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# Biometra seminars

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# T CELL HOMEOSTATIC IMBALANCE IN PLACENTAS FROM WOMEN WITH HIV IN THE ABSENCE OF VERTICAL TRANSMISSION


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Implementation of universal antiretroviral therapy (ART) has significantly lowered vertical transmission rates but has also increased numbers of HIV-exposed uninfected children (HEU), who remain vulnerable to morbidities. Here, we investigated whether T cell alterations in the placenta contribute to altered immune status in HEU. We analyzed different T cell subsets from term placenta decidua and villous tissue and paired cord blood from pregnant women with HIV (PWH) who initiated ART late in pregnancy with pregnant women not living with HIV (PWNH). Placentae from PWH showed inverted CD4:CD8 ratios and higher proportions of tissue resident CD8+ T cells in villous tissue relative to control placentas. We examined the origin of these cells, memory status and how specific T regulatory cells were enriched in placentas from PWH. Overall, T cell homeostatic imbalance in PWH is reflected in the placenta, which may be a causal link between HIV-induced maternal immune changes during gestation and altered immunity in newborn infants in the absence of vertical transmission.


The seminar will be online only: scan **this** or click **HERE** to join the meeting.

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