CONCLUSION:

In the small patient cohort of 50 treated sites, the radiation therapy fractionation regimen of 20 Gy in 5 fractions gave similar results to the standard regimen of 24 Gy in 12 fractions in terms of

1. Treatment response
2. Local recurrence free survival
3. Toxicity

The study results were comparable to those reported in the literature despite the challenges of socio-economic factors, poor patient follow-up, short patient survival and limited use of antiretroviral therapy associated with the study of AIDS- associated Kaposi sarcoma in the South African population (27).

The shorter fractionation regimen of 20 Gy in 5 fractions may be preferred in departments with limited resources. However its routine use cannot be recommended based on this study alone due to the small sample size. The data needs to be validated in a large prospective randomized trial.

Additionally, caution is advised when using the shorter regimen of 20 Gy in 5 fractions for the treatment of very extensive lesions and in those patients with very severe lymphoedema, as there was a non-significant trend to severe toxicities of ulceration and necrosis noted in this study.

In addition, future studies need to address the role of radiation therapy in the antiretroviral era and specifically in patients with extensive disease. The use of

the 8 Gy single fraction regimen for extensive disease also needs to be compared with the 20 Gy in 5 fraction regimen to assess the duration of response and toxicity in patients with extensive disease.