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SUPPRESSIVE ART ASSOCIATED WITH EFFECTIVE TREATMENT OF CERVICAL PRECANCER

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BACKGROUND

It is uncertain what effect suppressive antiretroviral therapy (HIV-RNA<50 copies/mL) has on the results of treatment of cervical intraepithelial neoplasia grade 2 or worse (CIN2+) among women living with HIV (WLWH).

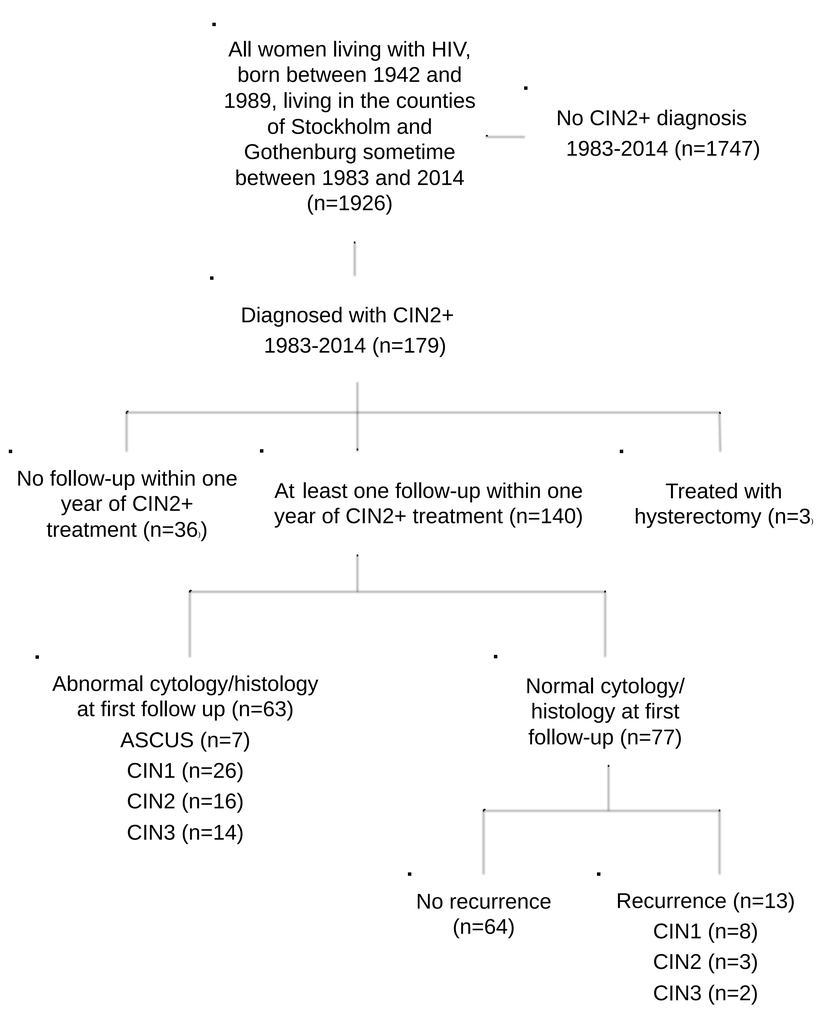
AIM: To assess predictors of effective treatment of CIN2+ among women living with and without HIV

DESIGN: Population-based cohort study with follow-up between 1983 and 2015.

METHODS

- Registry linking of the **Swedish National HIV Registry**, the **Swedish Population Registry** and **the Swedish National Cervical Screening Registry.**
- All women in Stockholm and Gothenburg counties (Sweden) living with HIV and diagnosed with CIN2+ sometime between 1983 and 2014 were identified (n=179).
- For each WLWH, two HIV-negative women resident in the same counties and matched for country of birth, diagnosed with CIN2+, were chosen as controls.
- **Treatment failure** was defined as the presence of 1) ASCUS+ or 2) CIN2+, at initial follow-up.
- **Recurrence** was defined as the presence of CIN1+ subsequent to an initial normal follow-up.

Selection of study population living with HIV



CONCLUSIONS

- **Suppressive ART and CD4 counts ≥500** are both **associated with an effective treatment of CIN2+** among women living with HIV.
- An **early HIV diagnosis,** immediate **ART** and **continuum of care** are all essential to reach successful CIN2+ treatment.

RESULTS

- WLWH were **three times** more likely to have **treatment failure** (odds ratio (OR) for ASCUS+: 3.3 [95% CI 2.1-5.2] OR for CIN2+: 3.7 [95% CI 2.0-6.8]) than HIV-negative women.
- WLWH **were five times** more likely **to recur** (hazard ratio 5.0 [95% CI 2.1-11.6] than HIV-negative women.
- **Suppressive ART** was associated with **reduced odds of treatment failure** (OR for ASCUS+: 0.4 [95% CI 0.2-0.8] OR for CIN2+: 0.3 [95% CI 0.1-0.8]).
- **Immunosuppression** (CD4 count <200 cells/µL) **associated strongly with treatment failure** (compared to CD4 count ≥500: OR for ASCUS+: 8.9 [95% CI 2.9-27.7], OR for CIN2+: 8.5 [95%CI 2.3-30.7]).

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