Microneedle Therapy for Basal Cell Carcinoma
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Introduction
• Basal Cell Carcinoma (BCC) is a very common form of cancer
• Current chemotherapy drugs are proven to be effective, but its route of administration suffer from systemic side effects.
• We propose a microneedle system that can deliver chemotherapy drugs without the harmful side effects.

Objective
• This experiment analyzed the release of vismodegib at varying w/w concentration (vismodegib/PLGA).
• We opted for single needles due to issues in using the arrays.
• The release of the drug was measured daily for a period of one week with UV Vis Spectroscopy.

Results & Conclusion
This experiment reveals that release tend to decrease over time, but it is difficult to decipher the results (may need more samples or another method). 5% and 10% released only a small percentage of its load in 1 week but 2% released about 80%.

Future Direction
• Using the microneedle arrays for uniform needle formation
• Studying the models longer (1-3 months) for complete degradation
• Encapsulation and degradation studies
• In vivo studies in porcine models

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References