



**Fig. S1. Clinical presentation, histopathological findings, and p16<sup>INK4a</sup>-immunostaining of the vulvar intraepithelial neoplasia.** (a) Clinical presentation of the vulvar lesion. A verrucous, irregularly shaped leucoplakic lesion is located at the posterior fourchette (Black arrow). (b) Histopathological analysis revealed atypical cells within the lower two-thirds of epithelium, consistent with VIN2 (haematoxylin-eosin staining, original magnification  $\times 100$ ). (c) Immunohistochemical analysis shows strong p16<sup>INK4a</sup>-positivity with both nuclear and cytoplasmic staining within the entire lesion, characteristic for HPV-induced high-grade dysplasia (p16<sup>INK4a</sup>-immunostaining, original magnification  $\times 100$ ).