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Should we stop testing CD4 counts in HIV infected individuals with viral suppression and CD4≥350?

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• Current lack of clinical utility and economic situation
• Recent calls for STOPPING CD4 testing
• Differs from national guidance

• MMC policy (2008): CD4 monitoring annually for patients with a CD4≥350 cells/mm$^3$ AND an undetectable HIV viral load

• We audited CD4 monitoring and its clinical utility over the subsequent three year follow-up period
Methods

• **Patient population:**  
  First 300 consecutive HIV+ patients attending MMC in Oct 2009  
  Viral load undetectable  
  CD4 ≥ 350 cells/mm^3 at baseline visit

• **Outcomes**  
  Frequency of CD4 monitoring  
  Proportion of stable patients with clinical events and CD4 at time of event
Results

• 300 consecutive attenders: 141 (47%) stable HIV+ patients
  Male 82%
  Age (years) 44 (39-49)
  Median follow-up (years) 2.5 (2.1-2.8)
  Median CD4 count:
    Start: 620 (480 - 770)
    End: 670 (550 - 850)
  Median frequency of measurement = 8.4 months (IQR 6.4-9.7)
Results

• 128 (91%) maintained CD4≥350 cells/mm$^3$

• 13 (9%) had CD4<350 cells/mm$^3$ accounting for 3.2% of the total 319 person-years of follow-up
  8 (6%) transient fall
  5 (3%) sustained falls below 350 cells/mm$^3$
    3 had CD4<200 cells/mm$^3$ - all predictable
    2 fluctuated around 350

In NO patient did change in CD4 lead to change in management
Conclusions

• A policy of stopping is better than reduce frequency

• No clinical benefit and significant CD4 declines are predictable by clinical scenarios well recognised to lower CD4 count

• Despite implementation of annual monitoring CD4 measurements were still more frequent

• Reduced cost of CD4 testing by 54% compared to a strategy of testing twice per year
  Savings made but it would save more to stop altogether

• We recommend stopping routine CD4 monitoring in stable individuals as any suggested policy regarding frequency of testing is likely to lead to more frequent monitoring in the clinic setting