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Verification of the effectiveness of the Fourier transform infrared spectroscopy computational model for colorectal cancer

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Highlights

- Physics-based computational model reflects the efficacy of chemotherapy.
- Post-chemotherapy colon tissues FTIR spectrum was similar with healthy one.
- FTIR is a sensitive distribution indicator for the main biochemical compounds of healthy and cancerous colon tissue.
- Cancerogenesis caused changes in spectrum representing the vibration of carbohydrate, protein and lipid functional groups.