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Faculty of Sciences

Master of Statistics

Master's Thesis
Evaluation of Surrogate Endpoints in Human Microbiome

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1 Background & Introduction

The sensitivity of some so called true endpoints(credible indicator of therapeutic response to an applied treatment) as well as time taken for evaluation of treatment effect on these endpoints makes the search for surrogates an improtant endeavour in modern medicine[Burzykowski2005]. While the the idea of surrogate endpoints (as they are popularly referred to) is appealing, they are not easy to come by and their evaluation is as well not a trivial task. However, the

1.1 The Human Microbiome

The human microbiome is made up of trillions of symbiotic bacteria cells in humans[2]. Although their functions is not yet fully understood, they are associated with nutrition, metabolism, immune function and human physiology[1].

1.2 Surrogate Endpoints & its Evaluation

Surrogate endpoints, as the name implies is a substitute for

References

[1] M. J. Bull and N. T. Plummer. "Part 1: The Human Gut Microbiome in Health and Disease". In: *Integrative Medicine: A Clinician's Journal* 13.6 (2014), pp. 17–22.

[2] L. K. Ursell et al. "Defining the Human Microbiome". In: *Nutirition Reviews* 70.Suppl 1 (2012), S38–S44. DOI: http://doi.org/10.1111/j.1753-4887.2012.00493.x.

Appendix