Methods This was a retrospective study on WLWH attending HIV Clinic in Modena since 1996. Only cisgender women considered. Data on follow-up status according to ethnicity were gathered: women not in active follow-up(considered as the presence of at least one visit after 1st Jan 2023) or without any notion about transfer to other centre were considered lost to follow-up. The two prevalent ethnic groups of WLWH (Caucasian and African) in active follow-up were compared, using Fisher's exact test and Wilcoxon-Mann-Whitney for categorical and continuous variables, respectively. Virological failure(VF) was considered if HIV RNA was >200 copies/ml while on antiretroviral therapy and/or absence of clinical visit for more than 18 months during follow-up.

Results 962 women had at least one access in HIV Clinic since 1996: median age at HIV diagnosis 29.6(IQR 18.5-52.2) years, 19.4% with AIDS, median baseline CD4 cell count 406(35-1167) cells/mmc; 67.6% were Caucasian, 28% African, 3% South-American and 1.4% Asiatic. Figure 1 describes the follow-up status of the population. Among women in active follow-up, 368(72%) and 213(24%) were Caucasian and African, respectively. Characteristics of those two groups are described in table 1. African WLWH had higher number of VF(p=0.021) and they had lower CD4 cell count and CD4/CD8 ratio at the last available visit than Caucasian women. They were therefore more frequently on threedrug regimen(80.5% vs 46.5%, p<0.001), often TAF-based (63.4% vs 38.6%, p<0.001) but less frequently INSTI-based (51.2% vs 74.5%, p>0.001). While Caucasian WLWH were more frequently smokers(39.9% vs 5.7%, p<0.001) and had dyslipidemia(70% vs 49%, p>0.001), African women had higher BMI(median 28 [IQR 21-36] vs 32 [18-33] Kg/m2, p<0.001) and more frequently diabetes(15.4% vs 7.1%, p=0.005). The higher prevalence of osteoporosis, menopause and cancer among Caucasian women could be confounded by the related missing data in African WLWH.

Conclusion African WLWH represent a quarter of the female population in Modena, characterized by a high rate of lack of adherence to treatment and clinical visit. Moreover, obesity and diabetes were the two major metabolic problems in this population. That led to multiple vicious circles in the management of these WLWH: the more frequent use of high genetic barrier antiretroviral regimens, not often metabolic friendly; the difficulties in comorbidities management; the low rate of screening for cancer and comorbidities. More efforts are needed to fulfil the gap in African population, taking into consideration cultural, social and economic determinants and adopting different retention in care strategies.

## Highlighting the diversity of people living with HIV

OC-69 PREGNANT WOMEN LIVING WITH HIV: THE EXPERIENCE OF IRCCS SAN GERARDO DEI TINTORI

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Background Describing delivery mode trends, pregnancy outcomes, and the rationale behind the continued use of cesarean section (CS) in women living with HIV (WLWH) is important for optimizing maternal and neonatal health.

Materials and methods We conducted a retrospective study at IRCCS San Gerardo of Monza to analyze pregnancy outcomes

Abstract OC-69 Table 1 Characteristics of women in follow up at our HIV clinic who experienced one or more pregnancies

Characteristics of women	N=63
Nationality, n (%)	
Italian	23 (36.5)
African	23 (36.5)
Eastern European	9 (14.3)
Central and South American	7 (11.1)
Western European	1 (1.6)
Risk factor for HIV acquisition, n (%)	
Heterosexual intercourses	54 (85.7)
Mother-to-child transmission	5 (7.9)
Needle sharing for injectable drug use	3 (4.8)
Undetermined	1 (1.6)
Number of pregnancies, n (%)	
1	63 (79.7)
2	15 (19)
3	1 (1.3)
Age at first pregnancy, median (IQR)	30 (28-34)
Age at HIV diagnosis, median (IQR)	28 (25-30)
CD4+ nadir (cells/µL), median (IQR)	397 (202-596)
Previous AIDS defining illness, n (%)	3 (4.7)
Diagnosis of HIV infection during pregnancy, n (%)	20 (31.6)

of all WLWH who sought care from 2008 onwards. We collected demographic data, immunovirological parameters and antiretroviral (ARV) treatment, delivery mode and obstetric management from clinical records. Pregnancies were divided in 3 groups based on the year of delivery: 2009–2013 (before VD was considered an option), 2014–2018 (early adoption period of VD) and 2019-today (late period).

Results Seventy-nine pregnancies were observed in 63 WLWH, described in table 1. Most women were non-Italian (63.5%) and sexual intercourse was the most common risk factor for HIV acquisition (85.7%). In 20 women (31.8%), HIV infection was diagnosed during prenatal screening.

As shown in table 2, 49 out of 79 pregnancies (64.6%) occurred in women already treated with ARV at conception; the proportion of these women significantly increased across time (chi-square for trend <0.001), consistently with the adoption of universal ARV initiation.

Between 2009 and 2013, during pregnancy, protease inhibitors were the most commonly prescribed drug in combination with nucleoside reverse transcriptase inhibitors (90%), while in the subsequent period there was an increased use of nonnucleoside and integrase inhibitors; 19 pregnancies (24%) required a later change in the ARV regimen (mainly raltegravir add-on for blips).

Most women (74/79) obtained HIV-RNA<50 cp/ml at delivery. Time to first HIV-RNA<50 cp/ml reduced from a median of 144 days before 2013 to 0 days after 2018; the median proportion of time spent in pregnancy with HIV-RNA<50 cp/ml increased from 44% (2009–2013) to 71.5% (2014–2018) to 100% (2019–2023) (Kruskal-Wallis P<0.001).

Before 2013, all women underwent CS, as recommended by national guidelines (GL) at that time. Since 2014, 30 women had a VD (50.9%), 19 (32.2%) had a CS due to obstetric indications, and only 8 (13.6%) had a CS related to HIV infection. After 2018, no women underwent CS because of HIV, but the proportion of CS remained high (42%). None of the infants acquired HIV.

Most women were still on active follow up (FU) 1 year post-delivery (84.8%); differences in viral undetectability are explained by changes in GL indications to use of ARV.

Conclusions Our study shows the changes regarding pregnant WLWH management. It is reassuring that most women reached delivery with undetectable viral load and maintained regular FU. Changes in ARV GL were associated with earlier viral suppression throughout pregnancy. VD was promptly implemented following GL changes, but the rate of CS remained higher than that of the general population, suggesting the need of further investigation to better understand the underlying reasons.

Abstract OC-69 Table 2 Characteristics of the pregnancies observed at our clinic

	Overall	2009-2013	2014-2018	2019-2024
Characteristics of pregnancies	(N=79)	(N=20)	(N=35)	(N=24)
ARV regimen at conception, n (%)				
None	30 (40)	12 (60)	17 (48.6)	1 (4.2)
Yes				
NRTI + PI	16 (20.2)	8 (40)	8 (22.9)	0 (0)
NRTI + NNRTI	18 (22.8)	0 (0)	8 (22.9)	10 (41.7)
NRTI + INI	12 (15.2)	0 (0)	2 (5.7)	10 (41.7)
Other (PI + INI)	3 (3.8)	0 (0)	0 (0)	3 (12.5)
ARV regimen during pregnancy, n (%)				
2NRTI+PI	46 (58.2)	19 (95)	24 (68.6)	3 (12.5)
2NRTI+NNRTI	19 (24)	1 (5)	8 (22.9)	10 (41.7)
2NRTI+INI	8 (10.1)	0 (0)	0 (0)	8 (33.3)
Other (PI+INI +/- NRTI)	7 (8.9)	0 (0)	3 (8.6)	3 (12.5)
ARV change during pregnancy, n (%)	19 (24)	3 (15)	14 (40)	2 (8.3)
HIV-RNA at delivery, n (%)				
<50 cp/ml	74 (93.7)	17 (85.0)	34 (97.1)	23 (95.9)
≥50 cp/ml	3 (3.9)	3 (15.0)	0 (0)	0 (0)
Unknown (transferred out)	2 (2.5)	0 (0)	1 (2.9)	1 (4.2)
Time to HIV-RNA <50 cp/ml, days (Median [IQR])	0 (0-148.5)	144 (0-191)	6 (0-154.5)	0 (0-0)
Percentage of time with HIV-RNA <50 cp/ml	80.3	44.4	71.6	100
(Median [IQR])	(38.4-100)	(12.3-89.2)	(24.1-100)	(78-100)
Mode of delivery, n (%)				
Caesarean section, per ID indication	26 (32.9)	18 (90)	8 (22.9)	0 (0)
Caesarean section, per Ob indication	19 (24.1)	0 (0)	9 (25.7)	10 (41.7)