Use of Maraviroc in HIV-1-Infected Paediatric Patients in Clinical Practice

C. Palladino¹, ML. Navarro Gomez², P. Soler-Palacin³, M. Gonzales-Tomè⁴, S. J. de Ory⁵, M. Espiau³,JA. León-Leal⁶, C. Fortuny⁷, V. Briz⁸
the CoRISpe working group

¹ Research Institute for Medicines (Instituto de Farmacología de los Servicios de Salud de Alicante), Faculty of Pharmacy, University of Alicante, Alicante, Spain; ² Servicio de Pediatría, Hospital General Universitario Gregorio Marañón, Madrid, Spain; ³ Instituto de Medicina Molecular de Lisboa (Instituto de Medicina Molecular), Lisbon, Portugal; ⁴ Hospital Sant Joan de Déu, Barcelona, Barcelona, Spain; ⁵ Hospital Sant Joan de Déu, Barcelona, Barcelona, Spain; ⁶ Hospital de la Santa Creu i Sant Pau, Barcelona, Barcelona, Spain; ⁷ Hospital Universitario de Canarias, Santa Cruz de Tenerife, Tenerife, Spain; ⁸ Hospital Universitario de Canarias, Santa Cruz de Tenerife, Tenerife, Spain.

Background

New potent therapeutic options are needed for HIV-1–infected paediatric patients who are treatment experienced and harbour highly drug-resistant viruses.

Maraviroc (MVC), the first CCR5-antagonist approved to treat adults with R5-variants, is not yet authorised in paediatric patients (1-3).

MVC is currently under evaluation in an open-label, non-comparative trial (A4001031) in CCR5–tropic HIV-1–infected antiretroviral therapy (ART)–experienced patients aged 2-17 years.

Objective

To evaluate the effectiveness, safety and tolerability of MVC-based salvage therapy outside clinical trials in HIV-1–vertically infected children (2-12yrs old) and adolescents (13-19yrs old).

Patients & Methods

Multicenter retrospective study of 20 HIV-1–vertically-infected paediatric patients (11yrs) ART–experienced and who initiated a MVC-based therapy.

Individuals were monitored from baseline (MVC initiation date) until the administrative censoring date (May 31, 2014) or MVC discontinuation if occurred.

Immunological, virological and clinical status at baseline and during follow-up was analysed every 3-6 months.

Viral tropism was determined by phenotypic assays (Trofile and Trofile®) or by the genotypic assay geno2pheno.

MVC was administered in tablet formulation and doses ranged from 100-300 mg twice daily for children and 150-600 mg twice daily for adolescents, according to body weight and co-medications.

Conclusions

MVC is useful as a salvage therapy in paediatric patients with confirmed R5 tropism and extensive resistance profile, leading to maintained virological suppression in up to 88% of the study population.

MVC appears to have a favourable safety profile. The likelihood of the treatment’s success might increase when MVC is combined with other active drugs.

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References

4. Co-responding authors: veronica.bri@isciii.es claudiapalladino@ff.ult.pt