CERVICAL SCREENING AND COLPOSCOPY PATHWAYS

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Cervical Screening Intervals

Age Group (Years)	Routine Screening Intervals
25-49	3 yearly
50-65	5 yearly
>65	Only screen those who have not been screened since age of 50 and who have had a recent abnormal smear

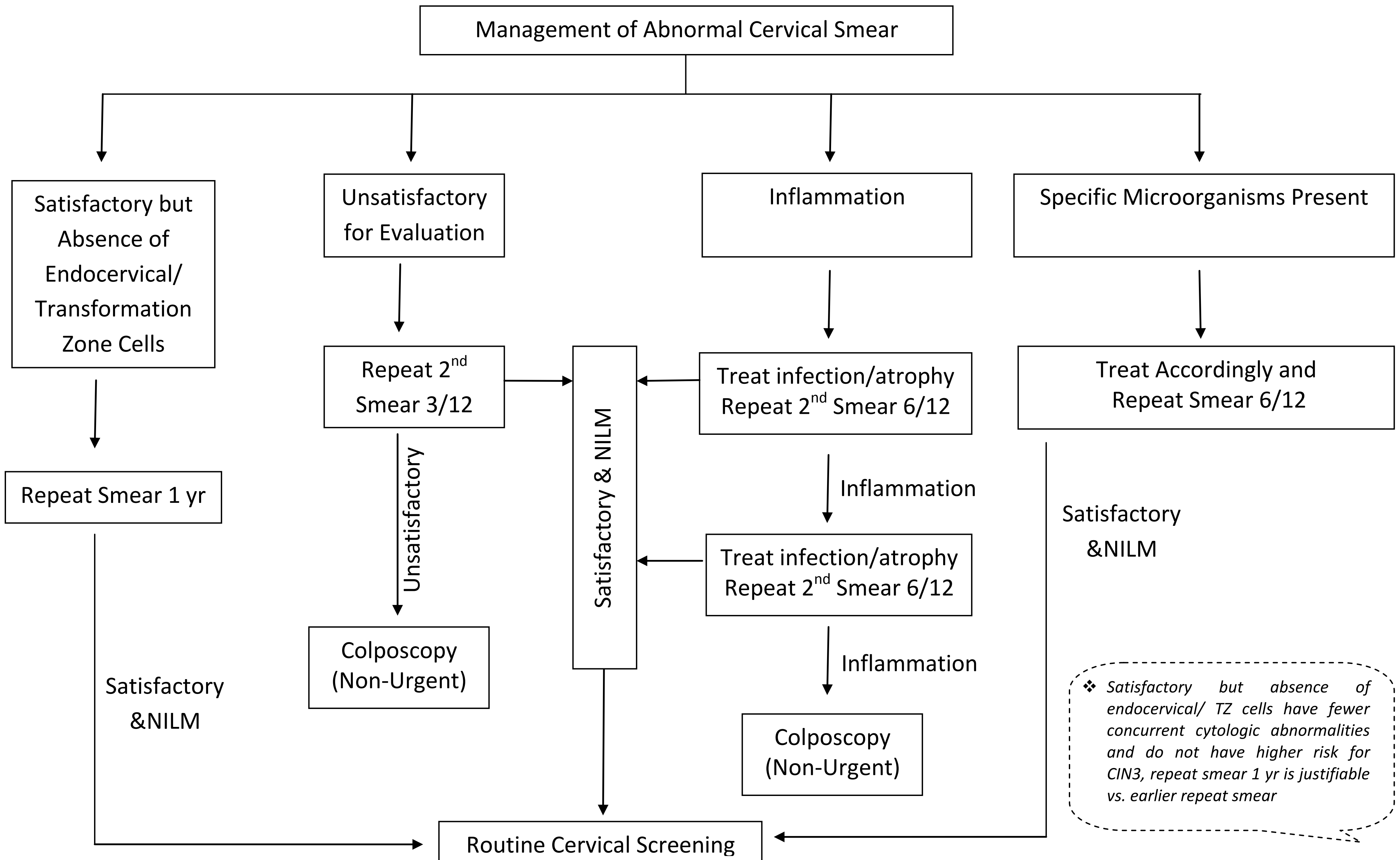
**A woman will be invited for yearly cervical screening initially, if she has consecutive yearly normal cervical smears x2, routine screening (3yrly/5ryly based on age) is required thereafter.

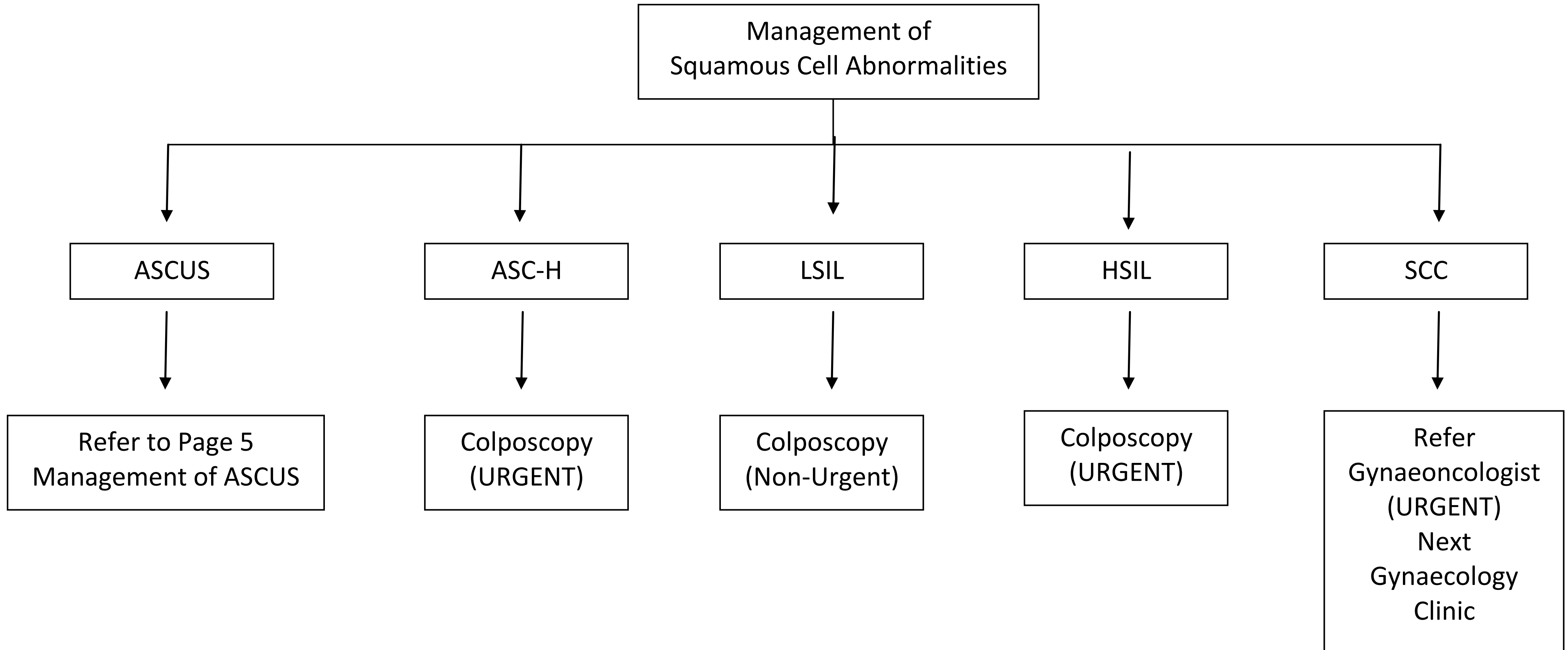
Natural History of Abnormal Cytology

Cytology	Regression at 24 mths	Progression to HSIL at 24 mths	Progression to invasive cancer at 24 mths
ASCUS	68.2%	7.1%	0.3%
LSIL	47.4%	20.8%	0.2%
HISL	35.0%	23.4% (persistence)	1.4%

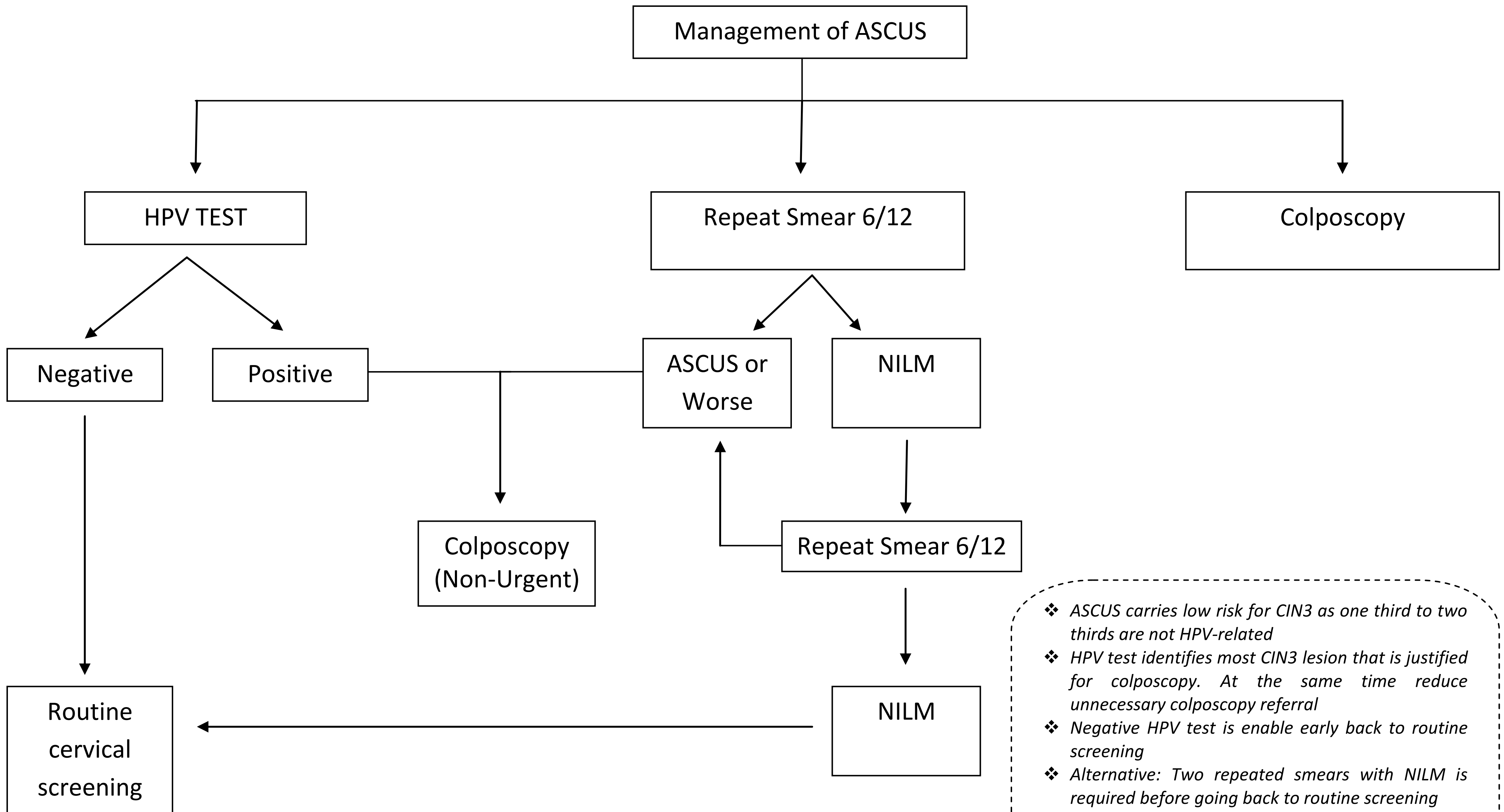
Natural History of CIN

CIN	Regression	Persistence	Progression to CIN3	Progression to invasive cancer
CIN 1	57%	32%	11%	1%
CIN 2	43%	35%	22%	1.5%
CIN 3	32%	56%	-	12%


Management of Abnormal Cervical Smear
Satisfactory but Absence of Endocervical/ Transformation Zone Cells
Unsatisfactory for Evaluation
Inflammation
Specific Microorganisms Present
Repeat Smear 1 yr
Repeat 2nd Smear 3/12
Satisfactory & NILM
Treat infection/atrophy Repeat 2nd Smear 6/12
Treat Accordingly and Repeat Smear 6/12
Unsatisfactory
Inflammation
Satisfactory &NILM
Treat infection/atrophy Repeat 2nd Smear 6/12
Inflammation
Colposcopy (Non-Urgent)
Colposcopy (Non-Urgent)
Satisfactory &NILM
Satisfactory but absence of endocervical/ TZ cells have fewer concurrent cytologic abnormalities and do not have higher risk for CIN3, repeat smear 1 yr is justifiable vs. earlier repeat smear
Routine Cervical Screening

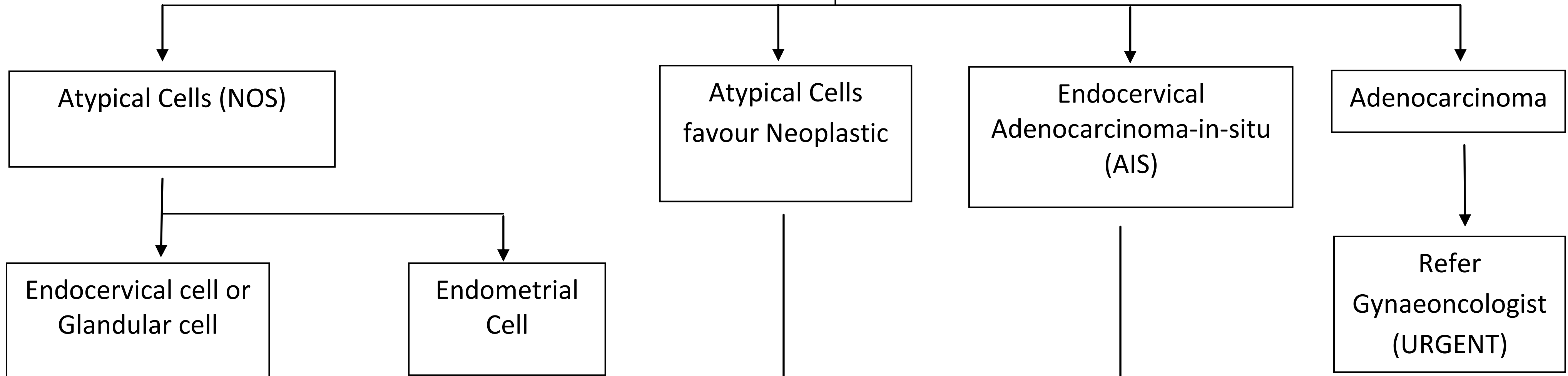


- *LSIL is highly associated with HPV infection (~77%), this is too high to allow reflex HPV testing to select women for colposcopy efficiently*
- *5-year cancer risk for ASC-H even with HPV- negative is 2%. Thus urgent colposcopy is justified.*
- *5-year cancer risk for HSIL is 8%*
- *In HSIL, 60% has CIN2+ 2% has cancer, this justifies immediate excision of TZ during colposcopy is acceptable*



- *ASCUS carries low risk for CIN3 as one third to two thirds are not HPV-related*
- *HPV test identifies most CIN3 lesion that is justified for colposcopy. At the same time reduce unnecessary colposcopy referral*
- *Negative HPV test is enable early back to routine screening*
- *Alternative: Two repeated smears with NILM is required before going back to routine screening*
- *Direct Colposcopy can be considered if patient is not keen for frequent follow up and repeat smear*

Management of Glandular Cell Abnormalities



Endocervical cell or Glandular cell — Out-Patient:

Colposcopy (Non-Urgent)
+
Endocervical Curettage/Brush
±
Endometrial Sampling (Pipelle) if:

- ≥ 35 y.o
- < 35 y.o + abnormal uterine bleeding/ chronic anovulation

Endometrial Cell — Out-Patient:

Colposcopy (Non-Urgent)
+
Endocervical curettage
+
Endometrial Sampling (Pipelle)

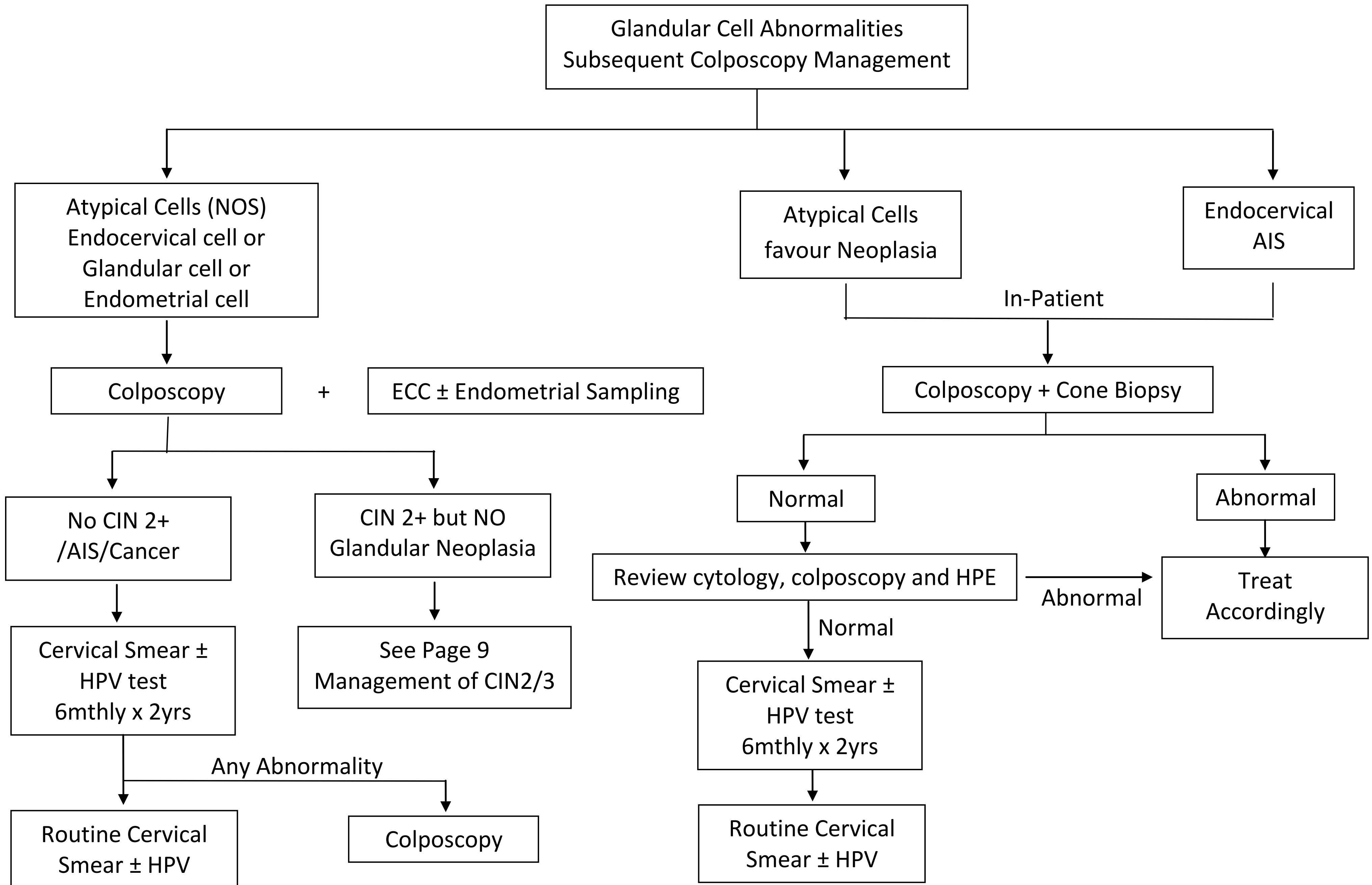
Atypical Cells favour Neoplastic — In-Patient:

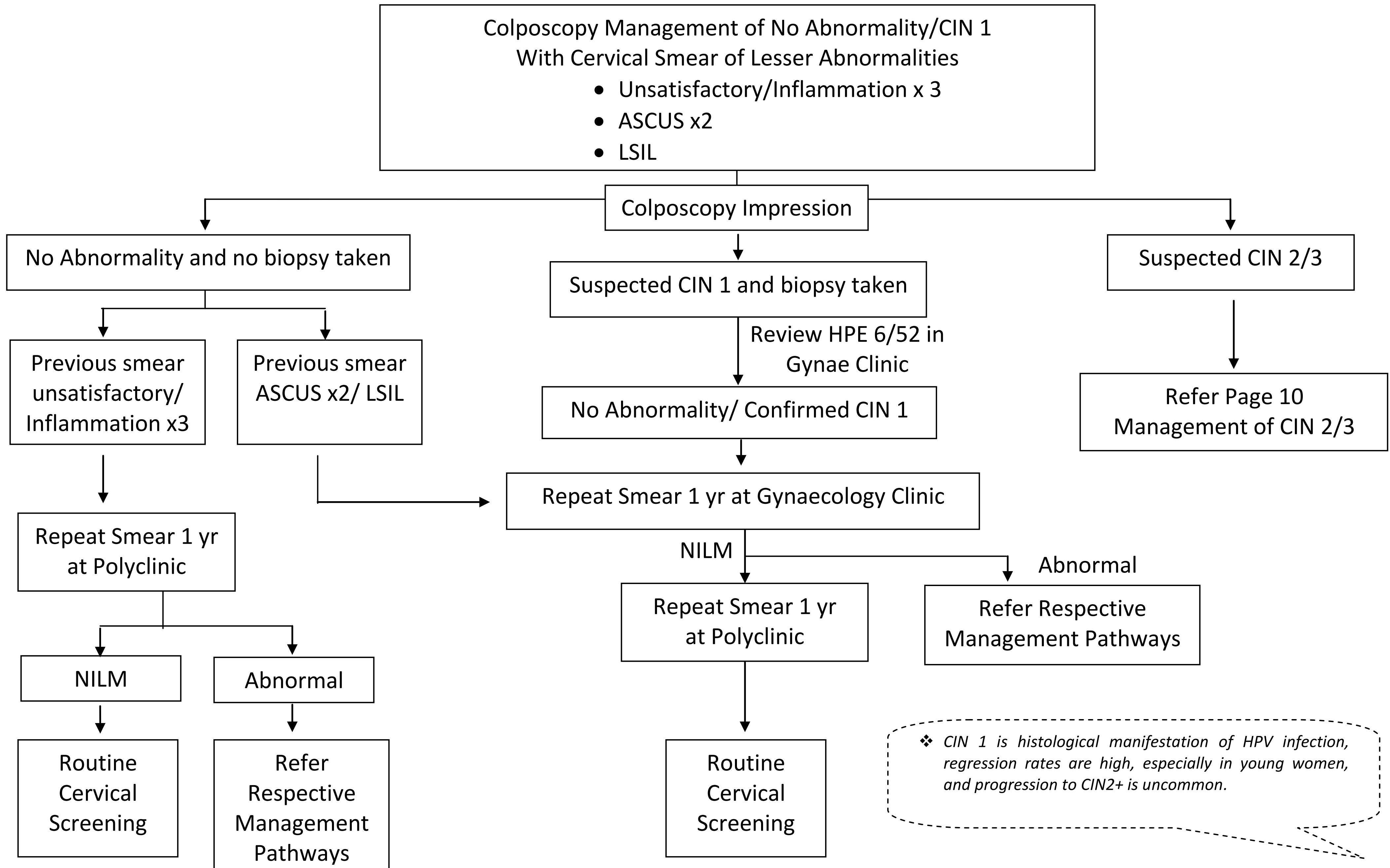
Colposcopy (URGENT)
+
Cone Biopsy
+
Hyteroscopy and curettage

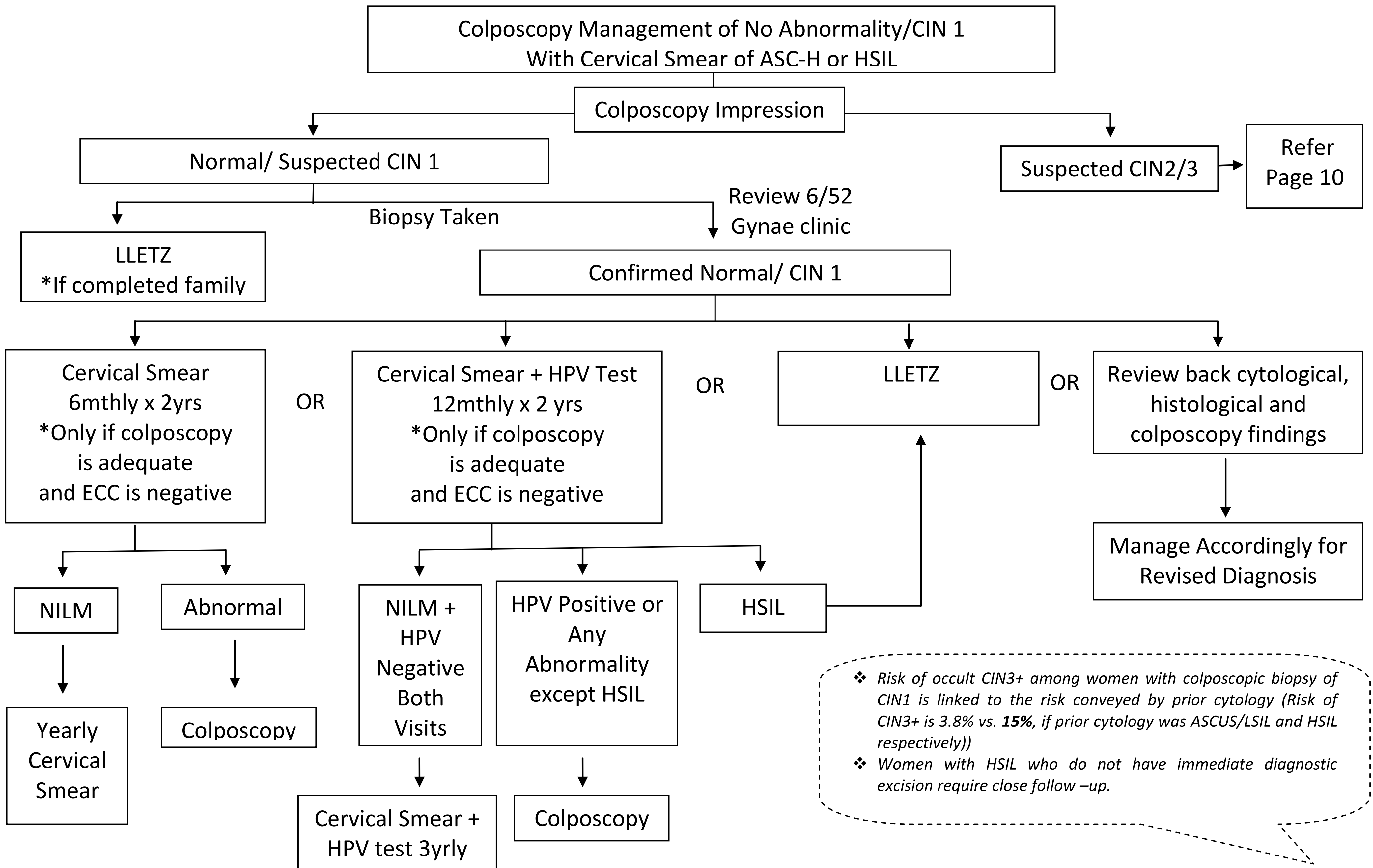
Endocervical Adenocarcinoma-in-situ (AIS) — In-Patient:

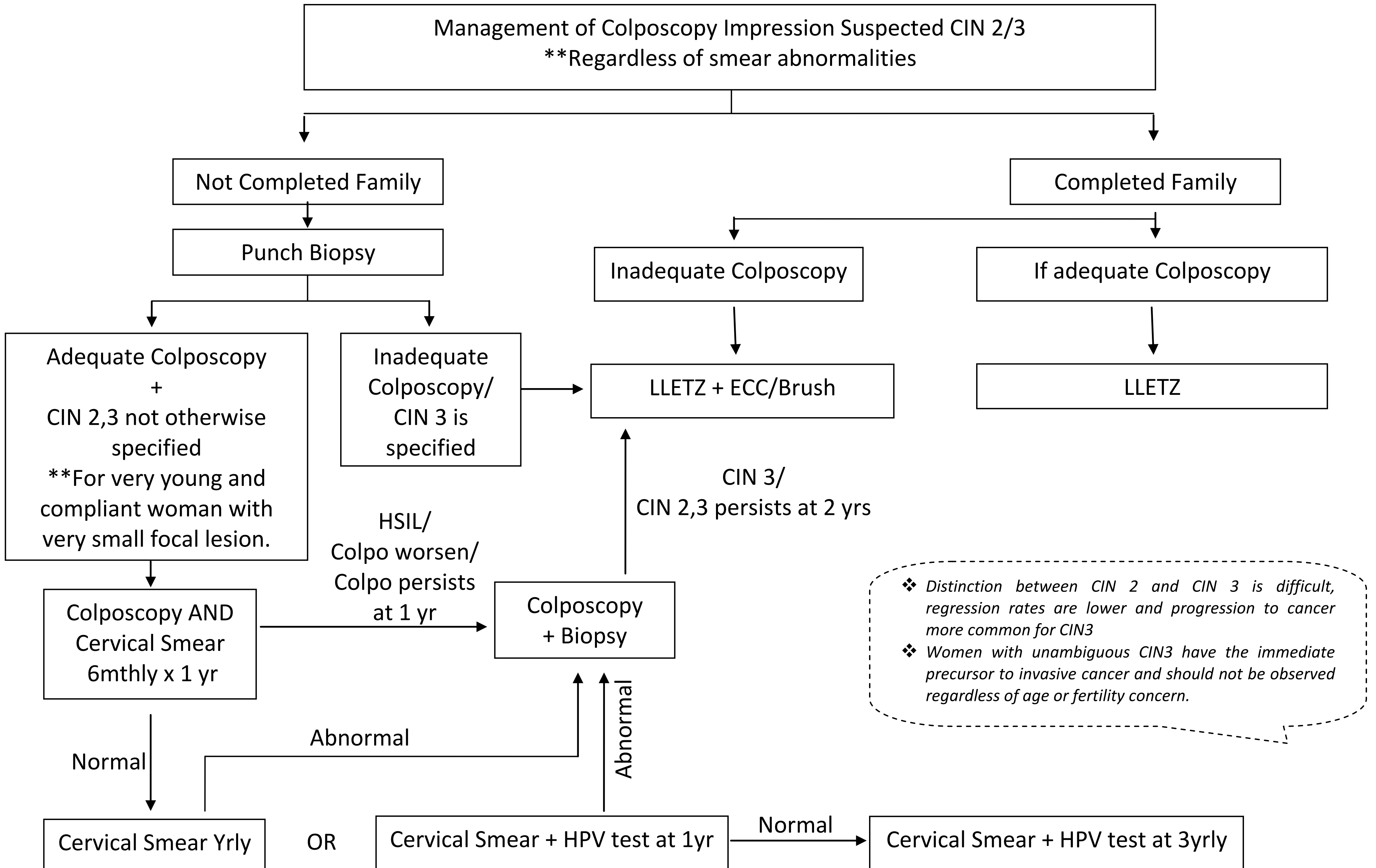
Colposcopy (URGENT)
+
Cone Biopsy

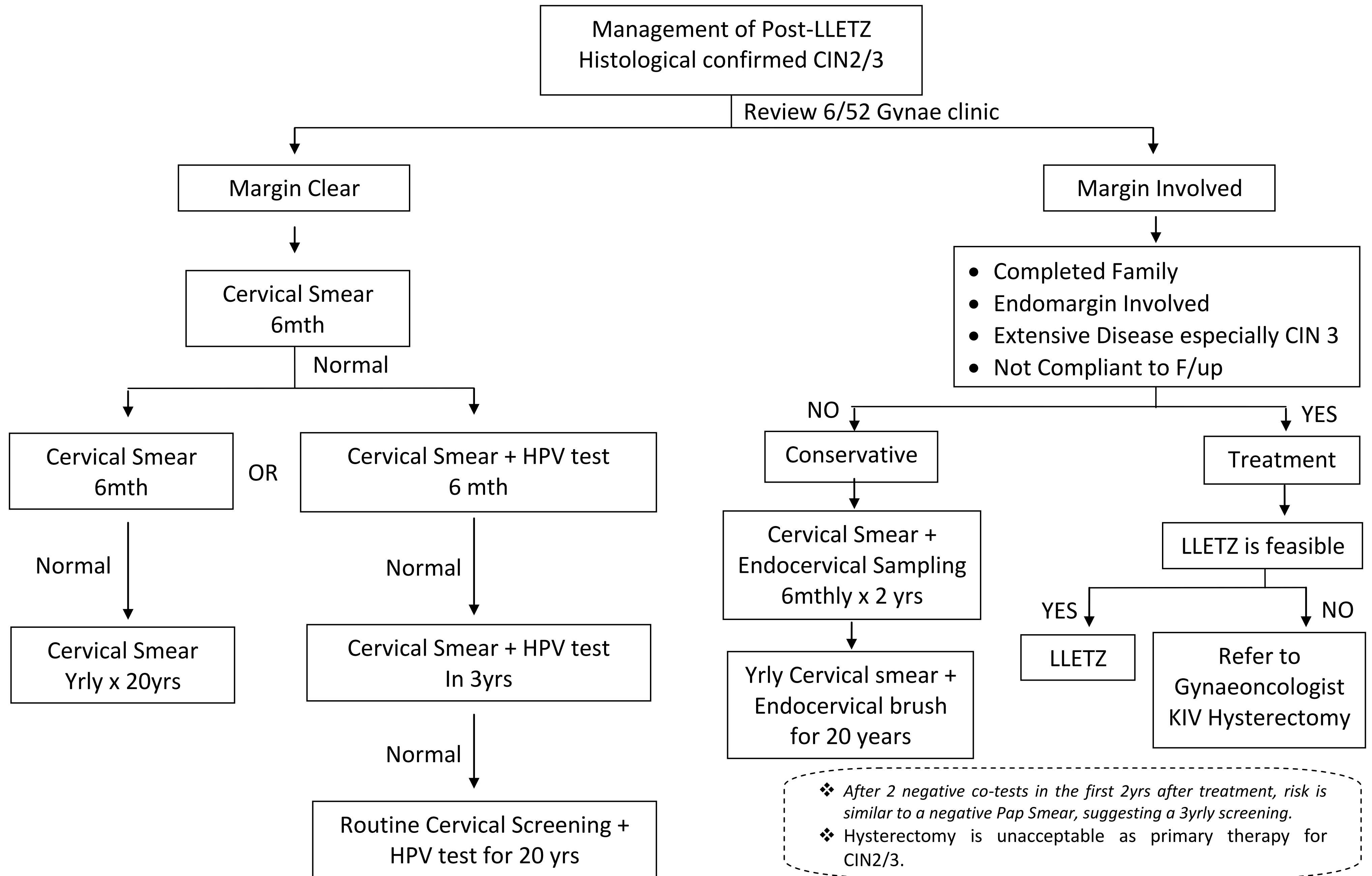
- *In women >30 y.o with Atypical Glandular Cells (AGC), 9% is found to be CIN3+ and 3% is found to be cancer*
- *Squamous and glandular lesion often co-exist, half of AIS has CIN (identification of CIN does not preclude AIS or adenocarcinoma)*
- *Endometrial ca risk is low in younger patient and without risk factors*

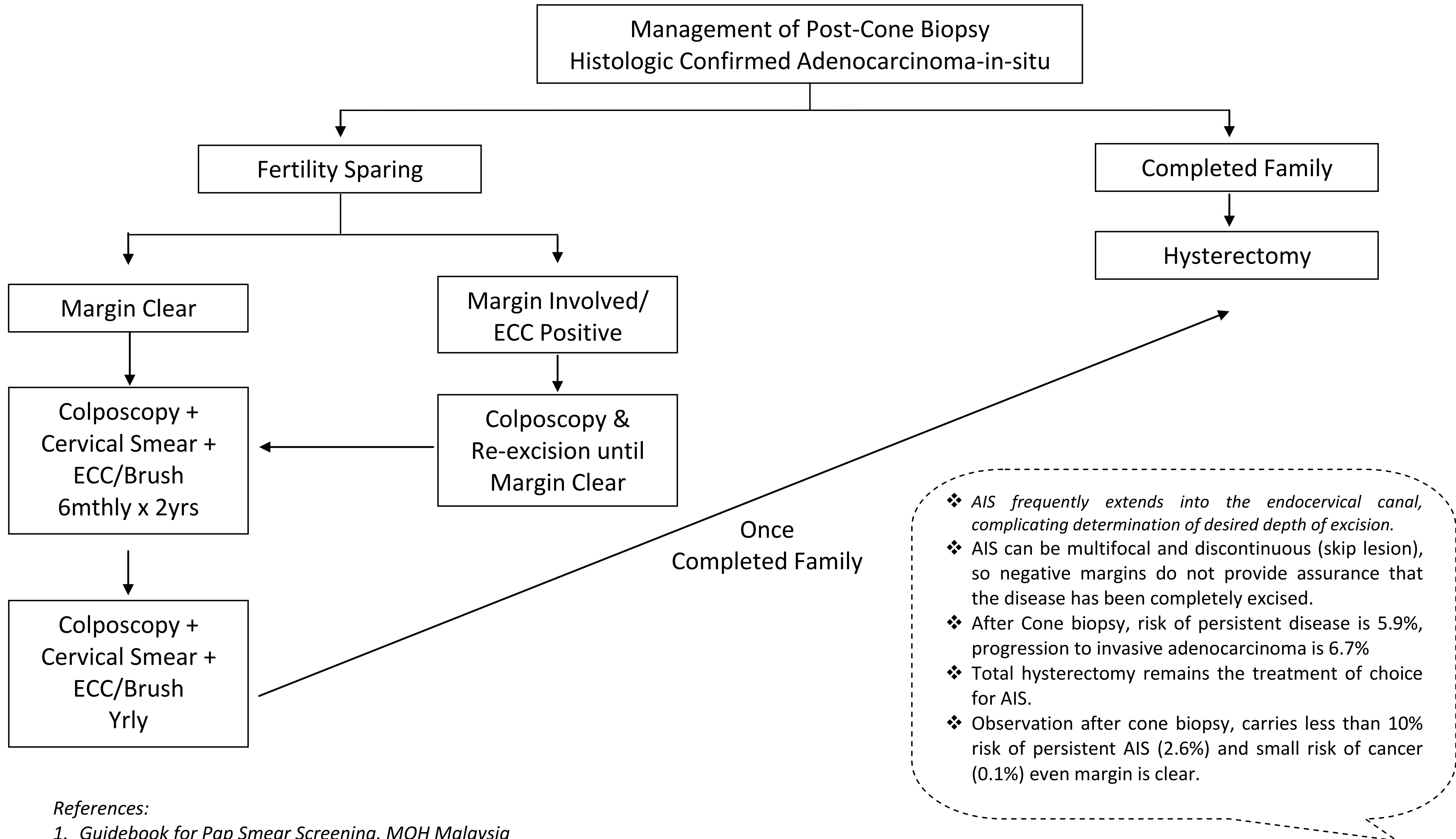

Glandular Cell Abnormalities
Subsequent Colposcopy Management
Atypical Cells (NOS)
Endocervical cell or
Glandular cell or
Endometrial cell
Atypical Cells
favour Neoplasia
Endocervical
AIS
In-Patient
Colposcopy
+
ECC ± Endometrial Sampling
Colposcopy + Cone Biopsy
No CIN 2+
/AIS/Cancer
CIN 2+ but NO
Glandular Neoplasia
Normal
Abnormal
Review cytology, colposcopy and HPE
Abnormal
Treat
Accordingly
Normal
Cervical Smear ±
HPV test
6mthly x 2yrs
See Page 9
Management of CIN2/3
Cervical Smear ±
HPV test
6mthly x 2yrs
Any Abnormality
Routine Cervical
Smear ± HPV
Colposcopy
Routine Cervical
Smear ± HPV


Colposcopy Management of No Abnormality/CIN 1
With Cervical Smear of Lesser Abnormalities
• Unsatisfactory/Inflammation x 3
• ASCUS x2
• LSIL
Colposcopy Impression
No Abnormality and no biopsy taken
Suspected CIN 1 and biopsy taken
Suspected CIN 2/3
Previous smear unsatisfactory/ Inflammation x3
Previous smear ASCUS x2/ LSIL
Review HPE 6/52 in Gynae Clinic
No Abnormality/ Confirmed CIN 1
Refer Page 10 Management of CIN 2/3
Repeat Smear 1 yr at Gynaecology Clinic
Repeat Smear 1 yr at Polyclinic
NILM
Abnormal
Repeat Smear 1 yr at Polyclinic
Refer Respective Management Pathways
NILM
Abnormal
Routine Cervical Screening
Refer Respective Management Pathways
Routine Cervical Screening
CIN 1 is histological manifestation of HPV infection, regression rates are high, especially in young women, and progression to CIN2+ is uncommon.


Colposcopy Management of No Abnormality/CIN 1
With Cervical Smear of ASC-H or HSIL
Colposcopy Impression
Normal/ Suspected CIN 1
Suspected CIN2/3
Refer Page 10
Biopsy Taken
Review 6/52 Gynae clinic
LLETZ
*If completed family
Confirmed Normal/ CIN 1
Cervical Smear 6mthly x 2yrs *Only if colposcopy is adequate and ECC is negative
OR
Cervical Smear + HPV Test 12mthly x 2 yrs *Only if colposcopy is adequate and ECC is negative
OR
LLETZ
OR
Review back cytological, histological and colposcopy findings
Manage Accordingly for Revised Diagnosis
NILM
Abnormal
Yearly Cervical Smear
Colposcopy
NILM + HPV Negative Both Visits
HPV Positive or Any Abnormality except HSIL
HSIL
Cervical Smear + HPV test 3yrly
Colposcopy
Risk of occult CIN3+ among women with colposcopic biopsy of CIN1 is linked to the risk conveyed by prior cytology (Risk of CIN3+ is 3.8% vs. 15%, if prior cytology was ASCUS/LSIL and HSIL respectively))
Women with HSIL who do not have immediate diagnostic excision require close follow –up.


Management of Colposcopy Impression Suspected CIN 2/3
**Regardless of smear abnormalities
Not Completed Family
Completed Family
Punch Biopsy
Inadequate Colposcopy
If adequate Colposcopy
Adequate Colposcopy + CIN 2,3 not otherwise specified **For very young and compliant woman with very small focal lesion.
Inadequate Colposcopy/ CIN 3 is specified
LLETZ + ECC/Brush
LLETZ
CIN 3/ CIN 2,3 persists at 2 yrs
HSIL/ Colpo worsen/ Colpo persists at 1 yr
Colposcopy AND Cervical Smear 6mthly x 1 yr
Colposcopy + Biopsy
Distinction between CIN 2 and CIN 3 is difficult, regression rates are lower and progression to cancer more common for CIN3
Women with unambiguous CIN3 have the immediate precursor to invasive cancer and should not be observed regardless of age or fertility concern.
Normal
Abnormal
Abnormal
Cervical Smear Yrly
OR
Cervical Smear + HPV test at 1yr
Normal
Cervical Smear + HPV test at 3yrly


Management of Post-LLETZ
Histological confirmed CIN2/3
Review 6/52 Gynae clinic
Margin Clear
Margin Involved
Cervical Smear
6mth
Normal
Cervical Smear
6mth
OR
Cervical Smear + HPV test
6 mth
Normal
Normal
Cervical Smear
Yrly x 20yrs
Cervical Smear + HPV test
In 3yrs
Normal
Routine Cervical Screening +
HPV test for 20 yrs
Completed Family
Endomargin Involved
Extensive Disease especially CIN 3
Not Compliant to F/up
NO
YES
Conservative
Treatment
Cervical Smear +
Endocervical Sampling
6mthly x 2 yrs
Yrly Cervical smear +
Endocervical brush
for 20 years
LLETZ is feasible
YES
NO
LLETZ
Refer to
Gynaeoncologist
KIV Hysterectomy
After 2 negative co-tests in the first 2yrs after treatment, risk is similar to a negative Pap Smear, suggesting a 3yrly screening.
Hysterectomy is unacceptable as primary therapy for CIN2/3.



References:

1. *Guidebook for Pap Smear Screening, MOH Malaysia*
2. *ASCCP 2012 Updated Consensus Guidelines for the Management of Abnormal Cervical Cancer Screening Tests and Cancer Precursors.*
3. *NHSCSP 2010 Colposcopy and Programme Management*

COLPOSCOPY APPOINTMENT GUIDELINES

- Please adhere strictly to the allocated slots for specific conditions stated in the appointment book
- If it is filled up, give the next available slot at another date
- If a slot is empty **a week** before the scheduled date – any patients can be put up for assessment
- DO NOT exceed 10 cases per colposcopy session

- ONLY the following are **URGENT** cases:
  : HSIL
  : ASC-H
  } Within 6wks

  : suspicious of invasion
  : AGC favouring neoplasia
  } Within 2wks

  *** If no empty slot available within this duration, to refer to specialist to slot in the case*

- All **squamous cell CA** or **adenocarcinoma** must be seen **urgently** in the next **Gynaecology clinic** to assess for a gross lesion (they do not need a colposcopy assessment if there is a gross lesion)

- **ASCUS**: repeat smear in 6 months or get a *non-urgent colposcopy date*
- **LGSIL:** *non-urgent colposcopy date*
- **3 consecutive inflammatory smears:** treat specific infections or with doxycycline & metronidazole and repeat smear before considering a *non-urgent colposcopy assessment*
  [non-urgent means 'the next available date at the respective slots for that specific condition']

- **HPV DNA positive** (high risk/low risk HPV) with **normal smear** : *non-urgent colposcopy*
- **HPV DNA positive** (low risk or uncertain HPV type) with any **abnormal smear**: follow the above guidelines on abnormal smears
- **HPV DNA positive** (high risk HPV) with abnormal smear: treat as an ***urgent case***

- There can only be a **maximum of 4 patients** with either inflammatory smears or HPV DNA positivity at any given colposcopy session (on a first come first serve basis)