of data collection. Environmental conditions can affect local perfusion but there have been no studies to date that have assessed the effect of temperature on NIR results in burn patients. The measurement of body systemic and room temperature should be incorporated into all future studies where blood flow and tissue hemodynamics are being assessed.

In conclusion, this study represents our preliminary work using NIR spectroscopy to determine burn depth. The transition from the bench to the bedside has enabled us to develop clinical mathematical algorithms for superficial and full-thickness injuries and to extract hemodynamic information from a simple reflectance of light. Obtaining physiologic information from an acute burn injury in a clinical setting is exciting and the possibility of this technology to assess and differentiate partial-thickness injuries is the objective of our future work.

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REFERENCES