

PRIMARY REVIEWER: I've reviewed it pretty carefully, and I think this is a promising application. The results shown here are very significant.

PANEL MEMBER 1: Based on?

PRIMARY REVIEWER: Well, if you refer to the histogram on Figure 3... Everyone there?

PANEL MEMBER 2: Hang on one sec...

PANEL MEMBER 1: I'm there.

PANEL MEMBER 2: Ok, I got it.

PRIMARY REVIEWER: These results show a concentration-dependent effect from this compound on cell growth. That's huge. It's something we haven't seen before.

PANEL MEMBER 2: Right. That's true.

PRIMARY REVIEWER: And it's exciting!

PANEL MEMBER 1: Maybe...

PRIMARY REVIEWER: Maybe?

PANEL MEMBER 1: Look, I hate to be a killjoy, but I'm a little skeptical.

PRIMARY REVIEWER: Based on what?

PANEL MEMBER 1: I'm not sure they're strong enough...

PRIMARY REVIEWER: Ok... Really?

PANEL MEMBER 1: See, the figure legend states that results for two concentrations weren't included because the samples were lost to contamination. But, it seems really unlikely that every single time the experiment was repeated, that the exact same samples in the exact same concentration were also lost to contamination.

PRIMARY REVIEWER: And what does this suggest to you?

PANEL MEMBER 1: That the error bars represent variations in cell counts between culture dishes used in a single experiment. Just one. No replicates.

PANEL MEMBER 2: I agree. The average cell count in any one experiment should be viewed as a single data point.

PANEL MEMBER 1: Yeah, not an average across multiple data points.

PRIMARY REVIEWER: Right. There's only one data point here and it's being reported as an average of multiples.

PANEL MEMBER 2: As in, you may take a thousand cells from one mouse, but you can only get one point from the results.

PANEL MEMBER 1: Exactly. We actually use that example frequently when we train students in my lab.

PRIMARY REVIEWER: So, these results are not as strong as they seem.

PANEL MEMBER 1: Right.

PRIMARY REVIEWER: Well, my TWO killjoys, you've made some good observations today.

PANEL MEMBER 1: We are not killjoys...

PANEL MEMBER 2: Well, YOU always are... but not me.

PRIMARY REVIEWER: Listen, different experiments have different pitfalls, and you guys caught this one. It's still an exciting application. Quite promising. But it's obviously going to need some redesigning to confirm and strengthen these results.

PANEL MEMBER 1: Yeah. And that might effect their score.

PANEL MEMBER 2: Killjoy...

PANEL MEMBER 1: Just doin m'job!

PRIMARY REVIEWER: And doing it quite well, I might add. All of you. Alright, is there anything else?

PANEL MEMBER 3: Actually I'd like to go back to Figure 4.

PRIMARY REVIEWER: Sure.