CleanCision:

A Novel Wound Retractor with Continuous Antibiotic Irrigation for Reducing Surgical Site Infection

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Objective of the Device

- Reduce the incidence of postoperative surgical site infection (SSI)

Description of the Device and Method of its Use

- Barrier wound protector that can accommodate various incision sizes
- Integrated automated low-pressure wound irrigation system that provides continuous antibiotic infusion to the wound while the device is deployed
- Combined anti-contamination mechanism
  - Mechanical barrier preventing bacterial contact with the wound
  - Irrigation system flushing the bacteria that manage to breach the barrier

Preliminary Results

- Study 1[1]
  - In a prospective multicenter pilot study, culture swabs of the incision edge were collected before and after placement of CleanCision
  - CleanCision was associated with a 66% reduction in overall bacterial contamination
- Study 2[2]
  - CleanCision versus Alexis retractor
  - CleanCision was 91.3% more protective against SSI

References: 1. Papaconstantinou et al (2018). World J Surg. 42:3000-3007 2. Nasseri et al (2022). Abstract.

Conclusion

- Preliminary results suggest that the use of CleanCision reduces the rate of postoperative SSI







