

# CASCADE Trial: 24-month Outcomes after Same-day Home-based ART Initiation

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## Background

The CASCADE trial, conducted in Lesotho, Southern Africa, has shown that offering same-day initiation of antiretroviral therapy (ART) to individuals found HIV positive during home-based testing, resulted in a significantly higher share of patients engaged in care and virally suppressed 12 months after the testing campaign. At completion of the trial, all patients not in care were traced and encouraged to attend care. The protocol was amended to allow for a 24 months follow-up of study participants.

## Methods

CASCADE was a randomized clinical trial that assigned individuals, recruited during a home-based HIV testing campaign, to either the offer of same-day ART start (SD) or referral to a nearby clinic for preparatory counseling and ART start after  $\geq 2$  pre-ART clinic visits (usual care, UC). Consenting ART-naïve, HIV-infected individuals,  $\geq 18$  years, were enrolled. Methods and 12 month results have been published previously<sup>[1]</sup>. At 12 months, those not active in care were traced by health workers and encouraged to return to care. At 24 months (range 22-28 months), engagement in care, viral suppression ( $< 100$  copies/mL) and reasons for disengagement were assessed among all trial participants. Trial registration: NCT02692027.

## Poster Number

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## Reference

[1] Labhardt ND *et al.* Effect of offering same-day ART vs usual health facility referral during home-based HIV testing on linkage to care and viral suppression among adults with HIV in Lesotho: The CASCADE randomized clinical trial. *JAMA*, 2018

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## Results

The care-cascade and the status of patients at 24 months are displayed in Figure 1. Of 274 randomized individuals (137 SD, 137 UC), 64% (87/137) in the SD and 48% (66/137) in the UC group were active in care 12 months after testing positive ( $p=0.011$ ), and 50.4% (69/137) vs 34.3% (47/137) had documented viral suppression ( $p=0.007$ ). At 24 months, 64% (88/137) in the SD versus 59% (81/137) in the UC arm were in care ( $p=0.38$ ), and 57% (78/137) vs 54% (74/137) had documented viral suppression ( $p=0.28$ ).

Among those active in care at 12 months, 11% (10/87) and 9% (6/66) were no longer in care at 24 months ( $p=0.63$ ). Among those not in care at 12-month, 22% (11/50) in the SD arm and 30% (21/71) in the UC arm were in care at 24-month ( $p=0.35$ ).

Among those not in care at 24 months, 31% (15/49) and 38% (21/56) had been found through tracing but refused care (Figure 2). Most cited reasons were disbelieving in diagnosis/ART (N=6), discomfort taking medication (5), rejection of any contact with health system (4) and perceived ill-treatment by health professionals (3).

## Conclusions

After tracing of all participants not in care at 12 months, a significant difference was no longer observed between the SD and the UC arm regarding viral suppression and engagement in care at the 24-month follow-up. Both arms remained below the targeted 90% of people living with HIV receiving ART. One third of those not in care refused attending.

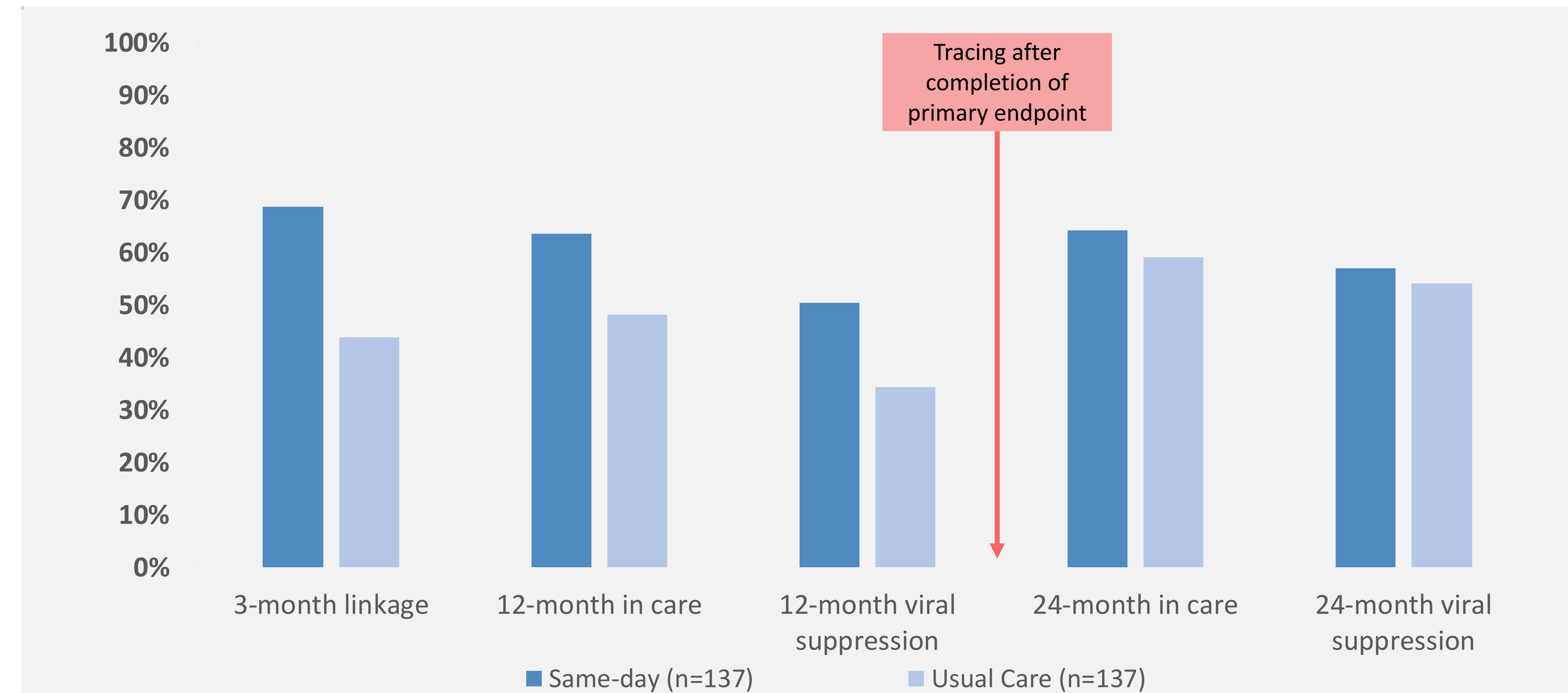


Figure 1: The care-cascade in patients in the same-day and usual care arm

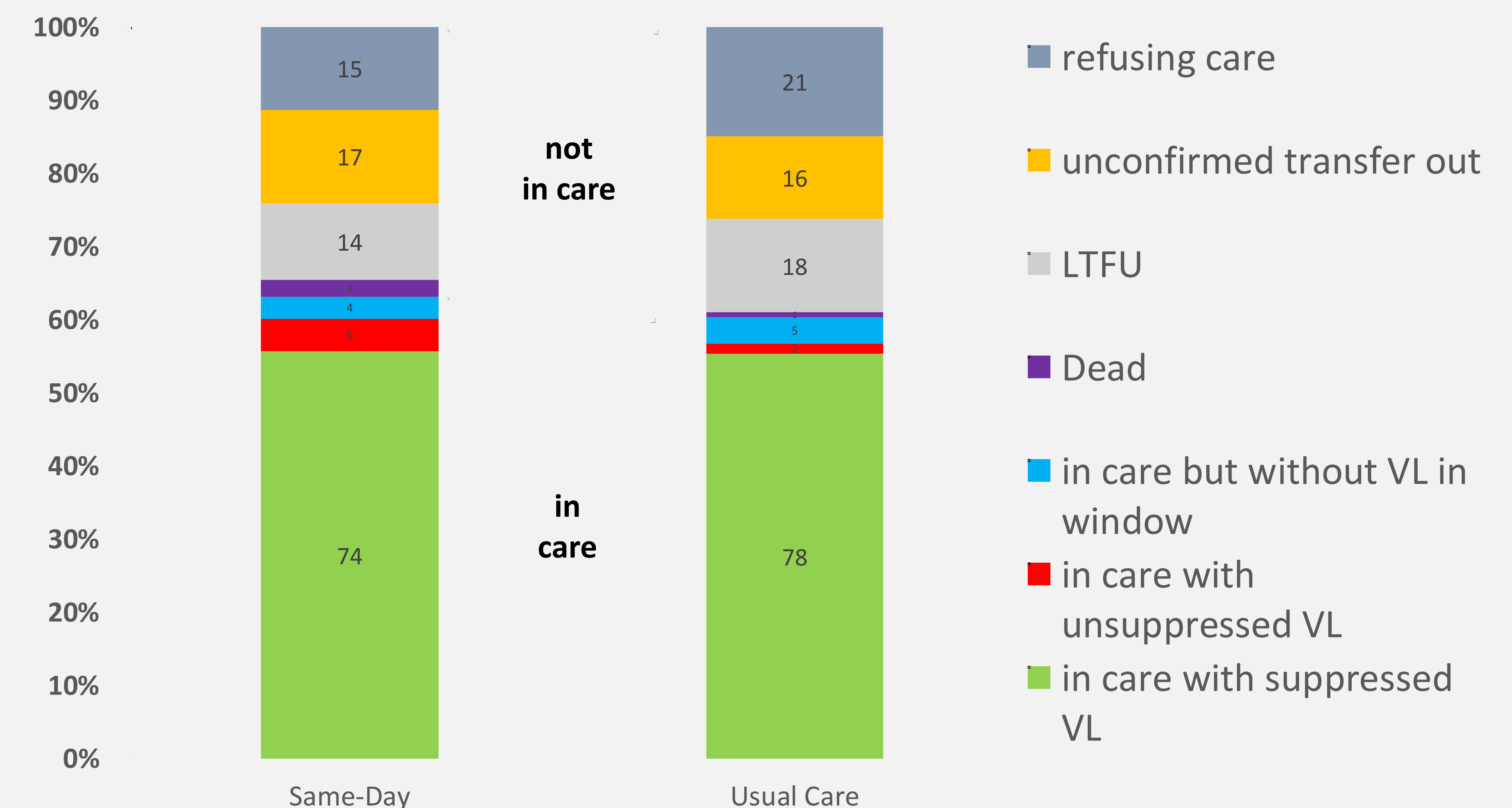


Figure 2: 24-month status of care in the same-day and the usual care arm