BIOSTATISTICS STATEMENT

Title: Highly accurate colorectal cancer prediction model based on Raman spectroscopy using patient serum

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Biostatistics Statement: Data analyses were performed using JMP® Pro 14.3.0 (SAS Institute Inc., Cary, NC, USA). The scattering light intensity in serum was extracted from the obtained Raman spectra. The average values of the three extracted scattering light intensities from each spectrum were analysed as training data by the boosted tree model with the use of JMP® Pro 14.3.0. The average values for the three extracted scattered light intensities among the patient groups were evaluated for normality using the Tukey test. Inter-group differences in non-normally distributed data were compared using the Steel-Dwass nonparametric test. These analyses were also performed using JMP® Pro 14.3.0. P values less than 0.05 were considered statistically significant.

Statistical analysis was mainly performed by Hiroaki Ito who has an expert knowledge of biostatistics.

Best regards,

Hiroaki Ito

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