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TITLE

ABX464 decreases total HIV DNA in PBMC´s when administered during 28 days to HIV-infected patients who are virologically suppressed

PRESENTER

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Background: ABX464, the first drug candidate from Abivax"s proprietary antiviral platform, inhibits HIV replication through a novel mechanism (i.e. the modulation of RNA splicing) which may have a sustained antiviral effect as shown in preclinical testing. In an earlier Phase IIa study, the results of which were presented at CROI 2016, ABX464 showed dose-dependent viral load reductions in treatment-naïve HIV-subjects and a good safety and tolerability profile.
Methods: Multi-center, randomized, double-blind, placebo-controlled Phase IIa trial in Spain, Belgium and France. Subjects with VL< 50 copies/mL under boosted darunavir monotherapy for at least 8 weeks prior to enrolment were randomized (3:1) to add ABX464 QD or placebo to boosted darunavir monotherapy during 28 days. At the end of such 28 days, all treatments were interrupted. Viral load was regularly measured and ART was reinstalled when viral load was > 1000 copies/ml. Safety was the primary endpoint of the trial. Blood samples (D0 and D28) were taken to assess the potential effect of ABX464 on the HIV reservoir (Total HIV DNA in PBMC"s). A significant reduction HIV reservoir (i.e. Responders) was defined as subjects who had a minimum reduction of 50 copies and a greater than 25% decrease in total HIV DNA copies.
Results: 30 subjects (29 males, 1 female) were included. They had been infected with HIV-1 for 10.2 years and on ART for 5.6 years. ABX464 was well tolerated. There were no serious adverse events reported in the treatment group. Mean time to viral load rebound was 14 days (placebo) and 13 days (ABX464). Amongst subjects with validated viral DNA results (4 placebo and 15 ABX464-treated subjects), an important reduction in viral DNA was observed in 8/15 (53%) ABX464 treated subjects (mean change of -38%, ranging from -27% to -67% and a mean decrease of 185 copies [-434; -82] / Mio PBMC"s. No responders were observed in the placebo group.
Conclusions: This is the first time we see a signal with any therapeutic candidate that it may be possible to reduce HIV reservoirs in patients. Further clinical trials with longer treatment duration are needed to further understand the mechanisms and implications of these findings.

More information