toxicity and low abandonment of treatment (n=8)
- It remains crucial to establish a structured data collection system within sub-Saharan Africa