Background
Cutaneous metastases occur in up to 10% of cancer patients (excluding melanoma) (Spratt 2014, Alcaraite 2020). Cutaneous metastases can cause considerable morbidity, leading to infection, disfigurement, and pain. The negative impacts to quality of life (QOL) for this population with advanced disease can be devastating (Spratt 2014).

Despite the prevalence and impact of cutaneous metastases, a standard of care remains elusive. Systemic chemotherapy has negligible impact on most cutaneous metastases (Fernandez-Anton Martin 2013, Spratt 2014). Additional therapies for cutaneous metastases include electrochemotherapy (ECT), photodynamic therapy (PDT), intradermal therapy (IDT), and topical therapy (TDT). No agent has demonstrated great response rates (Spratt 2014; Cubbas 2015). Therefore, there is a significant unmet need for an effective, less invasive therapy for cutaneous metastases in patients struggling with advanced primary cancer.

Paclitaxel is approved by FDA for several cancers known to cause skin metastases. This, in conjunction with paclitaxel’s cytotoxic mechanism of action, provides the basis for the investigation of submicron particle paclitaxel (formulated as SOR007) for the topical treatment of cutaneous metastases from nonmelanotic studies of SOR007. It is believed that the submicron particle will achieve a depot effect, providing a continuous dose of paclitaxel to the diseased skin over time with limited systemic exposure.

Specific Aims
• To determine preliminary safety and tolerability of topical SOR007
• To determine preliminary efficacy of topical SOR007 based on RECIST criteria, photography documentation of lesion size in longest diameter, and objective clinical response
• To study potential reduction in pain at the treatment area
• To describe the pharmokinetics of topical SOR007

Primary Endpoints
• Safety and tolerability, as demonstrated by adverse events, changes in laboratory examinations, physical examination findings, and vital signs.

Secondary Endpoints
• Efficacy will be determined by the difference in the total area of eligible lesion(s) in the treatment area between baseline and Day 43 using a calibrated grid measurement system (ImageTool) provided by the National Institutes of Health (NIH). Eligible lesions will be determined at baseline by the RECIST (Von 2009) definition of measurable metastases (i.e., >1.1) and its diameter to its longest diameter

• Objective Clinical Response (Complete Clinical Response – CR) or Partial Response (PR) is defined as the percentage of patients who achieve complete clinical response or partial response 14 days after last treatment. Best overall response is defined as the best response from the start of study treatment until the end of treatment

• Reduction in pain at the treatment area will be measured by the Numeric Rating Scale (NRS-11) from baseline to last treatment, as described by Werner (2020)

• Systemic Exposure as determined by: Time at which peak plasma concentration is observed and Area under the plasma concentration versus time curve (AUC)

Exclusion Criteria
• Male and female patients ≥ 18 years of age
• Malignancies resulting in cutaneous metastases
• Cutaneous metastases diagnosed confirmed prior to consent
• ECOG Grade 0 – 2, with minimum life expectancy of at least 3 months
• At least one baseline eligible lesion (i.e. ≥ 10mm diameter in the longest diameter)
• Willing to avoid treatment with other lotions, creams, etc. during the treatment period

• Subjects with adequate organ and bone marrow function
• Last dose of any systemic non-taxane cytotoxic chemotherapy completed at least one day prior to Day 1. Last dose of any systemic taxane cytotoxic chemotherapy completed at least 4 weeks prior to Day 1
• Willing to use appropriate birth control for patients of child-bearing potential
• Absence of any physical contact near the treatment area during and up to 2 weeks after the treatment phase

References