



The Brazilian Journal of INFECTIOUS DISEASES

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Letter to the Editor

Long-term virologic and immunologic responses on darunavir/ritonavir – containing regimens among highly antiretroviral therapy-experienced patients: 7-year follow-up of a prospective cohort study in São Paulo, Brazil



Dear Editor:

Management of highly antiretroviral therapy (ART)-experienced patients continues to be a challenge, and there are scarce “real-world” data about their long-term virologic and immunologic responses. Darunavir/ritonavir (DRV/r) was included among the antiretroviral drugs available in Brazil in 2008. Since then five Brazilian studies evaluated the effectiveness of salvage therapy, most of them DRV/r-based. In 2013, we published in this journal a single center prospective cohort study where 82.6% of patients achieved HIV RNA <50 copies/mL after 48 weeks of treatment.¹ Other four Brazilian retrospective observational studies were published showing 74.7–84% of patients with HIV RNA <50 copies/mL. Follow-up in all these studies was also limited to 48 weeks.^{2–5} Herein, we report the results alongside seven years of our cohort in São Paulo. In line with the original report, non-completers were considered as failures in the analysis of virologic response. In 2016, seven years after

initiation salvage therapy with DRV/r, 71.7% of patients had HIV RNA <50 copies/mL and their CD4 cell counts increased by a mean of 353 cells/mm³. Thirty-seven (40.2%) patients had CD4 cell counts above 500 cells/mm³. Fig. 1 shows the annual results of viral loads and CD4 cell counts in this cohort. Despite the decrease in the rate of viral suppression after the third year of follow-up, high rates of viral suppression (about 70%) were still maintained afterwards. Interestingly, the increase of CD4 cell counts was steady and persistent throughout follow-up. Among patients on the 7th year of follow-up ($n=72$), 71 (98.6%) were receiving DRV/r, and 62 (86.1%) were given raltegravir in addition to DRV/r as part of their salvage regimen. Only 18 (25%) patients maintained the baseline regimen, 30 (41.7%) patients needed to discontinue at least one antiretroviral, and 32 (44.4%) patients needed to switch one or more components of their regimen. Our results showed that long-term benefit of ART is possible in middle-income countries, in spite of continuous and new challenges.

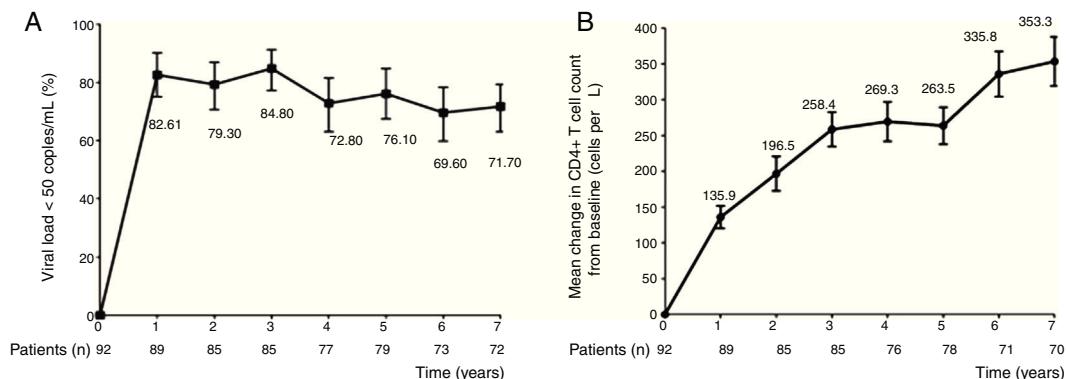


Fig. 1 – Long-term virologic (A) and immunologic (B) responses on darunavir/ritonavir – containing regimens among highly ART-experienced patients.

Conflicts of interest

JEV has received honoraria for lectures and travel grants from Janssen-Cilag and Merck Sharp & Dohme. Other authors have no conflicts of interest.

REFERENCES

1. Vidal JE, Song AT, Matos ML, et al. High rate of virologic suppression with darunavir/ritonavir plus optimized background therapy among highly antiretroviral-experienced HIV-infected patients: results of a prospective cohort study in São Paulo, Brazil. *Braz J Infect Dis.* 2013;17:41–7.
2. Schöntag M, Tenore S, Ferreira P, Guinoza J, Diaz R. High viral load, previous fosamprenavir use and more recent HIV diagnosis correlate with darunavir failure in salvage therapy in São Paulo, Brazil. *J Int AIDS Soc.* 2012;15 Suppl. 4:18269.
3. Biscione F, Westin MR, Ribeiro KM, et al. Virologic and immunologic effectiveness at 48 weeks of darunavir/ritonavir-based regimens in treatment-experienced persons living with HIV1 infection in clinical practice: a multicenter Brazilian cohort. *J Int Assoc Provid AIDS Care.* 2014;13 Suppl. 1:63–8.
4. Ribeiro KM, Biscione FM, Westin MR, Machado DP, Greco DB, Tupinambás U. Virologic and immunologic effectiveness of

darunavir-based salvage therapy in HIV-1-infected adults in a Brazilian clinical practice setting: results of a multicenter and retrospective cohort study. *Braz J Infect Dis.* 2014;18 Suppl. 1:1–7.

5. Brites C, Nóbrega I, Netto EM. Use of new antiretroviral drugs and classes in Bahia, Brazil: a real life experience on salvage therapy of AIDS patients. *Braz J Infect Dis.* 2015;19 Suppl. 5:529–32.

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Received 27 June 2017

Accepted 30 July 2017

1413-8670/

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<http://dx.doi.org/10.1016/j.bjid.2017.07.005>

Available online 29 September 2017