DORAVIRINE: SAFETY, TOLERABILITY & EFFICACY IN SOUTH AFRICAN WOMEN ON CONTRACEPTION

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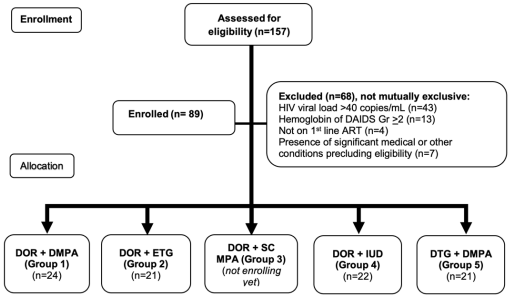
BACKGROUND

- Prior to scale-up of new antiretroviral therapy (ART) for HIV treatment, exploring drug-drug interactions between ART and hormonal contraception is crucial
- EPIC is a parallel group pharmacokinetic study to examine drug-drug interactions between doravirine (DOR)-containing ART (DOR+3TC+TDF) and hormonal contraceptives among women of reproductive potential living with HIV in Johannesburg, South Africa

METHODS

- EPIC began November 2021 and is ongoing
- ≥6-week lead-in period with oral DOR was required after participants switched from their existing ART
  - Viral load (VL) ≤40 copies/mL required for eligibility
- Participants on DOR-containing ART self-selected contraceptive method groups (**Figure 1**):
  - Intramuscular depomedroxyprogesterone acetate (DOR + DMPA; Group 1), 12 weeks of follow-up
  - Etonogestrel implant (DOR + ETG; Group 2), 24 weeks of follow-up
  - Copper intrauterine device (DOR + IUD; Group 4), 24 weeks of follow-up
- Participants on DTG selected DMPA (DTG + DMPA; Group 5)
- We report: 1) early safety (measured by number & severity of adverse events (AE)), 2) tolerability (measured by patient satisfaction & drug adherence), and 3) efficacy (HIV VL ≤40 copies/mL)

Figure 1: Flow diagram of study participants



DOR-containing ART appears ***safe, tolerable,*** **and** ***efficacious*** in maintaining viral suppression among women concomitantly using contraceptives

RESULTS

- Of 157 women screened, 89 have been enrolled (Nov. 2021 through Dec. 2022):
  - Group 1 (n=24), Group 2 (n=21), Group 4 (n=22) & Group 5 (n=21)
  - Common reasons for ineligibility include lack of HIV viral suppression (n=43, 74%) and/or haemoglobin abnormality of grade 2 or higher (n=13; 22%)
  - Majority are aged 26 years or older, have secondary or higher education level, not formally employed, and have 3-5 members living in their household
- Early safety: of all AEs reported to date (n=194), 11 (6%) were attributable to DOR, of which headaches (n=4, 2%) or nausea (n=2, 1%) were most frequent (**Figure 2, Table 1**)
  - All DOR-attributable AEs occurred at grade 1, except for one AE of diarrhoea at grade 2
- Tolerability: among DOR groups, only 1 participant reported ART dissatisfaction, 99% of the times participants were happy to continue it, and ≥90% participants had >76% adherence by pill count
- Efficacy: 52/60 (87%) exiting participants in the DOR groups maintained viral suppression

Figure 2: Total number of adverse events (as per DAIDS grading)

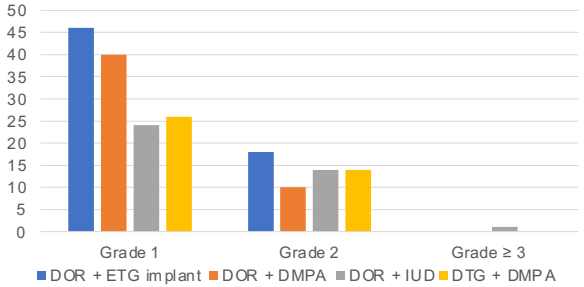


Table 1. Safety, tolerability, and efficacy of doravirine-containing ART when concomitantly used with contraceptive methods, EPIC study, Nov 2021-Dec 2023

	Group 1 (DOR + ETG)	Group 2 (DOR + DMPA)	Group 4 (DOR + IUD)	Group 5 (DTG + DMPA)
Total number of AEs	64	50	40	40
Grading of AEs				
Grade 1	46	40	24	26
Grade 2	18	10	14	14
Grade 3 or higher	0	0	1	0
Total Grade 2+ AEs attributable to DOR	0	1	0	0
ART satisfaction				
Very satisfied	58	60	56	37
Satisfied	63	73	36	61
Not satisfied	1	0	0	0
Not happy with continuing ART	2	2	1	3
Times adherence ≥76%	128/142 (90%)	88/98 (90%)	104/111 (94%)	--
Viral suppression at study exist (<40 c/mL)	17/21 (81%)	18/21 (86%)	17/18 (94%)	18/20 (90%)

CONCLUSIONS

- Switching from first-line ART regimens to DOR-containing ART appears safe, tolerable, and efficacious in maintaining viral suppression in South African women concomitantly using hormonal contraceptives
- These data support the viability of this option for those living in resource-limited settings who are intolerant of or unable to take DTG-containing ART

ADDITIONAL KEY INFORMATION

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