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Oral Presentation – Abstract O153

Once-daily dolutegravir is superior to once-daily darunavir/ritonavir in treatment-naïve HIV-1-positive individuals: 96 week results from FLAMINGO

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Introduction: Dolutegravir (DTG) 50 mg once daily was superior to darunavir/ritonavir (DRV/r) 800 mg/100 mg once daily through Week 48, with 90% vs. 83% of participants achieving HIV RNA 50 c/mL ($p = 0.025$) [1]. We present data through Week 96.

Materials and Methods: FLAMINGO is a multicentre, randomized, open-label, Phase IIIb non-inferiority study, in which HIV-1-positive ART-naïve adults with HIV-1 RNA ≥ 1000 c/mL and no evidence of viral resistance were randomized 1:1 to receive DTG or DRV/r, with investigator-selected backbone NRTIs (TDF/FTC or ABC/3TC). Participants were stratified by screening HIV-1 RNA (≤ 100K c/mL) and NRTI backbone.

Results: A total of 484 adults were randomized and treated; 25% had baseline HIV RNA 100K c/mL. At Week 96, the proportion of participants with HIV RNA 50 c/mL was 80% in the DTG arm vs. 68% in the DRV/r arm (adjusted difference 12.4%; 95% CI 4.7, 20.2%; $p = 0.002$). Secondary analyses supported primary results: per-protocol [(DTG 83% vs. DRV/r 70%), 95% CI 12.9 (5.3, 20.6)] and treatment-related discontinuation = failure [(98% vs. 95%), 95% CI 3.2 (-0.3, 6.7)]. Overall virologic non-response (DTG 8%; DRV/r 12%) and non-response due to other reasons (DTG 12%; DRV/r 21%) occurred less frequently on DTG. As at Week 48, the difference between arms was most pronounced in participants with high baseline viral load (82% vs. 52% response through Week 96) and in the TDF/FTC stratum (79% vs. 64%); consistent responses were seen in the ABC/3TC stratum (82% vs. 75%). Six participants (DTG 2, none post-Week 48; DRV/r 4, two post-Week 48) experienced protocol-defined virologic failure (PDVF; confirmed viral load 200 c/mL on or after Week 24); none had treatment-emergent resistance to study drugs. Most frequent drug-related adverse events (AEs) were diarrhoea, nausea and headache, with diarrhoea significantly more common on DRV/r (24%) than DTG (10%). Significantly more participants had Grade 2 fasting LDL toxicities on DRV/r (22%) vs. DTG (7%), $p < 0.001$; mean changes in creatinine for DTG (~ 0.18 mg/dL) observed at Week 2 were stable through Week 96.

Conclusions: Once-daily DTG was superior to once-daily DRV/r in treatment-naïve HIV-1-positive individuals, with no evidence of emergent resistance to DTG in virologic failure and relatively similar safety profiles for DTG and DRV/r through 96 Weeks.

Reference

1. Clotet B, Feinberg J, van Lunzen J, et al. Once-daily dolutegravir is superior to Darunavir + ritonavir in antiretroviral naïve adults with HIV-1 Infection: 48 week results from the randomised study ING114915. Lancet. Published Online April 1, 2014. http://dx.doi.org/10.1016/S0140-6736(14)60084-2

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