Supplementary Material S2—Select comments from respondents about each cytology report format

**Traditional narrative format**

*Clinical Pathologists*

- I don't believe we can thoroughly quantitate feelings. Cytopathology represents only a portion of the lesion and is not the gold standard in most cases. No matter how precise we believe we can diagnose with cytopathology, it is histopath that fully diagnoses and patient response/behavior that fully answers the big question, did we get it right?
- Cytology is a subjective science, and arbitrarily assigning probably numbers instills a greater confidence than is likely warranted
- The probabilities are very arbitrary and can cause further confusion
- Because the probability based is very difficult to conform to from a pathologist point of view. We all use terms that sort of rank from strongest to weakest, but actually defining a probability is very tricky and could be somewhat deceptive in how it conveys likelihood of disease to the clinician
- Assigning percentages to each differential is not really possible without complete knowledge of the case. Histories sent with samples are nearly always incomplete. A pathologist cannot see the patient to assess them.
- More flexibility for the comments to influence discussion/further diagnostics and to truly allow reflection on the uncertainty/certainty of the diagnosis.
- Descriptive. The reader should be able to read the description in a report and come to the same conclusions as the pathologist. It also allows the pathologist to, conversationally, advise the reader about next diagnostic steps, prognosis, etc.

*Specialist Clinicians*

- Old habits die hard. This is what I am used to reading.
- It is what I have been accustomed to- I find it more concise and prefer making my own final decision.
- I don't understand how the probabilities are determined and if they would be consistent between reports
- I do not think that the "numbers" have much of a scientific basis behind them. Certainly those numbers could not be legally defended.

*Non-Specialist Clinicians*

- All these percentages makes it too complicated to read. If the pathologist knows their stuff we shouldn't need the rest of this. More information than is necessary
- what i am use to . Description of slides is easy to understand and draw a conclusion or not one in this case
• It is what I am used to reading, and the probability format seems like "glorified guesswork"
• After 40 years of veterinary practice, I think like that presentation. Possibly since I have always seen them presented in that format.
• I guess I'm old and just used to it.
• I'm used to it, and I feel the pathologist should be able to tell me what they feel is the most likely scenario, without giving me actual percentages. Keeps it more "human."
• I am most familiar with this, and it provides the detailed info I require.

**Probability-based Narrative Format**

**Clinical Pathologists**

• Clear indication of the degree of certainty.
• May be simpler for clinicians and decrease misinterpretation of reports.
• Conveys the pathologist's impression best. Seems to convey the pathologist's 'gut feeling' even with the limitations of the sample.

**Specialist Clinicians**

• Clear, concise, probability based. More coherent than choice #3
• I like the ranking being objective with numbers. This is more clear and effective than adjectives.
• I like the more objective qualifiers rather than just assessments like "most likely" and "probably"
• I like quantification placed on the various descriptors that clin paths often use (suspicious for, most consistent with etc.). My perfect situation is to just talk directly to the clin path if sample not conclusive to get their off-the-record impressions.
• It seems to give a more clear direction in terms of what is most important to address first and a suggested order to work through and compare to other information clinical might have that would alter the probabilities.
• Close to the Traditional narrative format but with the ranking that is likely to be more informed/current versus personal experience.
• I like the narrative, but adding the probability helps me understand what those words mean to the pathologist
• It keeps the narrative format that I am used to while clarifying the modifiers making that more consistent between pathologists.

**Non-specialist Clinicians**
• Reading the narrative format is familiar and understandable. I appreciate the additional details the probability report provides. It helps have more concrete evidence when clinicians and owners are making a decision on best next steps.
• Because it is the traditional narrative with the probability which is a plus I prefer the traditional narrative vs the template as I find it easier to read and find the information
• Most thorough and consistent review of information, flowed well, provided good raw and interpreted data
• It keeps the traditional format but adds a key to help clinicians understand the defined probability rather than them having to guess between different pathologists
• I like narrative structure, as a reader, and the probability numbers are helpful in discussing results with a client.
• Provides more description than the template and gives a better idea of what the pathologist thinks is most likely

Probability-based Template Format

Clinical Pathologists

• Easily read, like the probabilities.
• Easier to find the information you need and will force standardization of reporting techniques. Too many pathologists use qualifiers that aren't always interpreted the same way by clinicians.
• The template would make it faster for us to write reports.
• I like the description. I find it easy to read and straightforward

Specialist Clinicians

• Clearly written and easier to understand. Ensures that all aspects of the cytologic evaluation are described. Provides practitioners with probability statistics which may help clinical decision making.
• This makes the history and reason for the study clear. It is easy to read quickly.
• Info was easy to find without having to read all of it multiple times if I had questions.
• I liked that it was easy and quick for me to get the information I needed from it.
• It gives the probability of the tumor/lesion and I do not have to rely upon interpreting the pathologist's words of "likely" or "unlikely" etc...I also like the description with headings over the narrative probability as it gets straight to the point about the tumor cells
• Like the bold headings and succinct information in very easy to find 'subheadings'
• Has a "checklist" style which reminds both the pathologist and clinician the important things to check for.

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• More detailed and accurate information. Easier to "read" and interpret. Better/more complete information that will assist when talking to an owner.
• Very easy to identify components of description and interpretation. As a person with Attention Deficit Disorder, this is IMMENSELY helpful.

**Non-specialist Clinicians**

• It's more to the point and I can read it faster. The probability ranking will help me to better convey prognoses to my clients.
• It seems the most complete/descriptive. All of the information contained within the report are things I am interested in. Probabilities are helpful, but even comments on adequacy of slide prep, reiterating signalment, etc are helpful.
• It appears there is less text overall so I think it looks like it will help condense the information better to help summarize and simplify the information for the clinician.
• It breaks up the narrative text in a predictable format. It's much more efficient to locate the desired data.
• It is an easier to understand format and has each category defined
• I really like the probability scores. Even better, the break up of the initial description paragraph helped me more easily see what criteria the pathologist is specifically looking for in their evaluation.
• I find the "bullet point" approach easier to read as this is how I organize "narrative" based reports. I will rewrite paragraphs in a template form for my own learning and understanding of a case.
• Clear, concise, easy to read with additional details provided if I want to read more, or need to understand why the interpretation was made.
• Love the probability section. Like the template for quick scanning
• Gives details about the quality of the specimen/slide, as well as probabilities for the various interpretations. In short, more information, but in a very concise manner.
• It has the results separated into categories that need to be addressed so there's uniform results between patients. Also, having probabilities makes it easier to communicate with lay persons, i.e. clients.
• The template format is nice instead of the cytologic details paragraph for quick future reference. I am a relief vet so for me, this provides a nice way to 'standardize' so I can find relevant details quickly in previous reports.

**Students**

• It summarizes the findings in a concise manner at the top, which sometimes is enough for a clinician to decide the next steps. However, if you want more information, the details are provided afterwards and easy to follow
• It's the easiest to read and I can find out the most important findings immediately.
• The report is succinct and easy to read when you're quite busy and need to get to the crux of what the interpretation is. It doesn't have as much lengthy text that might be more difficult to sift through.
• Easy to read and jump to different sections if required compared to the narrative style. Probability allows you to keep an open mind about the potential cause and not become set on one thing being the right answer.
• Very easy to read and identify important information
• A template ensures that no part of the report is excluded as you should consider answering each part of the analysis individually. Additionally, it's easier to read than in paragraph form.
• It is easy to read and I can quickly see all the key details.
• It is concise, easy on the eye and still gives a good scope of information. I also believe it is faster to write for the pathologist.
• It gives clear descriptive and well demarcated information that is easily evaluated at an abbreviated glance and indicates surety on a graduated scale that removes some aspects of individual bias in interpreting what the report indicates
• Provides more information than the traditional format (gives probability of findings) and is more simple to read than the probability based description
• I like that it broke down the cell types that were seen or were not and then explained the thought behind it.
• Very clear headings and set out more in a dot point format so I find it easier to remember what I read previously/find something I need to recall quickly
• It is more detailed and gives a clarity of how the cytology is conducted by the 1st person. It gives me a sense of preparedness and sureness on how to further go about with the case even if I don't conduct the cytology myself.
• I prefer this format because it is easier to find what I need instead of reading through some fluff that comes with the narrative formats