How to write an Interpretation


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How to write an Interpretation

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How to write an Interpretation

Every day we interpret examination findings and clinical tests with the aim of coming to a diagnosis. But how well do we interpret these tests?

Whether it is a traditional examination technique used by doctors for centuries or a new cutting-edge biomarker; the diagnostic landscape shifts over time. The aim of an E&P interpretation is to produce a library of evidence-based resources directing the use of clinical tests including examination techniques.

STYLE

An interpretation is not a traditional review. Imagine you are writing a guide for a general paediatrician to read in the 10 minutes, prior to clinic starting or during some downtime on a night shift. It should be enjoyable to read and easy to understand whilst still being evidence based and up to date.

Increasingly people are looking for credible learning resources on social media. As part of your interpretation we ask you produce an infographic that includes the key learning from your article (Figure 1 – Summary infographic). This will be shared on social media to promote your article. There a number of free software packages for producing infographics including:

Pictochart: https://piktochart.com/
Canva: https://www.canva.com/

TOPICS AND AUTHORS

Any test used in paediatric practice lends itself to an Interpretation including everyday tests, specialist tests, whether performed in a laboratory, at the bedside or in the radiology department. Another category of tests that may be discussed are clinical examination techniques, which we are particularly keen to publish on. Although a senior author with specialist knowledge on the test is required, Interpretations can be written by paediatricians of any grade. The registrar on the shop floor is arguably in the best position to ask relevant questions.
How to write an Interpretation

FORMAT
The single most important point to make about the format is that an Interpretation is not a standard review in disguise. We have developed a format for Interpretations that we think works well for our readers. The supplementary template is designed to help with writing an interpretation.

CLINICAL SCENARIOS
The clinical scenarios are the backbone of Interpretations through which authors discuss the use of tests performed within a specific context in a specific patient group.

These clinical scenarios should use the PICO (patient, intervention, comparison, outcome) format of evidence-based medicine. What we are not looking for are nonspecific questions such as: What does the test result mean? Such questions produce answers of little practical value. Instead, specific questions are required which generate practically useful answers. The above question, therefore, might be better posed as:

In febrile infants (P) does raised procalcitonin (I) compared to a normal procalcitonin (C) predict bacterial sepsis (O). The answers to these questions should be argued with reference to recent and high-quality research evidence. In the absence of research evidence, expert opinion or consensus guidelines can be cited.

At the end of your scenarios you MUST include a table (Table 1) summarising the test’s diagnostic accuracy. (There are freely available templates of suitable tables in the supplementary material linked to this article online)
Table 1: Diagnostic accuracy of fictional test X at cut-off Y in diagnosing Z

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>SENSITIVITY (95% CI)</th>
<th>SPECIFICITY (95% CI)</th>
<th>NPV (95% CI)</th>
<th>PPV (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEONATES</td>
<td>0.91 (0.88-0.94)</td>
<td>0.99 (0.91-1.00)</td>
<td>0.99 (0.97-1.00)</td>
<td>0.89 (0.88-0.94)</td>
</tr>
<tr>
<td>INFANTS UNDER 3 MONTHS</td>
<td>0.86 (0.81-0.91)</td>
<td>0.91 (0.88-0.94)</td>
<td>0.91 (0.88-0.94)</td>
<td>0.75 (0.70-0.85)</td>
</tr>
<tr>
<td>INFANTS OVER 6 MONTHS</td>
<td>0.75 (0.70-0.85)</td>
<td>0.86 (0.81-0.91)</td>
<td>0.86 (0.81-0.91)</td>
<td>0.68 (0.55-0.77)</td>
</tr>
<tr>
<td>CHILDREN OVER 6 MONTHS</td>
<td>0.68 (0.55-0.77)</td>
<td>0.58 (0.44-0.68)</td>
<td>0.58 (0.44-0.68)</td>
<td>0.58 (0.44-0.68)</td>
</tr>
<tr>
<td>NEUTROPENIC CHILDREN</td>
<td>0.58 (0.44-0.68)</td>
<td>0.51 (0.47-0.63)</td>
<td>0.51 (0.47-0.63)</td>
<td>0.58 (0.44-0.68)</td>
</tr>
</tbody>
</table>

CI Confidence Interval, NPV Negative Predictive Value, PPV Positive Predictive Value

MAKING AN IMPACT
At E&P we are keen to support novice writers. To help you in getting work published we ask that you contact us with a short proposal (half a side of A4) outlining your proposal (elevator pitch) – please include some examples of clinical questions. We will then provide specific feedback and, if appropriate, issue a formal commission through the journal’s online submission system. Once formally submitted your article will be sent for peer review. Successful articles will be published in the E&P journal and infographics shared on social media.

Figure 2. (Summary guide)

GO FOR IT
We are here to help so begin preparing your elevator pitch and send in you half page outline.