LETTER

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The recent Message from the Editors, "The Value of a Case Report" states, "No matter how compelling a vignette may seem, one must always be concerned about the reliability of inference based on an 'n of one.' No statistics are possible in case reports." Although we agree that caution should always be exercised in interpreting case reports, we believe that this broad statement would benefit from qualification.

The utility of statistics depends on the number of independent observations, not the number of subjects. An "n of one" study can provide powerful statistical evidence that a correlation is above chance level if it contains many independent observations. This can be achieved, for example, by multiple crossovers between an intervention and a placebo² or by multiple observations of spontaneous behavior over time.3 Conversely, a large population study may wrongly

suggest that a correlation is above chance level if all subjects share a common confounding factor. An "n of one" study cannot assess incidence or prevalence, but it can be designed to answer to a rigorous statistical standard.

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References

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