**VDA-1102: A NOVEL WELL-TOLERATED TREATMENT FOR ACTINIC KERATOSIS**

Chaim M. Brickman, Vered Behar, Galit Zelinger, and Oren M. Becker

Vidac Pharma, 10 Hartom St, Jerusalem, Israel 9777510

**BACKGROUND**

**ACTINIC KERATOSIS**

- Actinic Keratosis (AK) is a prevalent early-stage malignancy of the skin that can lead to cutaneous Squamous Cell Carcinoma (cSCC).
- Due to their mechanisms of action, current effective AK field treatments are irritating and painful, and cause unsightly skin eruptions.
- These side effects result in hesitancy by both patients and physicians to initiate therapy, patient compliance issues, and/or unwillingness to re-treat lesions in the same treatment field.
- Furthermore, large populations susceptible to multiple AKs (e.g., immunosuppressed, post-transplant, elderly patients) go untreated.
- Thus, an efficacious minimally-irritating topical treatment for AK is a pressing unmet medical need.

**VDA-1102: MECHANISM OF ACTION**

VDA-1102 is a novel small-molecule HK2-modulator that triggers apoptosis and blocks glycolysis in HK2-expressing malignant cells. Normal cells that do not express HK2 are unaffected by VDA-1102.

**IN VIVO EFFICACY**

Efficacy on UVB-damaged Skin of Hairless SKH-1 Mice

- **No. lesions per treatment area**
  - Placebo
  - HK1
  - HK2
  - SN/VDA-1102

**SAFETY**

**PHARMACOKINETICS**

Pharmacokinetic analysis for the parent compound (VDA-1102) and for its major metabolite demonstrated no systemic exposure of either.

**CONCLUSIONS**

- **VDA-1102** is a selective HK2-modulator that triggers apoptosis in HK2-expressing malignant cells such as AK and cSCC, without affecting the surrounding normal tissue.
- In a proof-of-concept Phase 2a clinical trial, VDA-1102 ointment (applied once-daily for 28 days) reduced the number of AK lesions on the face and scalp of adult subjects, while being very well-tolerated both locally (skin) and systemically.
- A Phase 2b dose-ranging trial with VDA-1102 ointment (applied for 3 months) is currently ongoing.