

Glandular Lesions and AIS

A systematic comparison

L. Henes¹, E. Mann², C. Hirchenhain³, A. Kentner⁴, M. Henes¹, V. Küppers⁵,
Participating centres in the AG-CPC registry study

¹Department Of Women's Health - Tuebingen(Germany) , ²University Women's Hospital - Rostock(Germany),
³University Women's Hospital - Dresden(Germany), ⁴Helios Hospital - Erfurt(Germany),
⁵Specialist Practice For Gynecology And Obstetrics - Duesseldorf(Germany)

Objective:

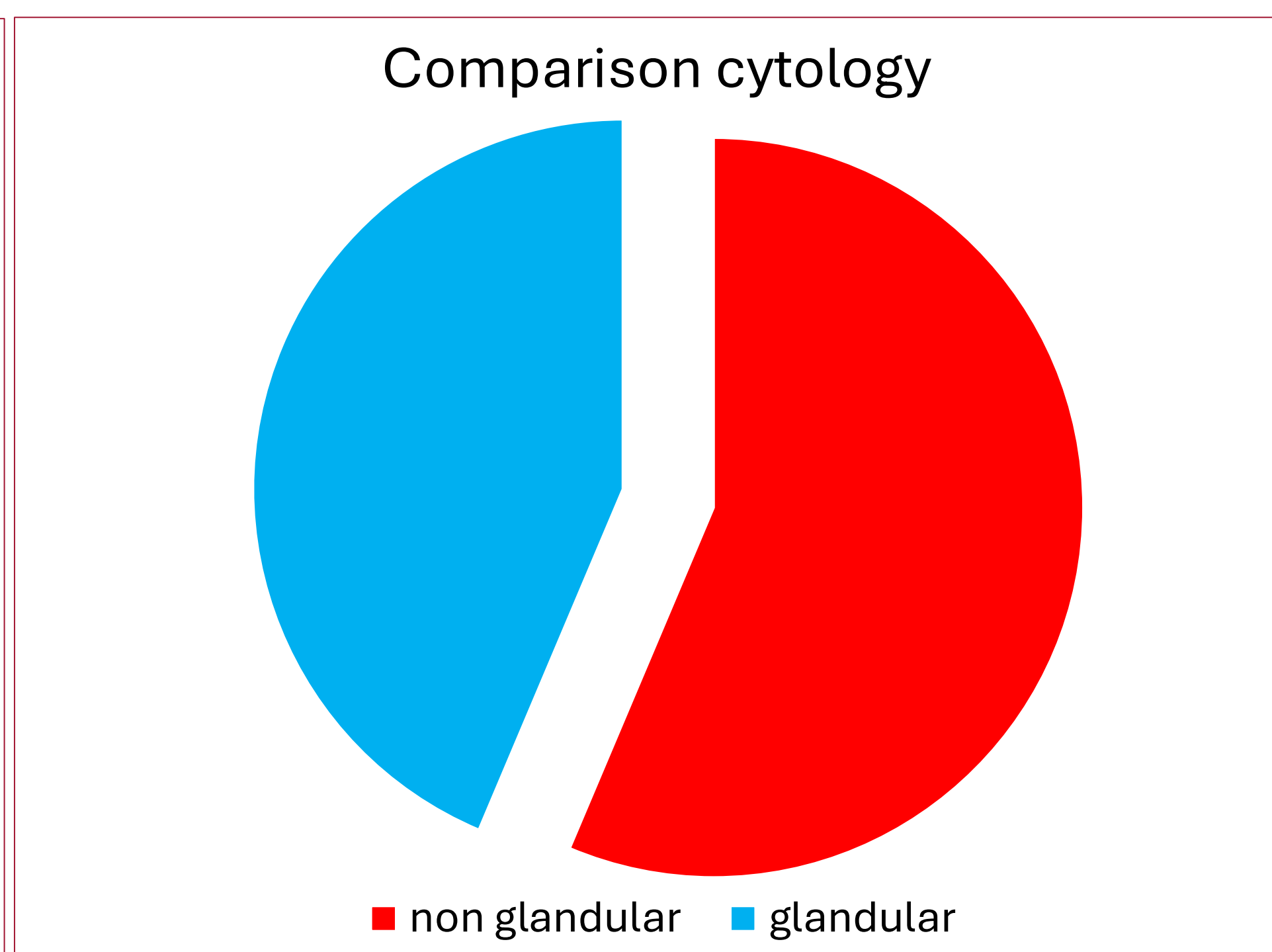
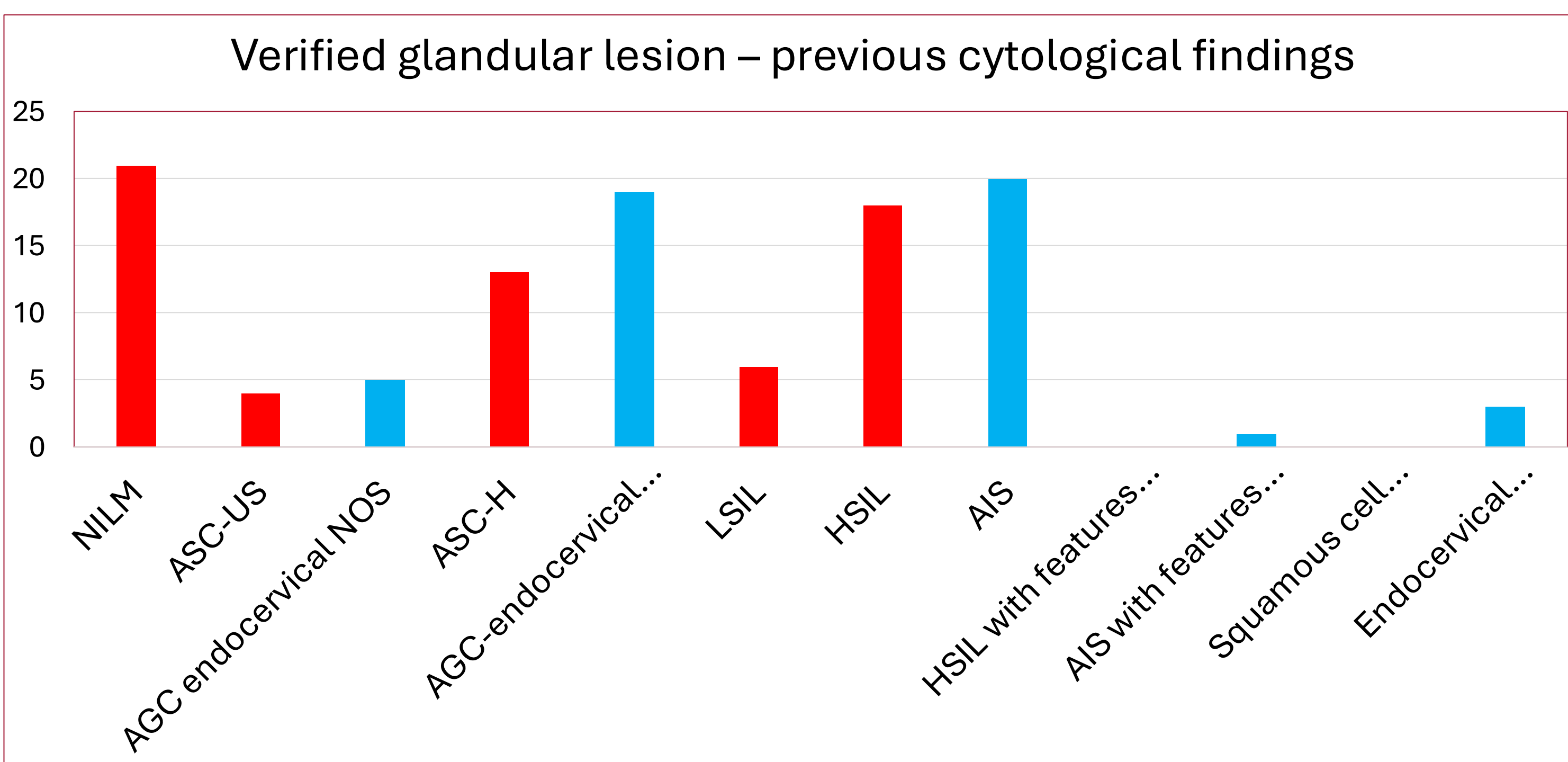
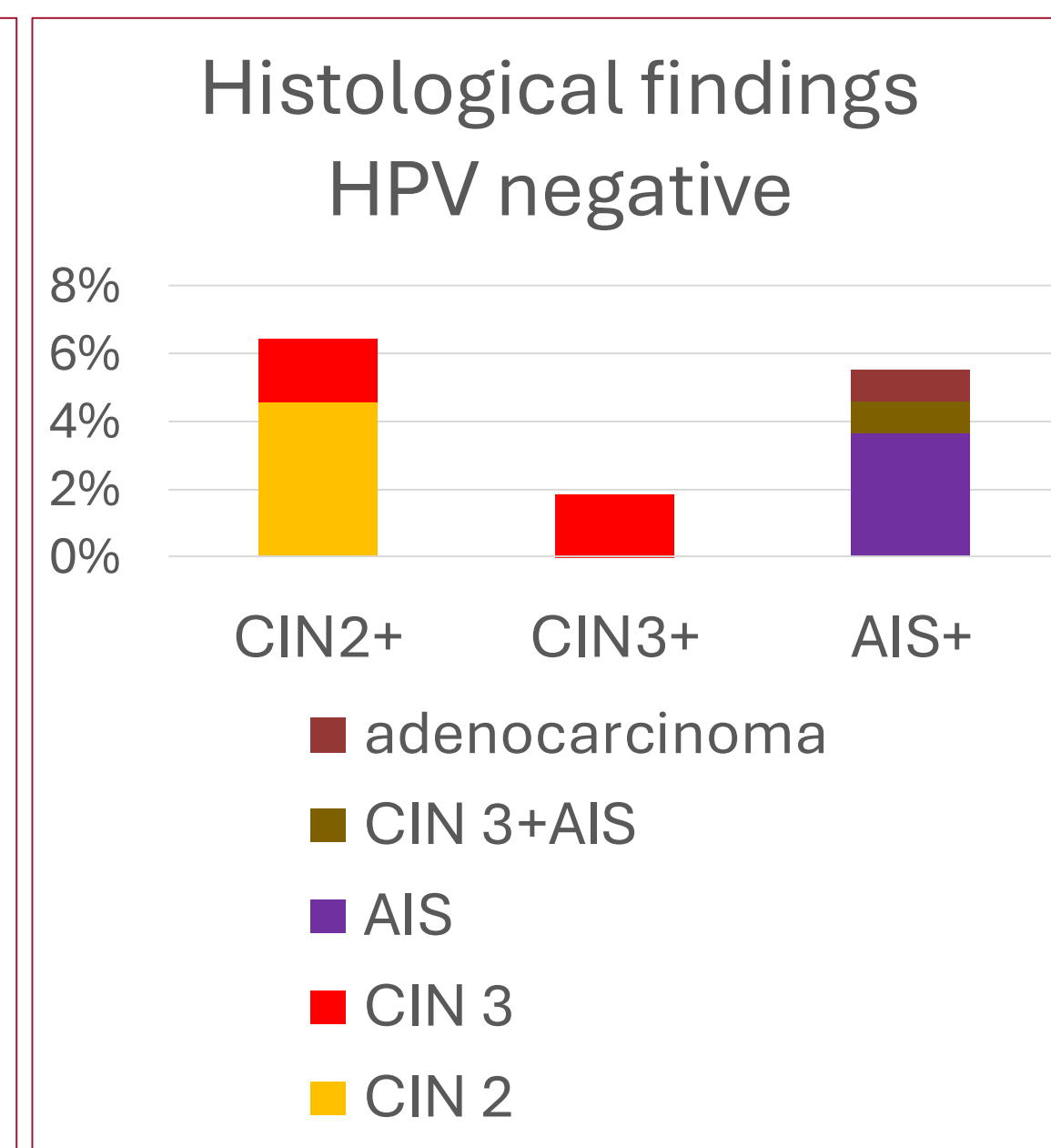
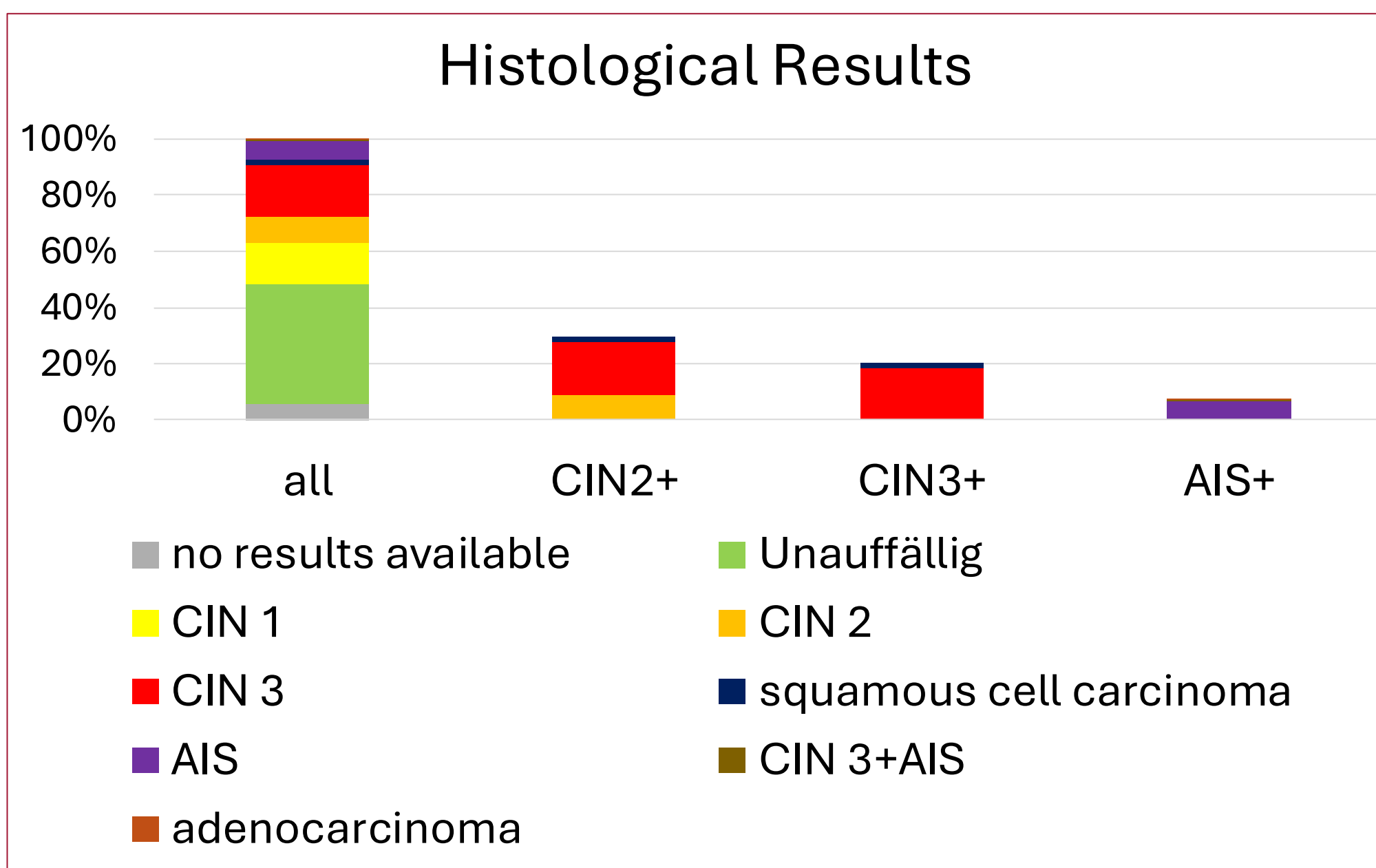
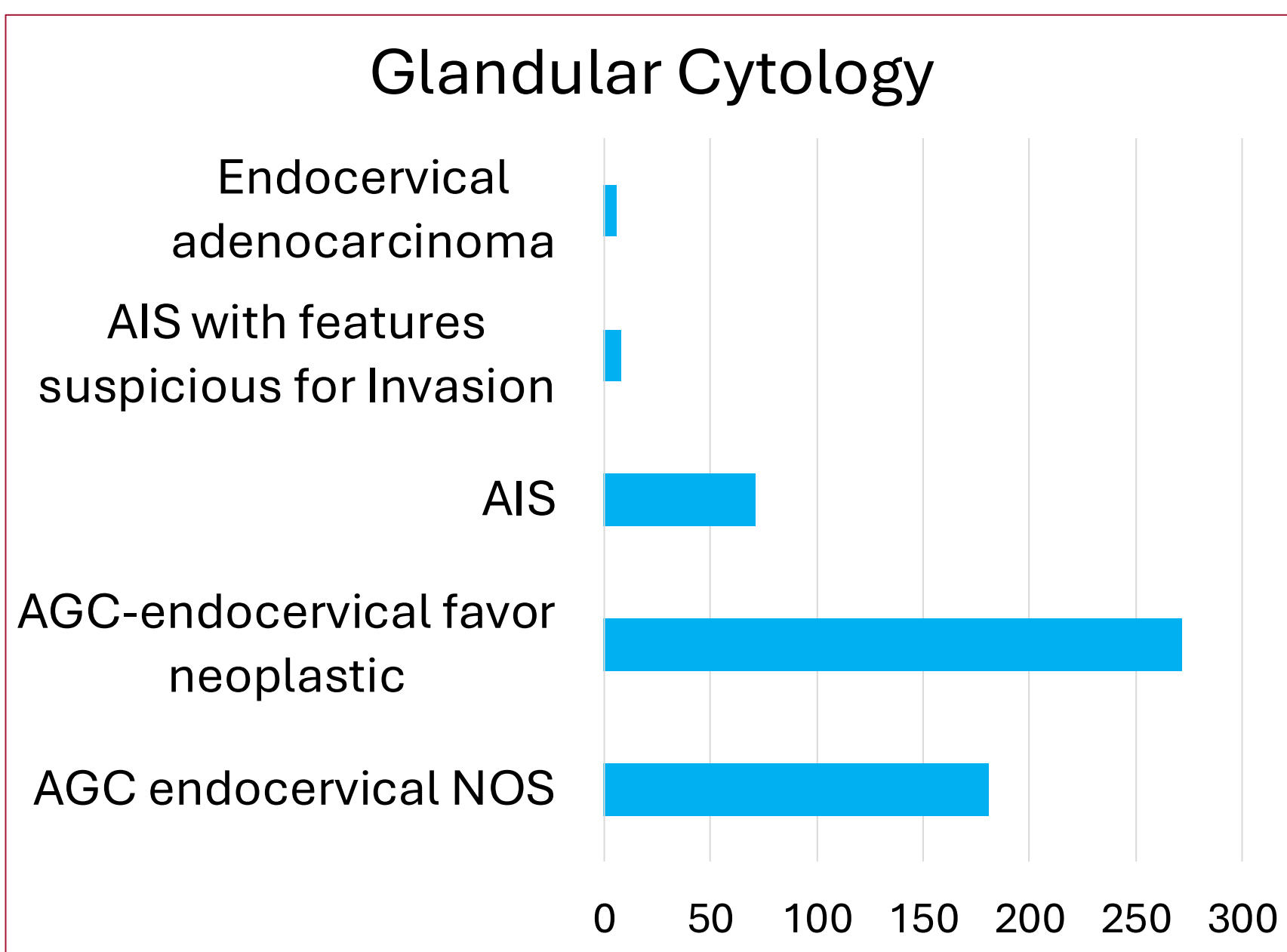
An estimated 10-20% of the 500,000 cervical cancer cases are adenocarcinomas with adenocarcinoma in situ (AIS) as a preliminary stage. Compared to others, the AIS shows an increasing incidence highlighting the need for improved screening parameters. Since colposcopic criterias are unspecific, the aim of this evaluation was to determine the correlation between atypical glandular cytology and the rate of AIS detection and vice versa.

Methods:

All patients presenting at one of 15 study centres between July 2020 and April 2026, were included according to the German diagnostic algorithm. Glandular cytologies (AGC endocervical NOS; AGC endocervical favor neoplastic; AIS; AIS with features suspicious for invasion; Endocervical adenocarcinoma) were examined for CIN2+, CIN 3+ and AIS+ (including adenocarcinomas) rates, followed by a comparison of sampling (cervical biopsy [CB] vs. endocervical curettage [ECC]). The AIS-detected group was further examined for the frequency of glandular cytologies.

Results:

- During the period mentioned above 544 patients were included with an abnormal glandular cytology with AGC endocervical favor neoplastic being the most common. 71,3% of these patients were HPV High Risk positive, 20% negative and for 47, the HPV status was unknown.
 - In this group, the CIN2+ (29.4%) and CIN3+ (20.4%) rates were significantly higher compared to the AIS+ rate (7.4%) (p<0.001).
 - No significant difference was found in the detection rate of AIS+ when comparing the sampling methods CB vs ECC (p>0.4). In comparison there was a significantly higher CIN2+ detection rate using a cervical biopsy (p<0.001).
 - Within the HPV negative group, the CIN2+ and CIN3+ rate dropped significantly (6.4%, 1.8%) while the AIS+ rate showed no significant change (5.5% including one case of adenocarcinoma).
- Of the 110 patients diagnosed with a histologically verified glandular lesion, 89.1% tested positive for HPV High Risk. The most common cytological findings were NILM.
 - There were more non glandular cytological results overall (56.4%) with NILM being observed in 19.1% of the cases.
 - The most common glandular cytology was AIS in 18.2% of the cases.



Conclusion:

There was a significant higher CIN2+/CIN3+ detection rate compared to AIS+ within the group of glandular cytologies, which dropped significantly when looking at HPV-negative patients. On the other hand, the most common cytological finding in the group of glandular lesions was NILM.

This emphasizes the difficulty of reliably narrowing down AIS based on medical history alone, yet demonstrates that by considering all findings including colposcopy, this critical patient group can be more effectively recognized and treated.