

# **AUSTRALIAN PATHOLOGY UNITS AND TERMINOLOGY**




(APUTS)


## **Reporting Terminology and Codes Anatomical and Cytopathology**




(v1.0)







Generic Surgical Pathology Report






Clinical History Section   22636-5 LN 

Specimen  22633-2 LN




Gross/Macroscopic Observation   22634-0 LN 


Microscopic observation   22635-7 LN 

Ancillary Studies 

- Immunohistochemistry 
- Flow cytometry 
- Cytogenetics 
- Molecular 
- Other 

Commentary   22638-1 LN   
 50595-8 LN

Diagnostic summary   22637-3 LN 

Supplementary reports   22639-9 LN 

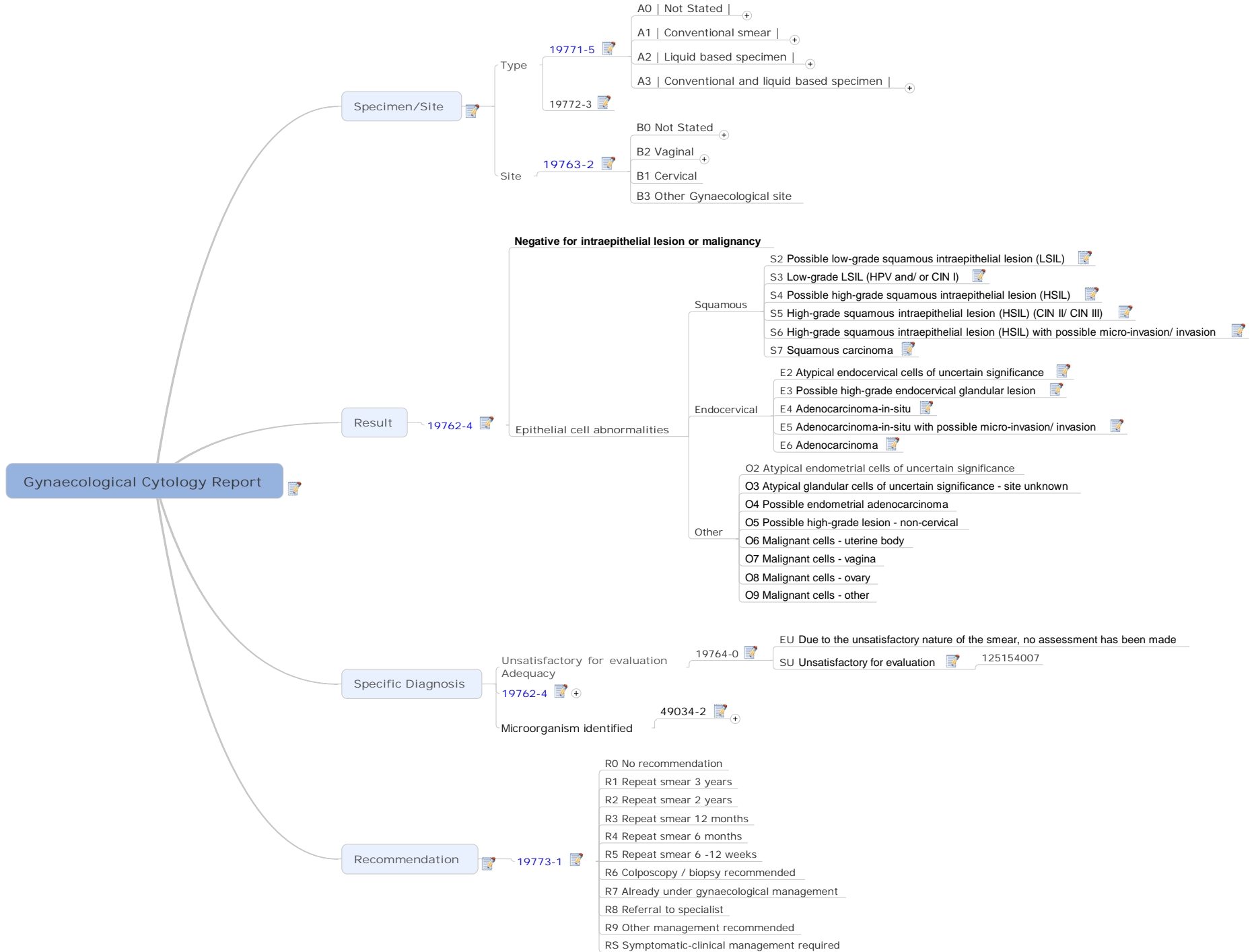
Generic Surgical Pathology Report							
All of the LOINC Codes identify only "Headers" or "Titles", denoting a section of the report. None defines a single atomic element or test result.							
Item Description	Subheadings	LOINC CODE	Short Code Description	Long Description	LOINC Class	Notes	Comments
<p><b>Clinical History Section</b></p> <p>The clinical information section includes more than one source or relevance. It provides a brief account of patient's clinical information, past and present health that may be relevant to the tissue sample the pathologist is examining. This information may be provided on the request form and is then quoted verbatim in the report. It may also be provided by other means such as telephone conversation, consultation, etc. There are good reasons for separating the different forms of clinical information so each source can be qualified by its veracity. eg.</p>		22636-5	Path report.relevant Hx	Pathology report relevant history	TUMRRGT	"Relevant clinical information, generally stating patient's past history of cancer, pre-operative diagnosis, and/or the reason the specimen was collected... NAACCR Data Standards and Data Dictionary Version 11"	This is defined as relevant clinical information for the purposes of tumour registration and NAACCR. For PUTS purposes it needs to be generic and apply to all clinical information provided on the request form. This begs the question of whether this LOINC applies to written clinical information from the request form or whether it includes any other clinical information received in the pre-analytical phase, eg. via telephone call or direct consultation. Whether it includes all information or all relevant information as the comment above states.
<p><b>Specimen</b></p>		22633-2	Path report.site of origin		TUMRRGT	Describes the site and laterality of the specimen (s). If there is more than one specimen included in the pathology report, each is generally assigned an identifying letter or numeral... NAACCR Data Standards and Data Dictionary Version 11	
<p><b>Gross/Macroscopic Observation</b></p> <p>The gross/macroscopic description section contains a written description of the specimen, including size, weight, colour, and any other materials received by the surgical pathology laboratory; it also includes vital data of the specimen's handling within the laboratory, type of fixative used, length of time in fixation, and the tissue's disposition. This section may also include information on intra-operative consultations such as frozen sections or intra-operative cytology, needle aspirations, smear preparations, etc. This section is used in traditional narrative reports as well as in structured templates for specific cancers or other conditions.</p>		22634-0	Path report.gross observation	Pathology report gross observation	TUMRRGT	"A physical desc. of gross appear. of specimen (source, size, color, unusual features, location of visible lesion, margins, markings placed by pathologist, labeling scheme used by pathologist for assignment of portions of specimen to blocks or cassettes... NAACCR Data Standards and Data Dictionary Version 11"	
<p><b>Microscopic Observation</b></p> <p>The microscopic description section describes the morphological findings of the case. Specific attributes that the pathologist may look for and report in the microscopic section include: histologic grade, tumour margins, assigning of the pathological stage when appropriate, the pN stage. In structured reports, the microscopic section may consist entirely of atomic data but may contain text describing unexpected findings, elements of uncertainty, or anything which is beyond synoptic capture. In traditional unstructured reports, this takes narrative form.</p>		22635-7	Path report.microscopic observation	Pathology report microscopic observation Other stain	TUMRRGT	"Findings and description of the presence or absence of disease in each section of the specimen. Generally include the types of tissues, cells, and activity observed... NAACCR Data Standards and Data Dictionary Version 11"	

Generic Surgical Pathology Report							
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<p><b>Ancillary Studies</b> The section lists the additional studies such as Immunohistochemistry, FISH, Flow or Molecular which may be performed. Ancillary studies may be used to determine line clonality or disease classification or subclassification prognostic biomarkers; or to indicate the likelihood patient response to specific biologic therapies. The information recorded may be derived within reporting laboratory itself or sourced from an external reference laboratory.</p>	<b>Immunohistochemistry</b>	XXXXX-X				There are 326 entries in LOINC for the "Method Type" = "Immune stain". Each is a specific assay eg We need a Header or Title Code for Immunohistochemistry.	
	<b>Flow cytometry</b>	XXXXX-X				There are 74 entries under "Method Type" = "Cytometry". None appears to be a header and governs a specific assay or use case.	
	<b>Cytogenetics</b>	55228-1	Study report	Cytogenetic Study	ATTACH.CLINRPT/Att	There are 12 entries under "Method Type" = "Cytogenetics". 11 of these are for specific karyotype abnormalities. 55228-1 is an NAACR code for Report". "Finding; Findings; Point in time; Random; Cytogenetic Karyotype". Long Common name = "Cytogenetic Study". Probably appropriate.	
		62365-2	Diagnostic Impression	Diagnostic impression [interpretation] Unspecified specimen by Molecular genetics method Narrative	HL7.CYTOGEN/Lab	Diagnostic impression. "The narrative describes about the diagnostic impression. This is often presented as a section header." Exemplar answer: "Diagnostic Impression: Metaphase cells analyzed revealed an abnormal male chromosome complement with an additional chromosome 16 seen in each metaphase. The results are consistent with the diagnosis of Trisomy 16. Trisomy 16 is not an uncommon finding in first trimester pregnancy loss" YET! Related names says: "; Diagnostic impression; Interpretation; Interp; Impressions; Point in time; Random; Misc; Miscellaneous; Unspecified; Cytogenetic; Narrative; Report; PCR; Molecular genetics"	
	<b>Molecular</b>	50396-1	Molecular diagnostic major findings for display	Molecular diagnostic major findings for display [Identifier] in Blood or Tissue by Molecular genetics method Nominal Molecular diagnostic major findings for display [Identifier] in Blood or Tissue by Molecular genetics method Nominal Molecular diagnostic major findings for display: Prid: Prid/ Nom: Molgen	MOLPATH.MISC/Lab	"Molecular diagnostic major findings for display [Identifier] in Blood or Tissue by Molecular genetics method Nominal". Method Code "MOLGEN"	
		50397-9		Molecular diagnostic overall interpretation [Presence] in Blood or Tissue by Molecular genetics method	MOLPATH.MISC/Lab	"Molecular diagnostic overall interpretation" [Presence] in Blood or Tissue by Molecular genetics method interp; Interp; Intrap; Interpret; Interpret; Arbitrary concentration; Point in time; Random; Bld/T; Bld/T; Blood; WB; Whole blood; QI; Ordinal; Qualitative; Qual; Screen; PCR; Molecular genetics Miscellaneous molecular pathology; Molecular pathology"	

Generic Surgical Pathology Report							
All of the LOINC Codes identify only "Headers" or "Titles", denoting a section of the report. None defines a single atomic element or test result.							
Item Description	Subheadings	LOINC CODE	Short Code Description	Long Description	LOINC Class	Notes	Comments
		53098-7				"Narrative diagnostic report" "Interpretation; Impression; Impressions; Point in time; Random; Bld/T; Tissue; Bld/T; Blood; WB; Whole blood Molecular genetics; MOLPATH.GENERAL"	
	<b>Other</b>	XXXXX-X					
<b>Commentary</b> This is the bringing together multiple elements to form a connected whole. Overarching case commentary may be used to: - Combine observations from the preceding sections to deduce or synthesise new information - Document any noteworthy adverse gross and histological features - Explain any elements of clinicopathological analysis - Express any diagnostic subtlety or nuance that goes beyond synoptic capture - Document further consultation or results still pending		22638-1	Path report.comments	Pathology report comments	TUMRRGT/Clinical	"Additional comments from the pathologist regarding situations such as possible source of the metastasis, comparison to previous specimens, need for re-surgery or specimens, and usefulness of additional stain/examinations, if applicable... NAACCR Standards and Data Dictionary Version 11"	
		50595-8	Pathologist interpretation	Pathologist interpretation of Unspecified specimen tests		"Pathologist interpretation" "; Path Interpret; Interpret; Impression; Impressions; Point in time; Random; Misc; Miscellaneous; Unspecified Other; Nominal; PATHOLOGY" "No trypanosomes identified, No malarial parasites identified"	
<b>Diagnostic summary</b> The diagnostic summary includes the agreed elements from the report which encapsulate the findings usually in a single sentence. This is not new information but a compilation of elements reiterated as a summary. The specific elements to be recorded are defined in each specialty cancer protocol. In general, whether a report is structured or narrative, the summary includes the nature of the specimen, the diagnosis, the completeness of excision. Stage and grade are commonly included depending upon the circumstances.		22637-3	Path report.final diagnosis	Pathology report final diagnosis	TUMRRGT/Clinical	Summarizes the microscopic findings for each specimen examined. Confirms or denies gross evidence of malignancy, given the histologic type of the tumor and in some instances the grade... NAACCR Standards and Data Dictionary Version 11	
<b>Supplementary reports</b> A supplementary report is a new version of a previously issued report. They may be issued to correct an amended report or to add additional information as an addendum. Where supplementary reports alter information previously given, the changes that are made are noted and the reason is given.		22639-9				"Info attached to report, generally after origin. Includes subsequent testing/stains, comparison to previous specimens, 2nd opinions from other pathologists or labs, or a change in diagnosis from re-examining or re-sampling specimen... Data Standards and Data Dictionary Version 11"	

RCPA Pathology Units and Terminology Standardisation Project - Terminology for Reporting Pathology: Generic Fluid Cytology Report v1								
Generic Fluid Cytology Report								
	LOINC	LOINC Component	LOINC Property	LOINC Timing	LOINC System	LOINC Scale	LOINC Method	LOINC LongName
<b>Specimen</b>								
Site	20506-2	Specimen drawn from	Type	Pt	^Patient	Nom		Specimen drawn from
Type of body fluid	14725-6	Fluid	Type	Pt	Body fld	Nom		[Type] of Body fluid
Fluid volume	12254-9	Specimen volume	Vol	Pt	Body fld	Qn		Volume of Body fluid
Fluid Appearance	9335-1	Appearance	Aper	Pt	Body fld	Nom		Appearance of Body fluid
Fluid Appearance spun	11134-4	Appearance	Aper	Pt	Body fld.spun	Nom		Appearance of Spun Body fluid
Colour	6824-7	Color	Type	Pt	Body fld	Nom		Color of Body fluid
Colour spun	53733-2	Color	Type	Pt	Body fld.spun	Nom		Color of Spun Body fluid
<b>Clinical Notes</b>								
	22636-5	Path report.relevant Hx	Find	Pt	Specimen	Nar		Pathology report relevant history
	55752-0	Clinical information	Find	Pt	^Patient	Nar		Clinical information
<b>Microscopy</b>								
Microscopic Observation	11068-4	Microscopic observation	Prid	Pt	Body fld	Nom	Cyto stain	Microscopic observation [Identifier] in Body fluid by Cyto stain
Microscopic Observation	18328-5	Microscopic observation	Prid	Pt	Body fld	Nom	XXX stain	Microscopic observation [Identifier] in Body fluid by Other stain
<b>Summary / Conclusion</b>								
	34574-4	Path report.final diagnosis	Imp	Pt	Specimen	Nom		Pathology report final diagnosis
<b>Anciliary study</b>								
	35265-8	Path report.addendum	Find	Pt	Specimen	Nar		Pathology report addendum in Specimen Narrative
<b>Pathologist/Cytologist</b>								
	59256-8	Cytologist	ID	Pt	XXX	Nom	Cyto stain	Cytologist who read Cyto stain of Unspecified specimen

RCPA Pathology Units and Terminology Standardisation Project - Terminology for Reporting Pathology: Generic Fluid Cytology Report v1								
Generic FNA Cytology Report								
	LOINC	LOINC Component	LOINC Property	LOINC Timing	LOINC System	LOINC Scale	LOINC Method	LOINC LongName
<b>Specimen</b>								
Site	20506-2	Specimen drawn from	Type	Pt	^Patient	Nom		Specimen drawn from
<b>Method</b>								
	30580-5	Guidance for aspiration.fine needle	Find	Pt	XXX	Nar	CT	CT Guidance for fine needle aspiration of Unspecified body region
	38018-8	Guidance for aspiration.fine needle	Find	Pt	XXX	Nar	US	US Guidance for fine needle aspiration of Unspecified body region
	44215-2	Guidance for aspiration.fine needle	Find	Pt	XXX	Nar	XR.fluor	Fluoroscopy Guidance for fine needle aspiration of Unspecified body region
<b>Clinical Notes</b>								
	22636-5	Path report.relevant Hx	Find	Pt	Specimen	Nar		Pathology report relevant history
	55752-0	Clinical information	Find	Pt	^Patient	Nar		Clinical information
<b>Macroscopic</b>								
Macroscopic	22634-0	Path report.gross observation	Find	Pt	Specimen	Nar		Pathology report gross observation
<b>Microscopy</b>								
Microscopy	11552-7	Microscopic exam	Imp	Pt	Tiss.FNA	Nom	Cytology	Microscopic exam [interpretation] of Tissue fine needle aspirate by Cytology
<b>Summary / Conclusion</b>								
Conclusion	34574-4	Path report.final diagnosis	Imp	Pt	Specimen	Nom		Pathology report final diagnosis
<b>Anciliary study</b>								
Anciliary study	35265-8	Path report.addendum	Find	Pt	Specimen	Nar		Pathology report addendum in Specimen Narrative
<b>Supplementary Reports</b>								
Supplementary Reports	22639-9	Path report.supplemental reports	Find	Pt	Specimen	Nar		Pathology report supplemental reports
<b>Pathologist/Cytologist</b>								
Reviewer	59256-8	Cytologist	ID	Pt	XXX	Nom	Cyto stain	Cytologist who read Cyto stain of Unspecified specimen
<b>Othe</b>								
FNA Cytology Report	33718-8	Cytology report	Find	Pt	Tiss.FNA	Doc	Cyto stain	Cytology report of Tissue fine needle aspirate Cyto stain





RCPA Pathology Units and Terminology Standardisation Project - Terminology for Reporting Pathology: Cytopathology: Gynaecological Cytology Report v1										
Gynaecological Cytology Report (AMBS 2004)										
Cervical cytology reports should contain the following components: Specimen& Site   Result   Specific Diagnosis   Recommendations								These columns contains sample result codes only. The codes could by used in either Result or Specific diagnosis areas as required by the business rules of the laboratory		This column contain sample SNOMED CT mappings (work still in progress)
	LOINC	LOINC Component	LOINC Property	LOINC Timing	LOINC System	LOINC Scale	LOINC Method	2006 Cytology Coding Schedule or Internal Codes		Possible SNOMED CT concept id
<b>SPECIMEN / SITE</b>										
Specimen	19771-5	Screen techniques	Prid	Pt	Cvx/Vag	Nom	Cyto stain	A0	Not Stated	397212007   Specimen type not specified
								A1	Conventional smear	446914005   Preparation and staining of smear using Papanicolaou technique
								A2	Liquid based specimen	430346005   Liquid based cytologic material
								A3	Conventional and liquid based specimen	No SCT ID for combination
Site	19772-3	Preparation techniques	Type	Pt	Cvx/Vag	Nom	Cyto stain	B0	Not Stated	430297000   Cytologic material obtained from unspecified body site
								B1	Cervical	119224000   Vaginal part
								B2	Vaginal	279882009   Vaginal cervix
								B3	Other Gynaecological site	
<b>RESULT</b>										
<i>The number of LOINC codes (incl. repeats of the same code) will depend on the number of coded comments are required to make up the RESULT from the 2006 Cytology coding schedule or the laboratory's Internal comments</i>										
	LOINC	Component	Property	Timing	System	Scale	Method	2006 Cytology Coding Schedule or Internal Codes		
Result	19762-4	General categories	Imp	Pt	Cvx/Vag	Nom	Cyto stain	SU	Unsatisfactory for evaluation	
Result	19762-4	General categories	Imp	Pt	Cvx/Vag	Nom	Cyto stain	S1	Negative for intraepithelial lesion or malignancy	
Result	19762-4	General categories	Imp	Pt	Cvx/Vag	Nom	Cyto stain		Epithelial cell abnormalities (Squamous)	
Result	19762-4	General categories	Imp	Pt	Cvx/Vag	Nom	Cyto stain	S2	Possible low-grade squamous intraepithelial lesion (LSIL)	
								S3	Low-grade LSIL (HPV and/ or CIN I)	
								S4	Possible high-grade squamous intraepithelial lesion (HSIL)	
								S5	High-grade squamous intraepithelial lesion (HSIL) (CIN II CIN III)	
								S6	High-grade squamous intraepithelial lesion (HSIL) with possible micro-invasion/ invasion	
								S7	Squamous carcinoma	
									Epithelial cell abnormalities (Endocervical)	
								E2	Atypical endocervical cells of uncertain significance	
								E3	Possible high-grade endocervical glandular lesion	
								E4	Adenocarcinoma-in-situ	
								E5	Adenocarcinoma-in-situ with possible micro-invasion/ invasion	
								E6	Adenocarcinoma	
									Other	
								O2	Atypical endometrial cells of uncertain significance	

RCPA Pathology Units and Terminology Standardisation Project - Terminology for Reporting Pathology: Cytopathology: Gynaecological Cytology Report v1										
									03	Atypical glandular cells of uncertain significance - site unknown
									04	Possible endometrial adenocarcinoma
									05	Possible high-grade lesion - non-cervical
									06	Malignant cells - uterine body
									07	Malignant cells - vagina
									08	Malignant cells - ovary
									09	Malignant cells - other
<b>SPECIFIC DIAGNOSIS</b>										
Specific Diagnosis	19764-0	Statement of adequacy	Imp	Pt	Cvx/Vag	Nom	Cyto stain	E-		Not applicable: vault smear / previous hysterectomy
								E0		No endocervical component
								E1		Endocervical component present. No abnormality or only reactive changes
								EU		Due to the unsatisfactory nature of the smear, no assessment has been made
Specific Diagnosis	19762-4	General categories	Imp	Pt	Cvx/Vag	Nom	Cyto stain	S1		No abnormality or only reactive changes
Specific Diagnosis	44945-4	Australian cervix cytology code	Imp	Pt	XXX	Nom				Atypical squamous cells (of undetermined significance) are present.
										HPV associated cytopathic effect (Koilocytosis) is seen.
										Abnormal squamous cells consistent with CIN 1 are present.
										Abnormal cells consistent with CIN2 are present.
										Abnormal cells consistent with CIN 3 are present.
										Abnormal cells consistent with CIN 3 are present. Micro-invasion/Invasion can not be excluded.
										Abnormal cells consistent with CIN are present. Precise grading is not possible.
										Atypical epithelial cells are present.
										Abnormal glandular cells are present.
										Atypical endocervical cells are present.
										Abnormal glandular cells are present. A high grade glandular lesion can not be excluded.
										Malignant cells consistent with adenocarcinoma are present.
										Malignant cells consistent with squamous cell carcinoma are present.
										Malignant glandular cells are present. No definite endocervical or endometrial features are present.
										Poorly differentiated malignant epithelial cells are present. No definite squamous or glandular features are seen.
										Malignant cells consistent with adenocarcinoma of the cervix are present.
										Malignant cells consistent with adenocarcinoma of the endometrium are present.
										Atypical endometrial cells suspicious for endometrial hyperplasia or endometrial carcinoma are present.

RCPA Pathology Units and Terminology Standardisation Project - Terminology for Reporting Pathology: Cytopathology: Gynaecological Cytology Report v1									
									Malignant epithelial cells are present. Some features raise the possibility of an extrauterine primary malignancy.
									Poorly differentiated malignant cells are present. The origin of the cells can not be determined.
								01	No other abnormal cells
Microorganisms / Flora	49034-2	Microorganism identified	Prid	Pt	Cvx/Vag	Nom	Cyto stain		Fungal S Fungal elements are seen.
									Trich S Micro-organisms with the appearance of Trichomonas vaginalis are seen.
									Herpes S Cellular changes consistent with Herpes simplex are seen.
									Acti S Micro-organisms with the appearance of Actinomyces species are seen.
									Candida S Fungal elements with the appearance of Candida species are seen.
									Bact Vag S Micro-organisms consistent with bacterial vaginosis are seen.
<b>RECOMMENDATIONS</b>									
Recommendations	19773-1	Recommended follow-up	Prid	Pt	Cvx/Vag	Nom	Cyto stain	R0	No recommendation
								R1	Repeat smear 3 years
								R2	Repeat smear 2 years
								R3	Repeat smear 12 months
								R4	Repeat smear 6 months
								R5	Repeat smear 6 -12 weeks
								R6	Colposcopy / biopsy recommended
								R7	Already under gynaecological management
								R8	Referral to specialist
								R9	Other management recommended
								RS	Symptomatic-clinical management required
<b>SUMMARY FOR SUBMISSION TO REGISTRY</b>									
Result	44945-4	Australian cervix cytology code	Imp	Pt	XXX	Nom			STRING OF 2006 CYTOLOGY CODING SCHEDULE CODES

## RCPA Pathology Units and Terminology Standardisation Project - Terminology for Reporting Pathology: Urine Cytology Report v1

## Urine Cytology Loinc codes

	LOINC	LOINC Component	LOINC Property	LOINC Timing	LOINC System	LOINC Scale	LOINC Method	LOINC LongName
<b>Specimen</b>								
Site	20506-2	Specimen drawn from	Type	Pt	^Patient	Nom		Specimen drawn from
Type of body fluid	14725-6	Fluid	Type	Pt	Body fld	Nom		[Type] of Body fluid
Appearance	5767-9	Appearance	Aper	Pt	Urine	Nom		Appearance of Urine
Volume	28009-9	Specimen volume	Vol	Pt	Urine	Qn		Volume of Urine
Character (Optional)	19244-3	Character	Aper	Pt	Urine	Nom		Character of Urine
Clarity (Optional)	32167-9	Clarity	Type	Pt	Urine	Nom		Clarity of Urine
Colour (Optional)	5778-6	Color	Type	Pt	Urine	Nom		Color of Urine
<b>Clinical Notes</b>								
	22636-5	Path report.relevant Hx	Find	Pt	Specimen	Nar		Pathology report relevant history
	55752-0	Clinical information	Find	Pt	^Patient	Nar		Clinical information
<b>Microscopy</b>								
Microscopic Observation	11070-0	Microscopic observation	Prid	Pt	Urine	Nom	Cyto stain	Microscopic observation [Identifier] in Urine by Cyto stain
Microscopic exam [interpretation]	27045-4	Microscopic exam	Imp	Pt	Urine	Nom	Cytology	Microscopic exam [interpretation] of Urine by Cytology
<b>Summary / Conclusion</b>								
Conclusion	34574-4	Path report.final diagnosis	Imp	Pt	Specimen	Nom		Pathology report final diagnosis
<b>Pathologist/Cytologist</b>								
Reviewer	59256-8	Cytologist	ID	Pt	XXX	Nom	Cyto stain	Cytologist who read Cyto stain of Unspecified specimen