

# Perspectives and Perceptions of Urgent and Alert Values in Surgical and Cytopathology: A Survey of Clinical



Baystate  
Health

## Practitioners and Pathologists.

Anthony Cretara, MD; Christopher N. Otis, MD.

Department of Pathology, University of Massachusetts Medical School – Baystate Health, Springfield MA



University of  
Massachusetts  
UMASS Medical School

### Abstract

Our goal, as pathologists on the patient care team, was to better understand the treating clinician's attitudes, preferences, and concepts regarding so-called urgent/alert/critical values in anatomic pathology. This does not refer to critical values in the clinical laboratory, such as elevated potassium levels, but rather to diagnoses rendered on biopsies by surgical pathologists and cytopathologists which may be unexpected or require prompt attention. To facilitate this goal, we developed a web-based survey regarding communication of critical diagnoses and distributed it to 1600 practicing physicians within the Baystate Health system, including attendings, fellows, and residents. This project represents the largest and most comprehensive survey-based investigation of the specific preferences of clinicians in regards to how, when, and to whom critical diagnoses should be communicated. Our survey results identified important areas of disagreement between pathologist and clinician regarding issues of what entities should be considered as critical diagnoses and who is responsible for correlating histologic findings with the larger clinical context. Identifying these discordant points of view within the medical community and fostering interdepartmental agreement on the best practices in communication of critical diagnoses is an important patient-care and safety issue and will minimize the risk of a clinician learning of an unexpected or treatment altering diagnosis by "stumbling across it in the medical record."

### Introduction

- The patient community generally has limited understanding of biopsy results and the intricate differences in diagnoses.
- Pathologists have highly limited access to patient interaction and depend on the treating clinician to communicate important information when submitting specimens, and to interpret results for the patient.
- Depending on the clinical situation, many biopsy results could be considered critical, requiring expedited communication between physicians.
- Unfortunately, this communication occasionally breaks down. We wanted to investigate some of the reasons why this can happen, and use that information to enact policy to make it less likely to occur

### Materials and methodologies

The survey consisted of 10 multiple choice questions built using SurveyMonkey, with either single answer or multiple answer options, and an option to leave free text comments. The final survey required approximately 5 minutes to complete. An email invitation with a link to the web survey was sent to participants via an email list of credentialed physicians in the Baystate health system provided by the medical staff office. The same email was then sent to residents and fellows of the Baystate health system via a distribution list provided by the Office of Graduate Medical Education.

### Materials and methodologies cont.

Two questions established basic demographic information: specialty and position. Additional questions posed included:

- What entities should be considered alert-urgent or unexpected diagnoses?
- How should a pathologist determine if a diagnosis is expected or unexpected?
- To whom should alert-urgent diagnoses be communicated?
- In what time frame should they be communicated?
- What are the acceptable methods of communication?
- What should a pathologist do with an alert-urgent diagnosis if they are unable to reach anyone claiming responsibility over patient care?
- How do you document having received an alert-urgent diagnosis?

The responses were stratified by position (attending, resident/fellow, or other) and specialty (medicine, surgery, pathology, or other). Simple data analysis was performed, observing frequency of responses to identify possible discrepancies in the attitudes of alert-urgent diagnoses between pathologists and non-pathologists.

### Results

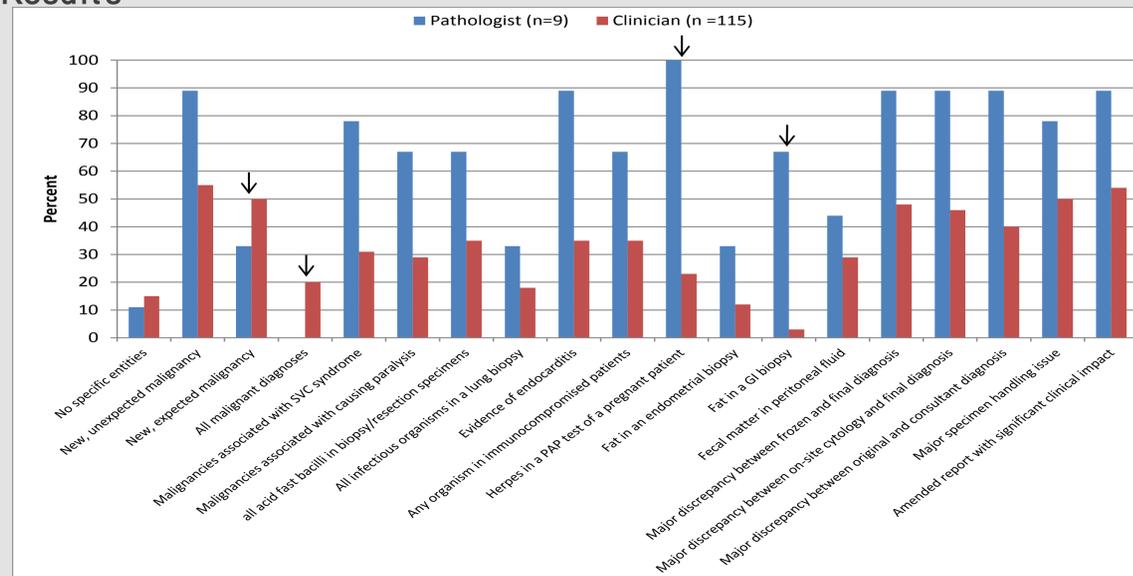


Figure 2. Survey responses to the question, "What should be considered alert-urgent diagnoses in Anatomic Pathology?" Black arrows indicate entities more likely to be considered alert-urgent by clinicians than pathologists. Blue arrows indicate entities with the largest discrepancy between clinician and pathologist.

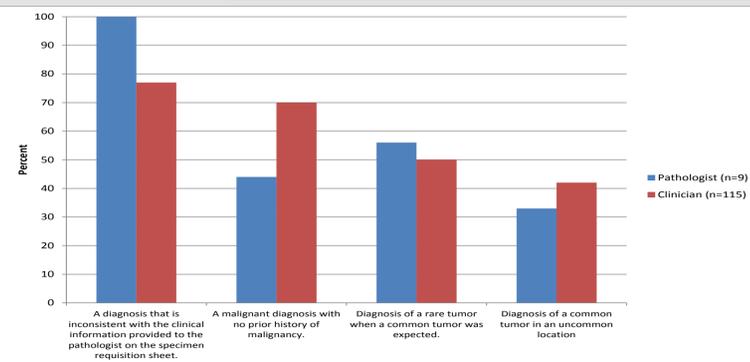


Figure 3. Survey responses to the question, "Which of the following should be considered an "unexpected" malignant diagnosis."

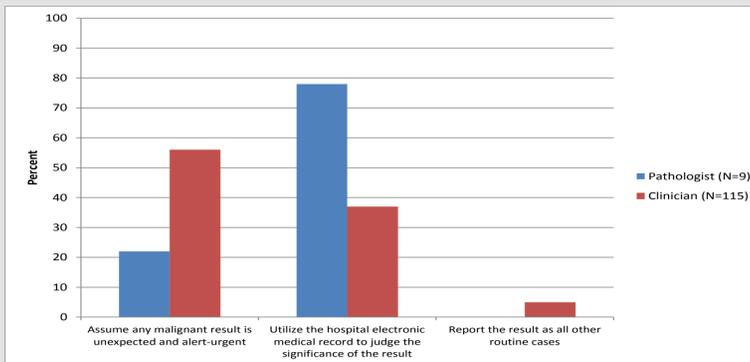


Figure 3. Survey responses to the question, "If clinical history is not provided on the pathology requisition form, how should the pathologist determine if a diagnosis is unexpected?"

### Results cont.

Of the 1308 attending physicians, and 330 residents and fellows to whom the survey was sent, 124 individuals submitted responses, yielding an overall response rate of 7.5%.

Demographic	Total = 124 no. (%)
<b>Department</b>	
Medicine	90 (72)
Surgery	14 (11)
Pathology	9 (7)
Other	11 (9)
<b>Level of training</b>	
Attending	90 (72)
Resident/Fellow	29 (23)
Other	5 (4)

### Conclusion

- Important areas of disagreement exist within the Baystate Health medical community as to what diagnoses should be considered critical and require expedited communication.
- Discordant expectation between pathologists and clinicians can cause breakdowns in communication, resulting in delayed treatment of serious conditions.
- Because our access to patient interaction is limited, pathologists rely heavily on information provided by the clinician.
- If the clinician fails to include any clinical information, the pathologist must utilize the electronic medical record to determine the urgency of a result.
- Fostering agreement within the interdepartmental medical team of what findings should be considered alert-urgent or unexpected and how they should be communicated is essential to improving patient care and safety.

### Recommendations

- With this feedback from our clinical partners in this survey, we have modified our departmental critical diagnoses communication protocols.
- Modernization of the pathologist work station would enable us to better access the clinical information necessary to determine if special communication to the treating team is warranted, and would improve the delivery of critical diagnoses.
- Forming and maintaining a robust quality assurance system is vital to a successful critical diagnosis communication protocol

### References

- Raouf E. Nakhleh, Jeffrey L. Myers, Timothy C. Allen, Barry R. DeYoung, Patrick L. Fitzgibbons, William K. Funkhouser, Dina R. Mody, Amy Lynn, Lisa A. Fatheree, Anthony T. Smith, Avtar Lal, Jan F. Silverman, (2012) Consensus Statement on Effective Communication of Urgent Diagnoses and Significant, Unexpected Diagnoses in Surgical Pathology and Cytopathology From the College of American Pathologists and Association of Directors of Anatomic and Surgical Pathology. Archives of Pathology & Laboratory Medicine: February 2012, Vol. 136, No. 2, pp. 148-154.
- Chapman, C.N. and Otis, C.N. From critical values to critical diagnoses: a review with an emphasis on cytopathology. Cancer Cytopathol. 2011; 119: 148-157