

Darunavir + RTV versus Lopinavir-RTV in Treatment Experienced
TITAN Trial

Darunavir/r versus Lopinavir/r in Treatment-Experienced TITAN: Study Design

Study Design: TITAN

- **Background:** Randomized, controlled, open-label, phase 3 trial to compare the efficacy and safety of ritonavir-boosted darunavir versus lopinavir-ritonavir, both with OBR*, in treatment-experienced, lopinavir-naïve patients with HIV infection
- **Inclusion Criteria (n=595)**
 - Adults ≥18 years
 - HIV RNA ≥500 copies/mL
 - Treatment-experienced, lopinavir naïve
- **Treatment Arms**
 - Darunavir 600 mg BID + RTV 100 mg BID + OBR*
 - Lopinavir/ritonavir (400/100 mg) BID + OBR*

**Darunavir 600 mg BID
+ Ritonavir 100 mg BID
+ OBR**
(n = 298)

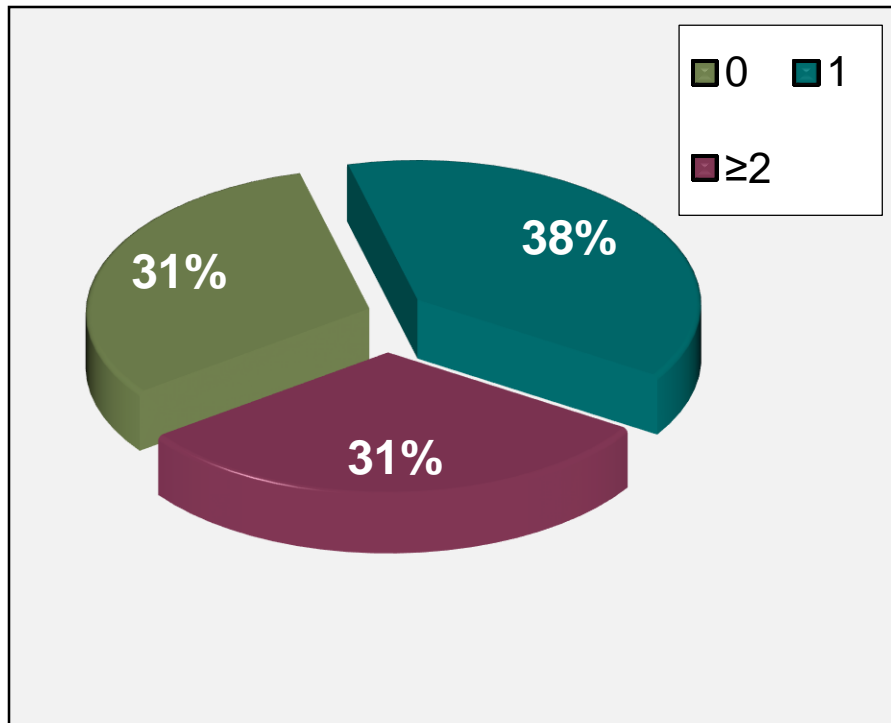
**Lopinavir/ritonavir 400/100 mg BID
+ OBR**
(n = 297)

TITAN = **T**MC114/r **I**n **T**reatment-experienced **p**Atients **N**aïve to lopinavir

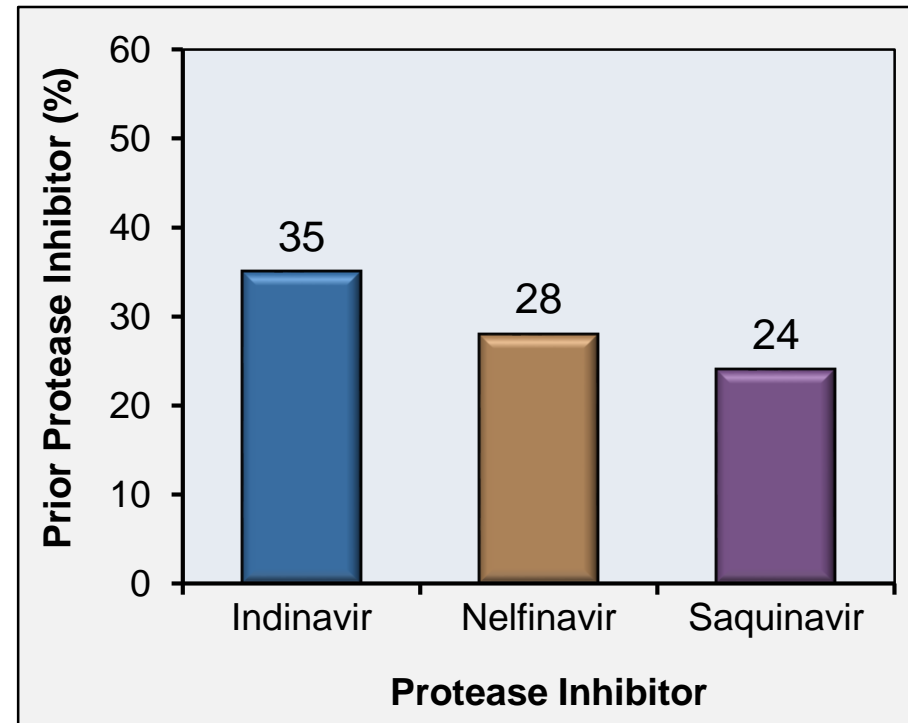
*OBR = Optimized background regimen: ≥2 active antiretroviral agents

Darunavir/r versus Lopinavir/r in Treatment-Experienced TITAN: Study Participant ARV Treatment History

Prior Number of Protease Inhibitors

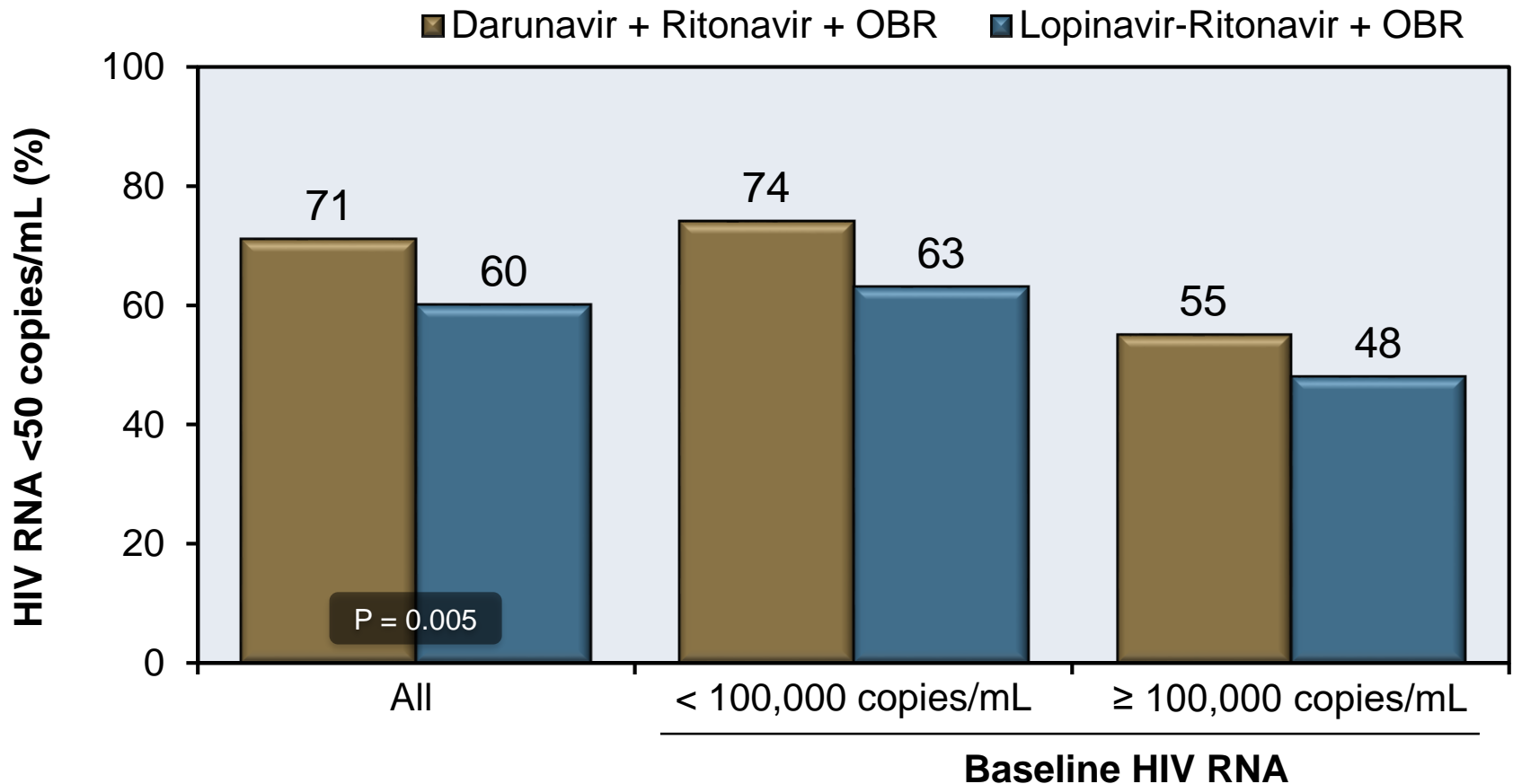


Most Frequently Used Prior PIs



Darunavir/r versus Lopinavir/r in Treatment-Experienced TITAN: Result

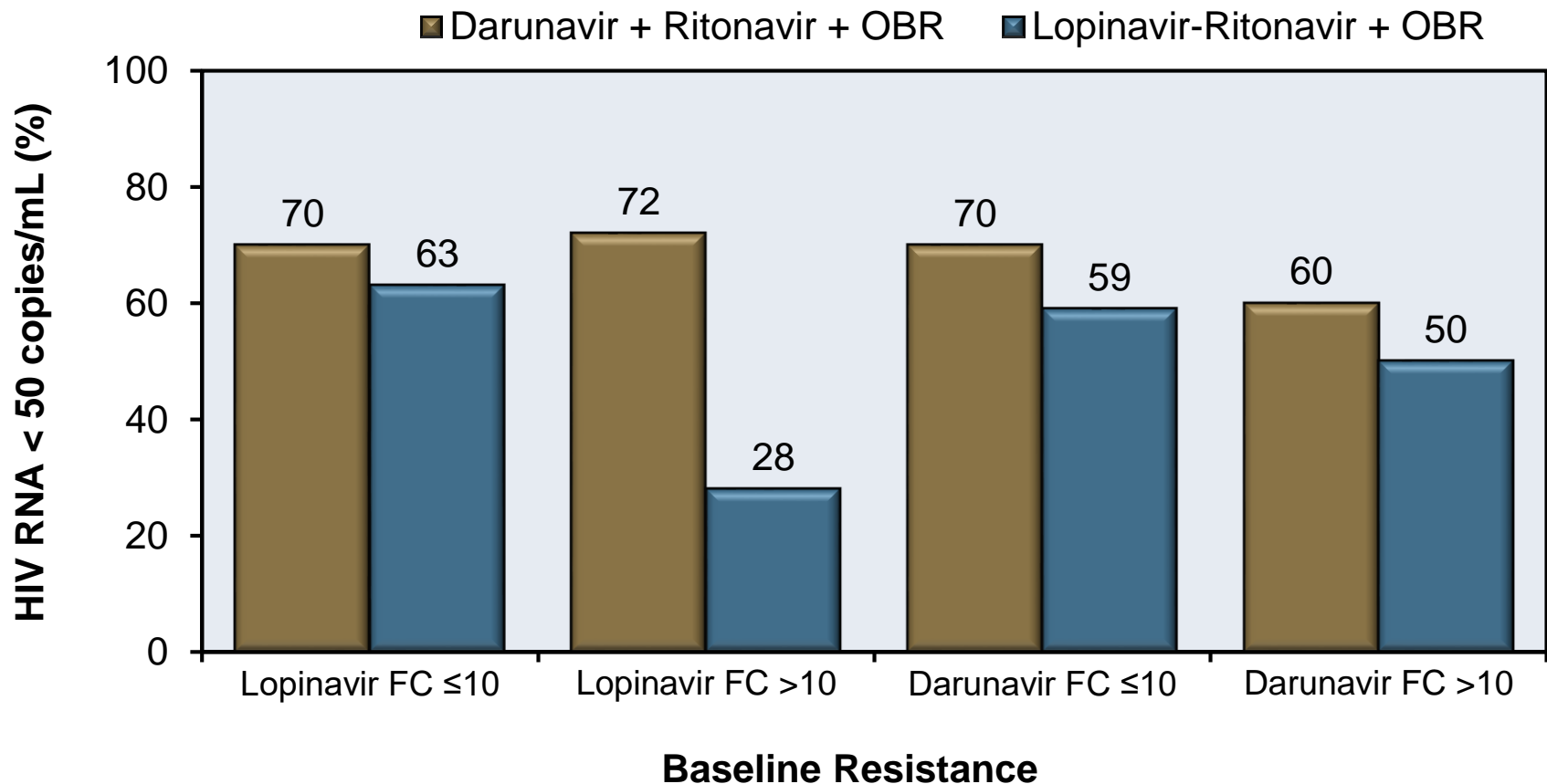
Week 48: Virologic Response (ITT-TLOVR)



Source: Madruga JV, et al. Lancet. 2007;370:49-58.

Darunavir/r versus Lopinavir/r in Treatment-Experienced TITAN: Result

Week 48: Virologic Response, by Baseline PI Resistance (ITT-TLOVR)

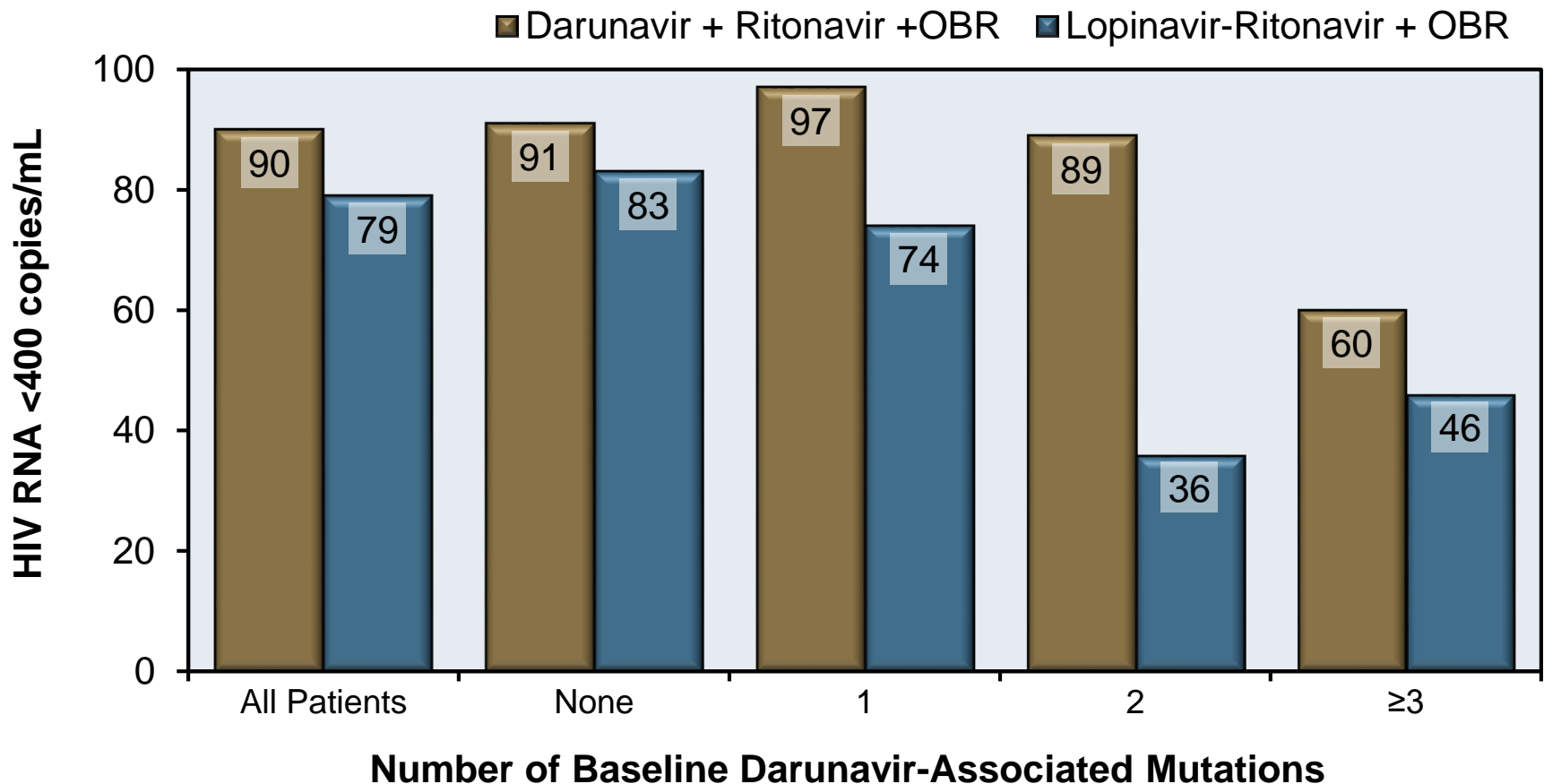


Darunavir/r versus Lopinavir/r in Treatment-Experienced TITAN: Conclusions

Interpretation: “In lopinavir-naïve, treatment-experienced patients, darunavir-ritonavir was non-inferior to lopinavir-ritonavir treatment in terms of our virological endpoint, and should therefore be considered as a treatment option for this population.”

Darunavir/r versus Lopinavir/r in Treatment-Experienced TITAN (Characterization of Virologic Failure): Result

Week 48: Virologic Response, by Baseline Darunavir-Associated RAMs



Darunavir/r versus Lopinavir/r in Treatment-Experienced TITAN (Characterization of Virologic Failure): Conclusions

Conclusion: “In treatment-experienced, LPV-naive patients, the overall virologic failure rate in the DRV/r arm was low and was associated with limited resistance development. These findings showed that the use of DRV/r in earlier lines of treatment was less likely to lead to cross-resistance to other protease inhibitors compared with LPV/r.”

Acknowledgment

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