IN THIS ISSUE: The Paris System for reporting urine cytology

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Physicians Diagnostic Support Service

Effective March 29, 2021, Munson Healthcare Cytopathology Laboratory will be implementing The Paris System for reporting urine cytology. The primary purpose of urine cytology is to detect high-grade urothelial carcinoma. The Paris System was designed as a standardized reporting system with that focus in mind, to convey risk and help guide clinical decision making.

The diagnostic categories for The Paris System for reporting urine cytology are:

- 1. Nondiagnostic/Unsatisfactory.
- 2. Negative for high-grade urothelial carcinoma (NHGUC).
- 3. Atypical urothelial cells (AUC).
- 4. Suspicious for high-grade urothelial carcinoma (SHGUC).
- 5. High-grade urothelial carcinoma (HGUC).
- 6. Low-grade urothelial neoplasm (LGUN).
- 7. Other: primary and secondary malignancies and miscellaneous lesions.

The most notable change from the current reporting system will be the inclusion of "atypical" cells (not worrisome for high-grade urothelial carcinoma) in which the atypia is attributable to changes in architecture or to known clinical scenarios such as stones, infection, etc., into the category of negative for high-grade urothelial carcinoma.

The risk of malignancy and management for each diagnostic category as outlined in the original publication of The Paris System is as follows:

CATEGORY	RISK OF MALIGNANCY	<u>MANAGEMENT</u>
Satisfactory/Nondiagnostic	<5%	Repeat cytology, cystoscopy in
Negative for HGUC	0-10%	3 months if clinical suspicion. Clinical follow up as needed.
Atypical urothelial cells (AUC)	8-35%	Clinical follow up as needed. Potential use of ancillary testing
SHGUC	50-90%	More aggressive follow up.
		cystoscopy, biopsy, staging.
HGUC	>90%	More aggressive follow up,
		cystoscopy, biopsy, staging.
LGUN	~10%	Cystoscopy and biopsy to
		further evaluate.
OTHER MALIGNANCY	>90%	More aggressive follow up,
		cystoscopy, biopsy, staging.