**Figure S2.** Flow diagram of study selection process.

## Screening of abstract

## Screening of title

## Identification

## Screening full text

Duplicates removed
(n=278)

Unique records:

(n=819)

Records excluded based on:

- Review of title (n=586)

Records identified in PubMed (n=412)

Embase (n=659) and Cochrane (n=26)

In total (n=1097)

Records for **review of abstract**

(n=233)

Records **excluded after evaluation of the full text** (n=37) for the following reasons:

- No primary data or data is not peer-reviewed (n=22)

- No HPV or p16INK4a testing (n=2)

- Missing information on survival in relation to HPV or p16INK4a (n=9)

- Double reporting of the same data (n=4)

Records **excluded after evaluation of the abstract** (n=181) for the following reasons:

- No primary data or data is not peer-reviewed (n=70)

- No anal cancer (n=7)

- No HPV or p16INK4a testing (n=58)

- No information on survival in relation to HPV or p16INK4a status (n=33)

- <5 samples (n=11)

- Double reporting of same data (n=2)

Records for **review of full text**
(n=52)

Included in present study
(n=16)

Records **included through review of reference lists** (n=1)

Included in p16INK4a meta-analysis
(n=7)

Included in HPV DNA meta-analysis
(n=10)

Included in HPV DNA/p16INK4a meta-analysis
(n=4)

HPV DNA = human papillomavirus deoxyribonucleic acid