## Supplementary materials

	Hospital	Location	Number of tests*	Time span
1	Hubei Maternal and Child Health Hospital	Wuhan, Hubei	9 341	12/31/2013 - 03/29/2016
2	Tongji Hospital of Tongji Medical College, Huazhong University of Science and Technology	Wuhan, Hubei	82 554	03/11/2014 - 12/31/2016
3	Wuhan Maternal and Child Health Hospital	Wuhan, Hubei	1 736	09/01/2013 - 08/29/2016
4	Huzhou Maternal and Child Care Hospital	Huzhou, Zhejiang	58 064	01/06/2015 - 10/26/2016
5	Ninghai Maternal and Child Health Hospital	Ningbo, Zhejiang	41 990	10/14/2012 - 12/14/2016
6	Women's Hospital, School Of Medicine, Zhejiang University	Hangzhou, Zhejiang	90 243	03/18/2014 - 10/11/2016
7	Zhuji Maternal and Child Health Hospital	Shaoxing, Zhejiang	9 593	09/16/2013 - 12/31/2016
8	Zhuji People's Hospital	Shaoxing, Zhejiang	61 248	07/20/2013 - 11/14/2016
9	Zhoushan Maternity and Infant Hospital	Zhoushan, Zhejiang	23 634	01/02/2014 - 12/12/2016
10	Jiaxing Maternity and Child Health Care Hospital	Jiaxing, Zhejiang	69 612	01/01/2014 - 10/31/2016
11	Taizhou First People's Hospital	Taizhou, Zhejiang	32 019	01/01/2013- 12/31/2016

## Table S1. Information on HPV tests from 11 hospitals.

\*Raw data which has not been processed according to selection criteria.

	hrHPV single-group (%)	hrHPV multiple-group (%)
A5/A6	20.8	73.3
A7	18.4	62.6
A9	60.8	66.3

**Table S2.** Distribution of hrHPV single and multiple-group infection.

The data of Jiaxing Maternity and Child Health Care Hospital was excluded because the groupspecific information was not available.

Tuble Set 1 values for comparing min + micetion falles between age groups.							
≤19	20-29	30-39	40-49	≥50			
≤19	< 0.001	< 0.001	< 0.001	< 0.001			
20-29		0.549	0.002	< 0.001			
30-39			0.003	< 0.001			
40-49				< 0.001			

Table S3. *P* values for comparing hrHPV infection rates between age groups.

P<0.005 was considered as statistically significant among post hoc multiple comparisons.

**Figure S1.** Age-specific infection by districts and single/multiple group in study populations. All infection rates were calculated among hrHPV positive tests.

