

Appendix 1: Supplementary tables [as supplied by author]**Table A: SNOMED codes for cytological diagnoses in the study, defined by Swedish Association for Clinical Cytology**

Cytological diagnosis	Abbreviation	SNOMED code
Normal cytology	--	M00110
Atypical glandular cells	AGC	M69720
Low-grade squamous intraepithelial lesion	LSIL	
Atypical squamous cells of undetermined significance	ASCUS	M69710
Mild squamous dysplasia	LSIL	M74006
High-grade squamous intraepithelial lesion	HSIL	
Suspected high-grade squamous dysplasia	ASC-H	M69719
Moderate squamous dysplasia	HSIL	M74007
Severe squamous dysplasia	HSIL	M80702
Squamous cell cancer	SCC	M80703

Table B: Age-specific event counts, incidence rates and incidence rate ratios for incident cervical cancer (all histopathologies) following HSIL and LSIL, by follow-up time

Age at abnormality	0.5 to 3.5 years			3.5 to 6.5 years			6.5 to 10.5 years			10.5 to 15.5 years		
	N ^a	IR ^b	IRR (95%CI) ^c	N	IR	IRR (95%CI)	N	IR	IRR (95%CI)	N	IR	IRR (95%CI)
HSIL vs Normal												
Age 23-29	38	58.2	7.1 (5.5 to 9.2)	9	16.4	2.8 (2.0 to 3.9)	19	31.4	3.2 (2.4 to 4.3)	16	29.0	3.1 (2.3 to 4.3)
Age 30-39	76	123.6	14.0 (11.5 to 17.2)	19	36.6	5.5 (4.1 to 7.4)	27	47.9	6.3 (4.8 to 8.2)	23	45.0	6.1 (4.6 to 8.1)
Age 40-49	45	145.4	18.3 (14.5 to 23.2)	18	69.0	7.2 (5.2 to 9.9)	16	55.3	8.2 (6.1 to 11.1)	13	48.3	8.0 (5.9 to 10.9)
Age 50-59	19	139.3	24.1 (17.9 to 32.4)	12	103.5	9.4 (6.5 to 13.6)	10	78.1	10.8 (7.6 to 15.3)	11	97.8	10.5 (7.3 to 15.1)
LSIL vs Normal												
Age 23-29	82	32.4	4.6 (3.9 to 5.4)	43	21.0	3.1 (2.6 to 3.8)	61	28.4	2.9 (2.4 to 3.5)	61	32.8	3.0 (2.5 to 3.6)
Age 30-39	141	78.1	9.6 (8.3 to 11.0)	87	57.8	6.5 (5.5 to 7.7)	79	49.4	6.1 (5.2 to 7.2)	55	39.1	6.2 (5.2 to 7.4)
Age 40-49	85	60.8	6.7 (5.7 to 8.0)	41	35.0	4.6 (3.8 to 5.6)	36	28.4	4.3 (3.5 to 5.3)	31	27.2	4.4 (3.6 to 5.4)
Age 50-59	39	47.4	5.9 (4.7 to 7.4)	22	31.3	4.0 (3.2 to 5.1)	16	21.0	3.8 (3.0 to 4.8)	21	33.7	3.8 (3.0 to 4.9)

a. Number of cervical cancer cases

b. Observed incidence rate, per 100 000 person-years

c. Incidence rate ratio and 95% confidence interval, relative to women with normal cytology, adjusted for attained age

Table C: Percentage of histology assessment, prevalent and incident cervical cancer (all histopathologies) by abnormality and calendar period

	N of abnormality	Histology assessment in six months		Prevalent cancer		Incident cancer 0.5 to 3.5 years		
		%	p-value for trend	N	% ^a	N	Crude IR ^b	p-value for trend
AGC								
1980-1992	3937	31.3 ^c	<0.0001	28	0.7	18	163.3	0.0775
1993-1997	3085	46.3		42	1.4	13	153.1	
1998-2002	3048	49.5		37	1.2	15	177.4	
2003-2007	2786	59.4		52	1.9	19	251.6	
2008-2011	1769	65.3		39	2.2	8	292.8	
HSIL								
1980-1992	19210	62.4 ^c	<0.0001	311	1.6	60	109.8	0.7288
1993-1997	12286	75.4		323	2.6	35	102.3	
1998-2002	12430	88.2		351	2.8	36	104.0	
2003-2007	11813	89.2		367	3.1	29	88.4	
2008-2011	9894	92.1		281	2.8	18	119.8	
LSIL								
1980-1992	58115	29.0 ^c	<0.0001	110	0.2	121	71.0	0.0003
1993-1997	45101	37.2		98	0.2	74	56.2	
1998-2002	47896	42.3		72	0.2	55	39.2	
2003-2007	49217	44.9		91	0.2	69	47.8	
2008-2011	43839	48.3		57	0.1	28	40.9	

a. Percentage of having prevalent cancer among women with the abnormality

b. Crude incidence rates per 100,000 person-years

c. Do not represent the true percentage since histology record was not complete in the database until 1993

Table D: Distribution of clinical assessment approaches within six months after AGC, by age at diagnosis of AGC

	Histology	Cytology only	No morphology
Age 20-29	56.2%	24.6%	19.2%
Age 30-39	58.0%	23.5%	18.5%
Age 40-49	52.6%	27.9%	19.5%
Age 50-59	54.4%	27.6%	20.9%

Table E: Management of cytological AGC, HSIL and LSIL recommended by the Swedish National Guideline issued in 2010

	AGC	HSIL	LSIL
In screening	Refer to colposcopy within six months	Refer to colposcopy within six months	Triage with HPV. Refer to colposcopy if HPV positive. Return to routine screening if HPV negative
At colposcopy	<ul style="list-style-type: none"> • Visible lesions at colposcopy should be biopsied • Diagnostic cone biopsy should be performed if the TZ is normal or not fully visible. • Endometrial evaluation should be performed if the woman is over 40 or has been bleeding. • Excisional treatment (conisation) should be performed by experienced colposcopist and should have clear margins. • A subsequent hysterectomy is advised if the woman does not want to preserve fertility. 	<ul style="list-style-type: none"> • Visible lesions at colposcopy should be biopsied • Excisional treatment if HSIL is biopsy proven • See and treat if large lesion and no wish to preserve fertility • Colposcopy of vagina and endocervical curettage if no visible lesion. 	<ul style="list-style-type: none"> • Visible lesions at colposcopy should be biopsied • Excisional treatment cone biopsy if HSIL is biopsy proven. • Repeat colposcopy after one year if LSIL in biopsy.
Follow-up	<ul style="list-style-type: none"> • After three negative smears, return to screening programme, but followed beyond age 60. Endocervical cells have to be present in smears 	<ul style="list-style-type: none"> • After three negative smears, return to screening programme, but followed beyond age 60. 	<ul style="list-style-type: none"> • Return to routine screening if no biopsy proven HSIL
New Guidelines in progress, to be issued before the start of HPV primary screening in 2017			