Author’s response to reviews

Title: Using information theory to identify redundancy in common laboratory tests

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Author’s response to reviews: see over
Dear Editor:

Our manuscript being submitted describes the results of the first ever attempt, to the best of our knowledge, to apply information theory to lab tests to quantify their redundancy with each other. Specifically, we quantified the average amounts of total, novel, and redundant information contained in various lab tests from the intensive care unit (ICU), across ICU days and between related variables.

Information overload and excessive bloodwork are serious problems not only in intensive care but also in many medical specialties, and we believe that information theory can be similarly applied to those medical fields to facilitate clinical information management and decision making.

Please note that none of the standards of reporting are applicable to our work since it did not follow a traditional clinical study design. STROBE may be the closest but we still feel that it is not applicable because our study did not have exposed and control groups.

We hope that the clinical implications of our analytic approach are of major interest to the readership of BMC Medical Informatics and Decision Making. Thank you very much for considering our manuscript for publication, and we look forward to receiving reviewers’ comments.

Sincerely,

Joon Lee, PhD
Assistant Professor