Introduction
More hospitals are establishing centralized frozen laboratories on-campus and/or at satellite facilities, creating the need to provide Pathologists instant remote access to frozen section slides for review from their office for live intraoperative consults. Remote live review of slides using the VisionTek®/VisionTek® M6 Digital Microscope (Sakura Finetek, Torrance, CA) reallocates the Pathologist’s time spent on travel to the satellite facility on-campus laboratories to instead read non frozen cases increasing productivity and generating incremental revenue. A comprehensive Return on Investment (ROI) model to justify the use of remote live digital microscopy is presented. The model calculates and projects the following:
- Time saved
- Incremental revenue generated utilizing the time saved
- Payback time (time for return of the investment)
- Overall financial benefits

Materials and Methods
Provide a flexible ROI model that calculates and visualizes the time saved using remote live digital microscopy, the incremental revenue generated utilizing the time saved, the payback time, and the overall financial benefit using VisionTek/VisionTek M6.

Results
Example 1 – Satellite facility
- Traveling to the same satellite facility (2, 4, 6, 8, or 10 times per week)
- Satellite facility is 10 miles away (round-trip 20 miles)
- Travel time is 2 hours round-trip
- $1 VisionTek M6
- When a VisionTek M6 is used, the Pathologist Assistant (PA) travels to the satellite facility instead of the Pathologist

Example 2 – On-campus laboratory
- Walking to on-campus frozen section laboratory (5, 10, 15, or 25 times per week)
- Travel time is 20 minutes round-trip
- $1 VisionTek
- Without VisionTek, the Pathologist performs grossing and reviews the slides
- With VisionTek the PA performs grossing and operates the VisionTek; the Pathologist reviews the slides remotely

Example 3 – Satellite facility and on-campus laboratory
- Cases per week at satellite facility/on-campus (3/10, 3/15, 5/15, 7/20)
- 2 VisionTek M6 (satellite facility and on-campus)
- Satellite facility is 10 miles away (round-trip 20 miles)
- Travel time is 2 hours round-trip to satellite facility
- Travel time is 20 minutes round-trip to on-campus laboratory
- When using 2 VisionTek M6, the PA travels to the satellite facility and on-campus laboratory, performs grossing and operates the VisionTek M6

Conclusions
The presented model compares the financials of investing in remote live digital microscopy using VisionTek/VisionTek M6 to review slides on-campus and/or at satellite facilities with situations where Pathologists have to travel to them. It presents the results compiled separately for the appreciation of the Pathologist and Hospital Administration. The considered parameters and calculations of the model have been verified by 3 hospitals.

An investment in live digital microscopy using VisionTek and/or VisionTek M6 provides preferable profitability with a short payback time. The presented model is a powerful tool to validate the financial benefit of investing into remote live digital microscopy.

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