Adhesive, Non-absorbent Nanoparticles for Dermal Applications

**OCR Number:** OCR 68396688

**Description:**

**Adhesive, Non-absorbent Nanoparticles for Dermal Applications**

- Biodegradable nanoparticles that stick to skin, are removed by friction, but don’t wash off
- Demonstrated efficacy using sunblock in rodent models
- Prevents UV damage to skin
- Wipes off with towel, doesn’t wash off with water
- Many possible non-prescription and prescription applications
- Clinical trial of sunblock currently enrolling subjects
- **Reference:** Deng et al. (2015). Nature Materials
- **Patent** Application filed
- **Lead Innovator:** Mark Saltzman, Ph.D.

BNPs encapsulating an infrared dye, IR-780, were applied to the dorsal skin of mice. After wiping with a wet towel (T) or washing with water (W), their skin retention was imaged with Xenogen.

Deng et al. (2015). Nature Materials

**PI:** W. Mark Saltzman

**Licensing Contact:** John Puziss
john.puziss@yale.edu