

Ethics
HIV and dialysis
HIV and kidney transplantation
in SA



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Allocation of Resources within Health

- Should we offer dialysis and transplantation (at all) in SA?
- And if so.....

What is governments responsibility?

- How many “slots” for dialysis is “enough”?
- What are the criteria for eligibility for a “slot”?
- In resource limited settings:
 - How do we “ration” access to dialysis and transplantation?

Perspective.....

- Is it a citizens constitutional right to have access to dialysis?
- Access to dialysis is a constitutional right - ONLY IN THE USA
- Subrumani case in KZN – declared that it is NOT a constitutional right in SA (access rationed according to “availability of services”)
- “life and death” committees well documented in USA in 1960’s to ration access to dialysis
- Committees still ration access to dialysis in the state sector in SA
- In the USA today, tho access to dialysis is unrestricted access to transplant is rationed: fewer blacks, women, elderly and poor

Perspective.....

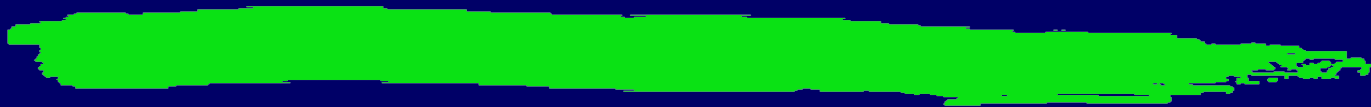
In SA – Tygerberg Hospital (Rafique Moosa, 2006)

- Worldwide: those who require dialysis increases by 7% per annum
- Since inception of dialysis program at Tygerberg 1976:
80 dialysis slots (no increase to date), population increase in the W/cape 2.9%;
- 1988 – 2003: 2442 patients assessed, 53% declined care. Only 15 HIV + patients were referred, all declined care
- Who was more likely to get a place: white, 20-40years of age, employed, married, lived near a dialysis centre, not diabetic
- 60% were denied access based on social factors related to poverty (illiteracy, lack of funds for transport to the unit, poor compliance)

Historically wrt HIV.....

- HIV + dialysis = BAD
- HIV + ART + dialysis = equal to NON-HIV
- HIV + transplant = BAD
- HIV + ART + transplant = equal to NON-HIV, better than diabetics
- All based on US + European data
- Where is local data?

Outcomes of HIV infected individuals with end stage kidney disease on chronic hemodialysis



Study design

- Retrospective case control study
- HIV infected individuals with ESKD on CHD
 - Survival
 - Morbidity
 - Blood parameters (HIV, ESKD)
- 1st January 2006 – 31st December 2010

Approval

National Renal Care (NRC) CHD Units

Staff in the units trained for consenting process

HIV prevalence 10.8%

(196 HIV+ / 1814 CHD population – 31 December 2010)

National consenting rates

196 HIV+



48 consents



Consent rate 24.5%

Kwazulu-Natal: 21

Gauteng: 9

Eastern Cape: 7

Western Cape: 5

Northern Cape : 2

Northwest: 3

Limpopo: 1

1814 HIV-



96 consents

2:1

Matched

Ethnicity


Gender

Age

Demographics

Parameter	HIV positive (n=48)	HIV negative (n=96)
Av. time on study	31 months (range 7 - 60)	30 months (range 6 – 60)
Ave age	43yrs (range 18-60)	45yrs (range 21-63)
Gender	female 20 (42%) male 28 (58%)	female 39 (41%) male 57 (59%)
Ethnicity	black 47 (98%) mixed race 1(2%)	black 81 (84%) mixed race 11 (11)% asian 4 (5%)

Demographics

parameter	HIV positive (n=48)	HIV negative (n=96)
Housing	94% = permanent dwelling	98% = permanent dwelling
Members / household	3.9 (range 1-8)	4.2 (range 1-11)
Running water	86%	88%
Employed	 73%	64%

Morbidity

parameter	HIV positive (n=48)	HIV negative (n=96)
Prevalence Diabetes	9/48 (19%)	18/96 (19%)
Prevalence Hypertension	33/48 (69%)	82/96 (85%)
Incidence rate Cerebrovascular Accident	nil	4/238 person years 17 per 1000
Incidence rate Coronary Artery Disease	nil	7/238 person years 29 per 1000
Incidence rate TB	9/123 person years 73 per 1000 IRR 8.7	2/238 person years 8 per 1000

Morbidity

parameter	HIV positive (n=48)	HIV negative (n=96)
Transplant list (31/12/2010)	Yes = 2/48 (4%)	Yes = 18/96 (19%)
Vascular access (31/12/2010)	AVF 30/48 (63%) AVG = 1/48 (2%) Perm cath 13/48 (27%) Unknown 4/48 (8%)	AVF 58/96 (60%) AVG 7/96 (7%) Perm cath 19/96 (20%) Unknown 12/96 (13%)

Morbidity

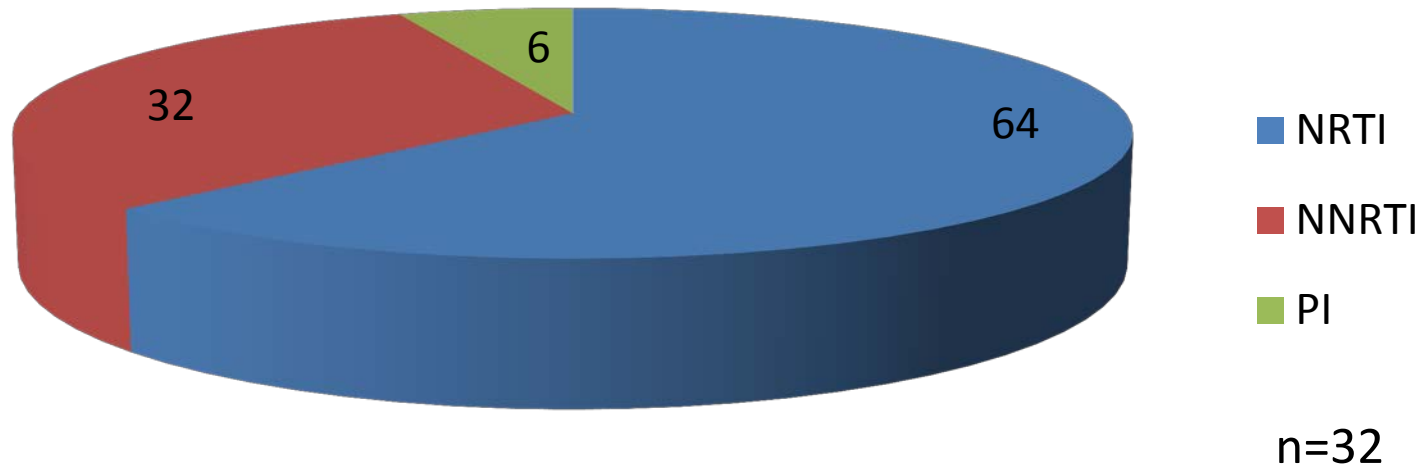
parameter	HIV positive (n=48)	HIV negative (n=96)
Total Number of Access - related admissions	48/123 person years 390 per 1000 IRR 1.05	89/238 person years 373 per 1000
Access –related infections that required admission	9/123 person years 73 per 1000 IRR 4.4	4/238 person years 17 per 1000

HIV management

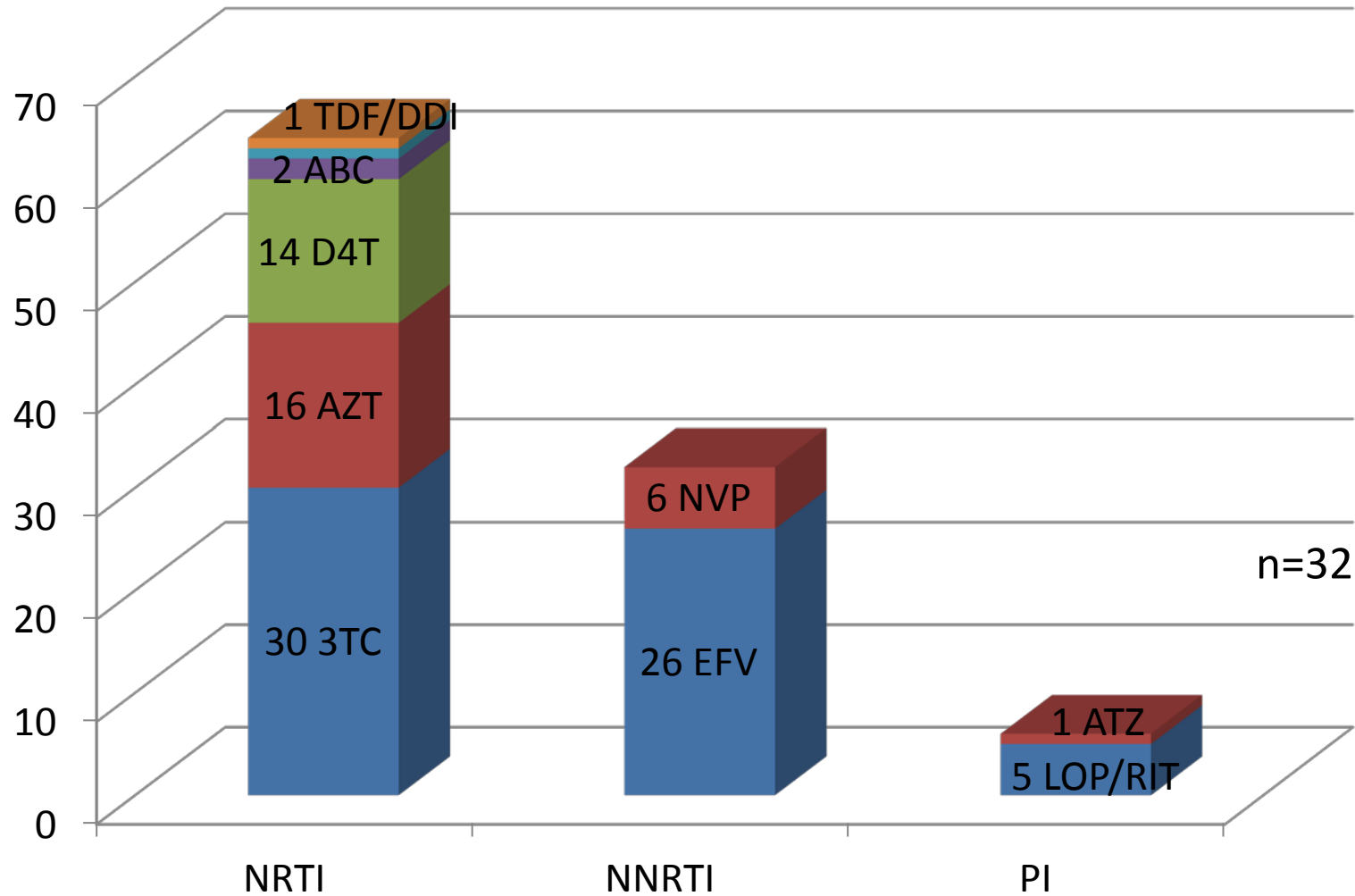
parameter	HIV positive (n=48)
Average duration of ART in months (n=28)	31 (range 7-60)
HIV viral load suppressed on treatment	16/37 (43%)
HIV viral load not suppressed on treatment	21/37 (57%)
Not on treatment	3/48 (6%)
No data	8/48 (17%)

on treatment 37/48

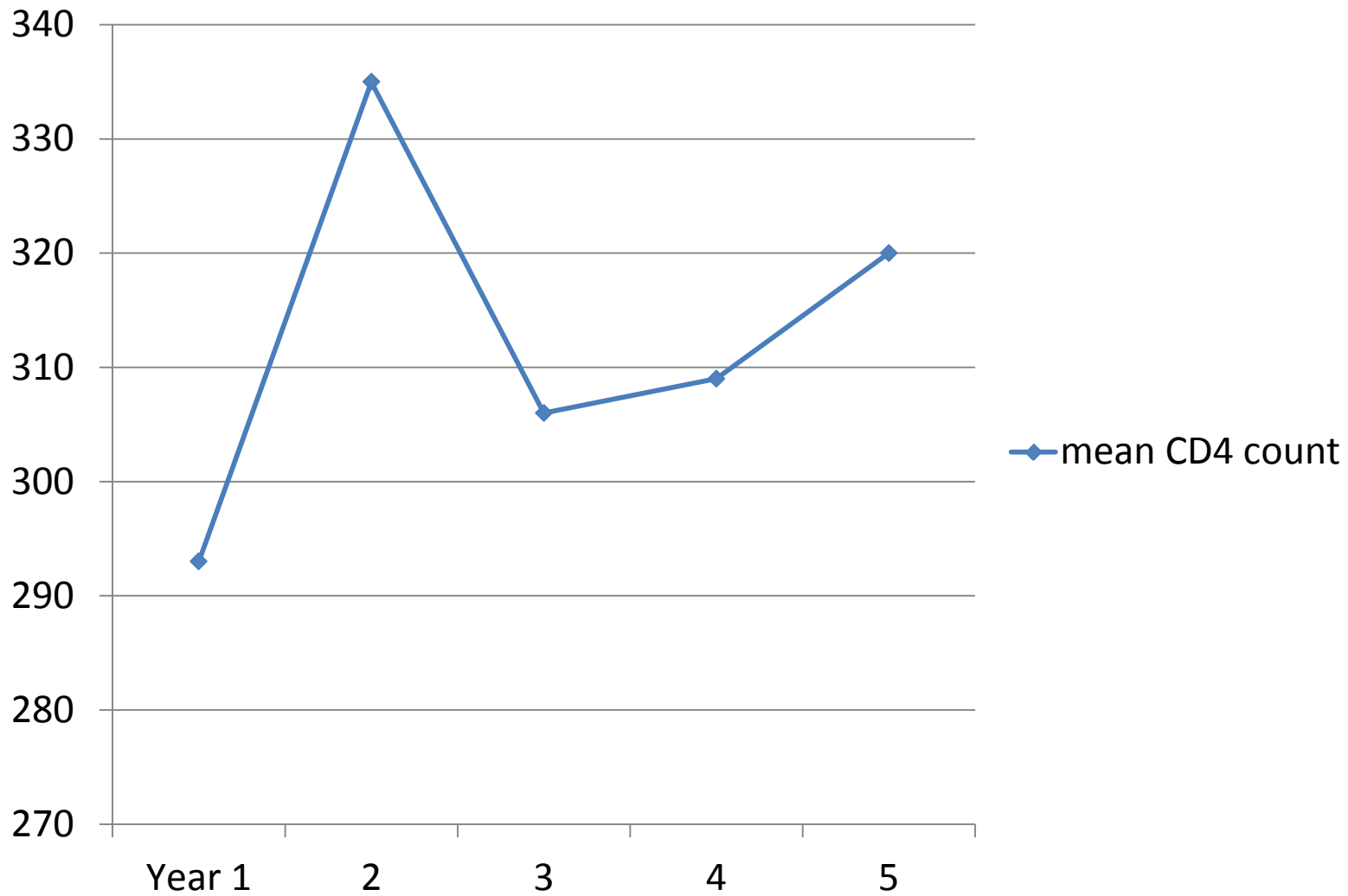
ART exposure



ART exposure



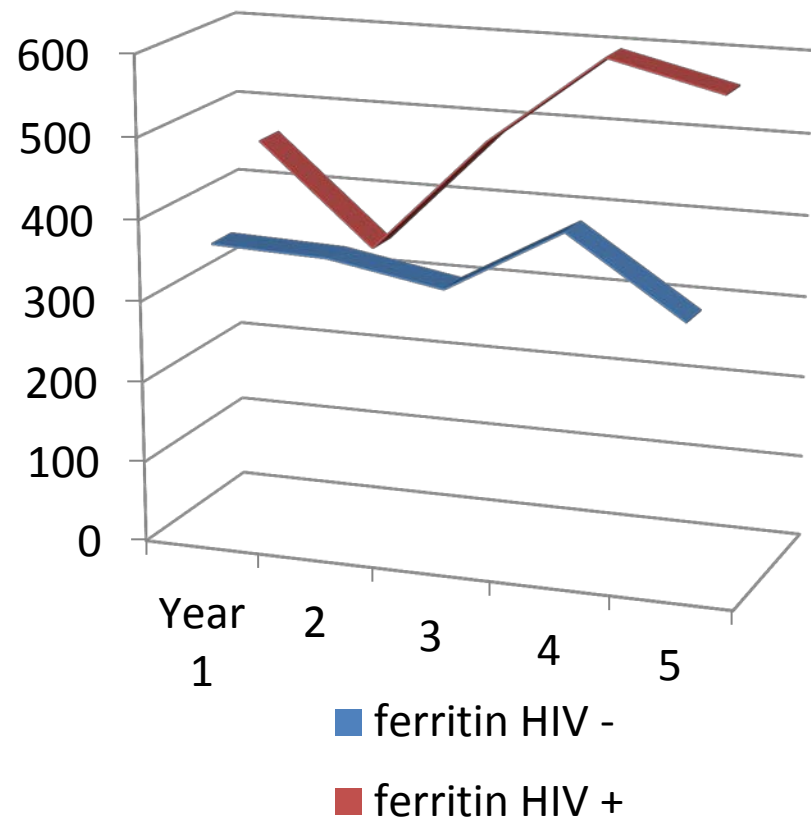
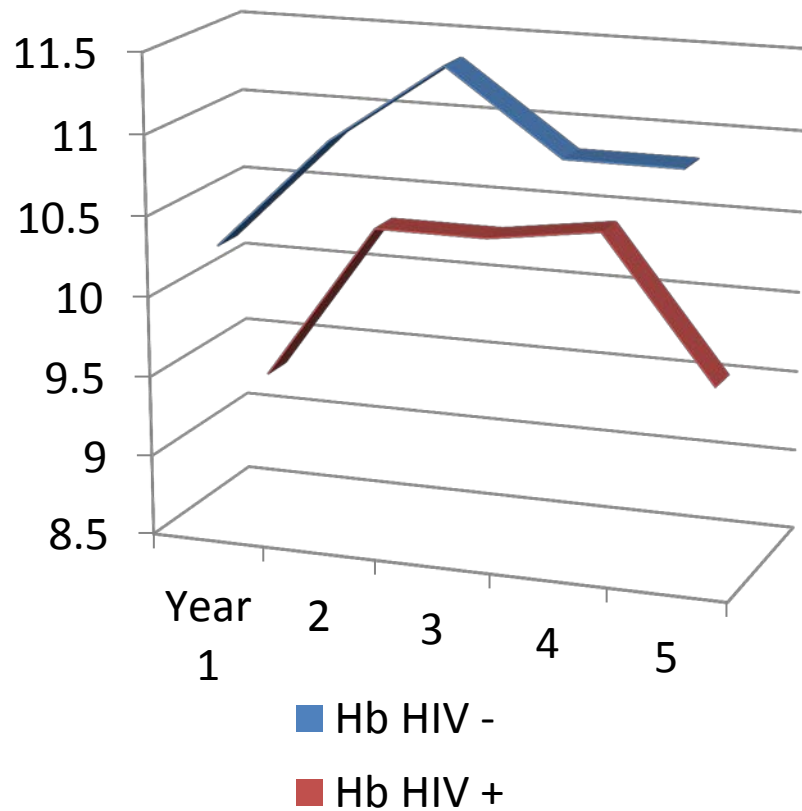
CD4 counts in HIV+



Haemoglobin

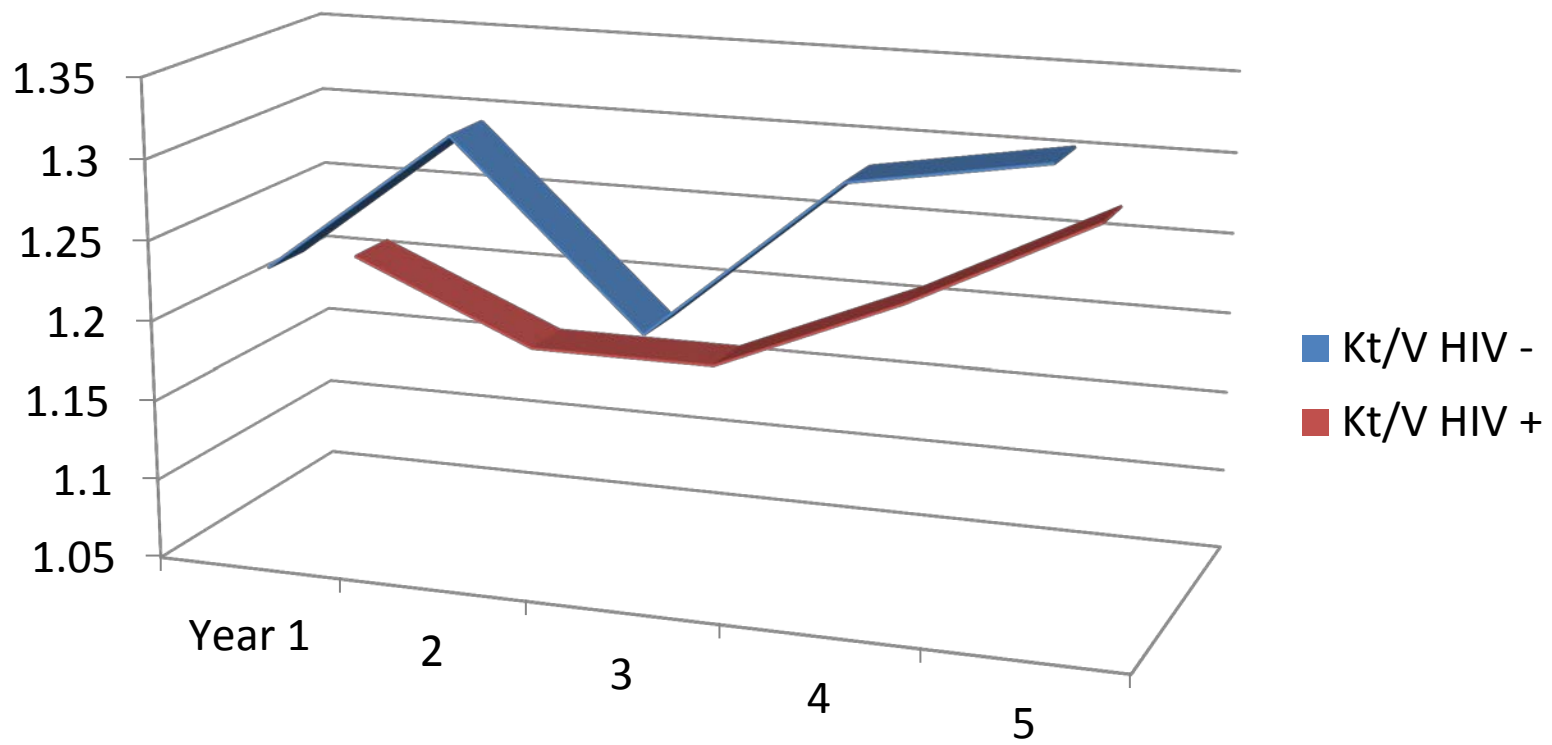
Ferritin

Statistically significant $p < 0.01$



Regression analysis (STATA 11)

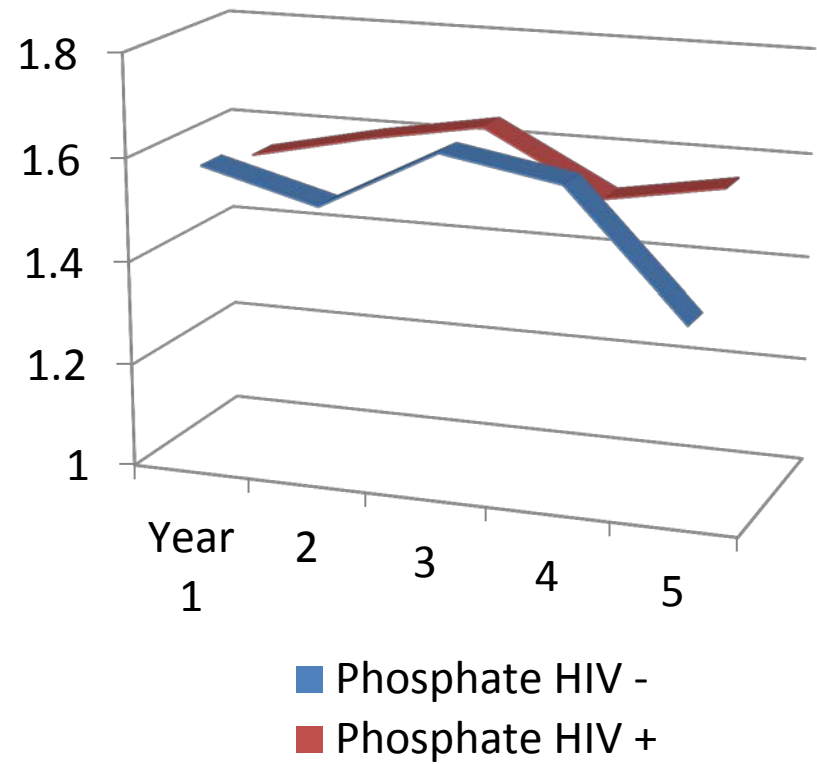
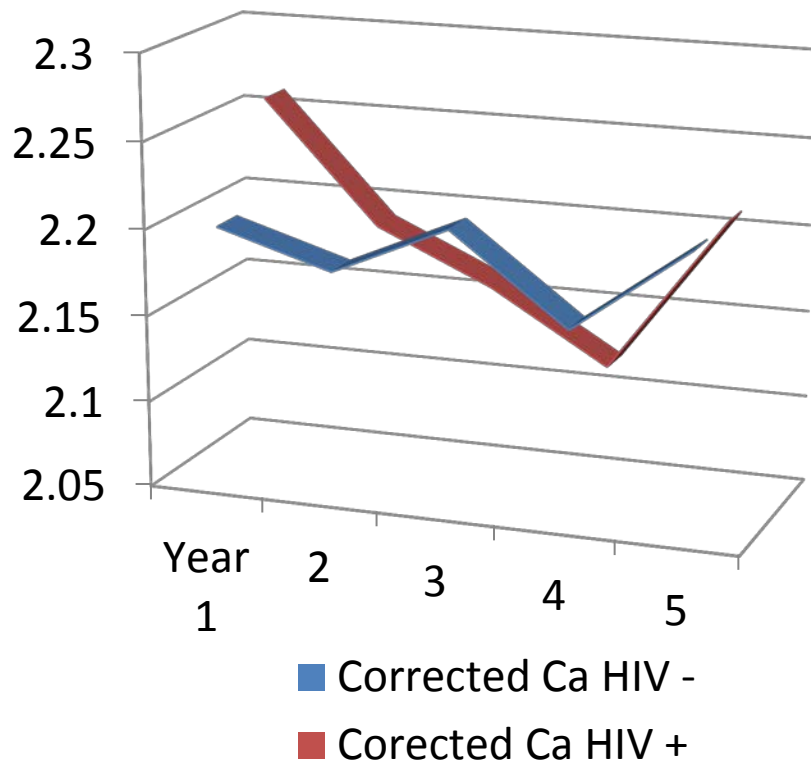
Kt/V



Regression analysis (STATA 11)

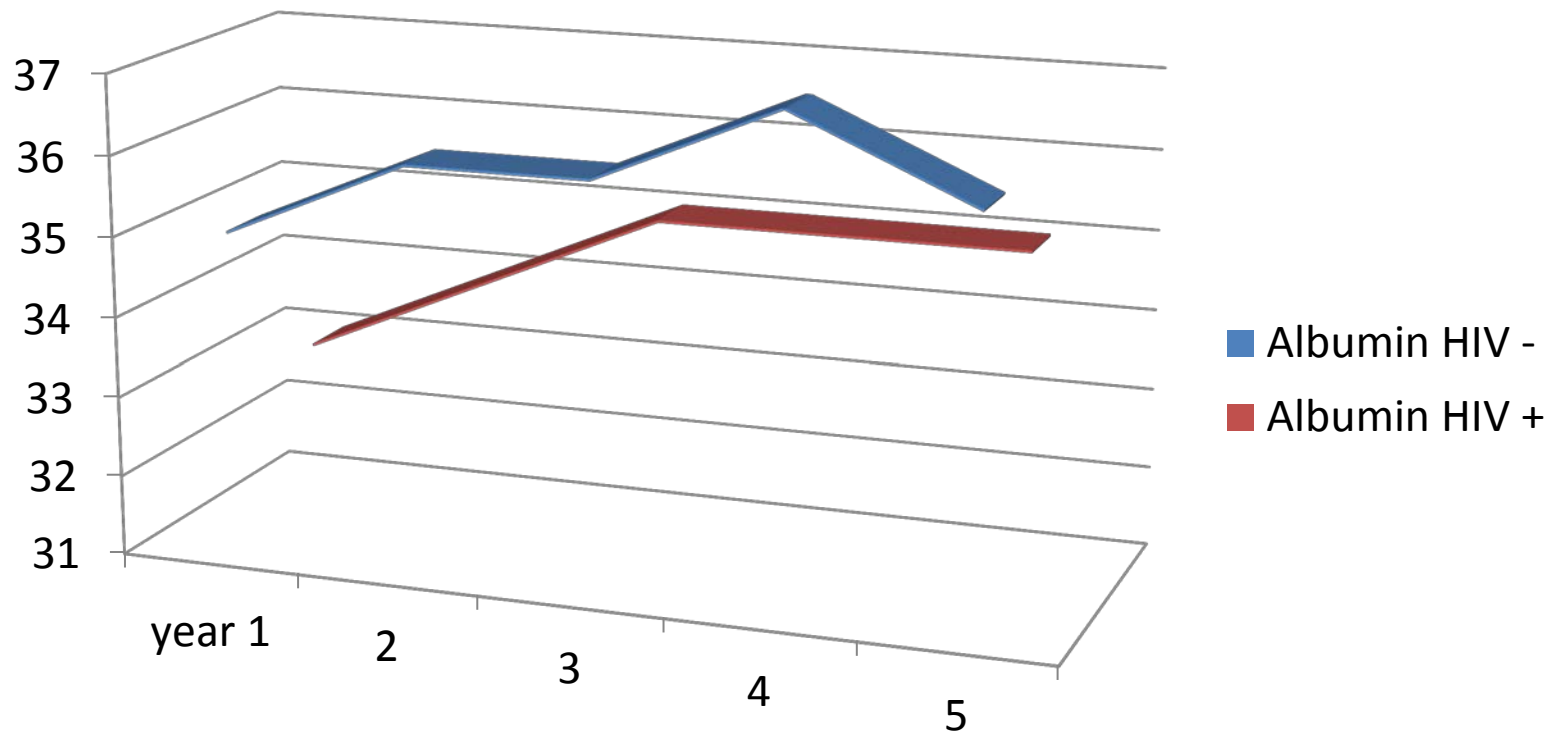
Corr Calcium

Phosphate



Albumin

Statistically significant $p < 0.05$



Survival

- Survival was the **same** in both groups
 - 100% in HIV+
 - 99% in HIV – (1x kidney transplant)
 - Survival was better than in any US or European study to date

Summary

- HIV+ group (compared to HIV – group):
 - SURVIVAL IS THE SAME
 - Lower prevalence of hypertension
 - Lower incidence of cardiovascular and cerebrovascular events (? dt lower BP/Hb)
 - Higher incidence of infection-related complications (access; TB)
 - Significantly lower Hb and albumin - ? clinical relevance wrt survival outcome

Summary

- HIV Management
 - Minimal data available in dialysis units
 - ART – 57% were not virally suppressed
 - No standard protocols for monitoring (HIV) viral load and CD4 count
 - Transplant listing rates low

Other studies.....

- Wits Academic Teaching Hospital Complex
 - HJH; CHB.; CMJAH
 - 59 patients from 2001 – 2012
 - 56% female; 93% black, mean age 37yrs
 - Mean follow up 30 months
 - Median CD4 count at initiation of dialysis was 230cells/mm³
 - 63% were on peritoneal dialysis
 - Mortality rate 51% (two thirds were on peritoneal dialysis)
 - Cause of death: fluid overload (38%); peritonitis (31%)

Whats the point?.....

- HIV patients do VERY well on CHD (private sector)
- HIV patients do ?less well on CAPD (state sector) –
>60% of deaths were preventable;
? This be dt lower entry level CD4 counts?
- Is this a reflection of access to health care/socio-economics?
- Can government afford to snub private:public partnerships with the above stats?
- There is NO justification to restrict access to RRT solely on the basis of HIV status
- HIV patients are but 1 of a group that are discriminated against (poor socioeconomic status; elderly, black, women)

Ethically.....

- Can government displace the “dirty” job of turning patients down to clinicians?
- Can government justify an absence of population related increases in dialysis slots?
- Can industry justify the cost of RRT?
- Eligibility criteria for RRT in state?
 - TRANSPLANTABILITY – is this written in stone?
 - Transplant rates are abysmally low
 - Patients wait for much longer
 - Only 19% of private sector patients are listed for Tx
 - Criteria for HIV patients: are we sabotaging them?

Ethically.....

As the patients advocates:

As a medical profession, can we afford
NOT TO SPEAK OUT?

Questions