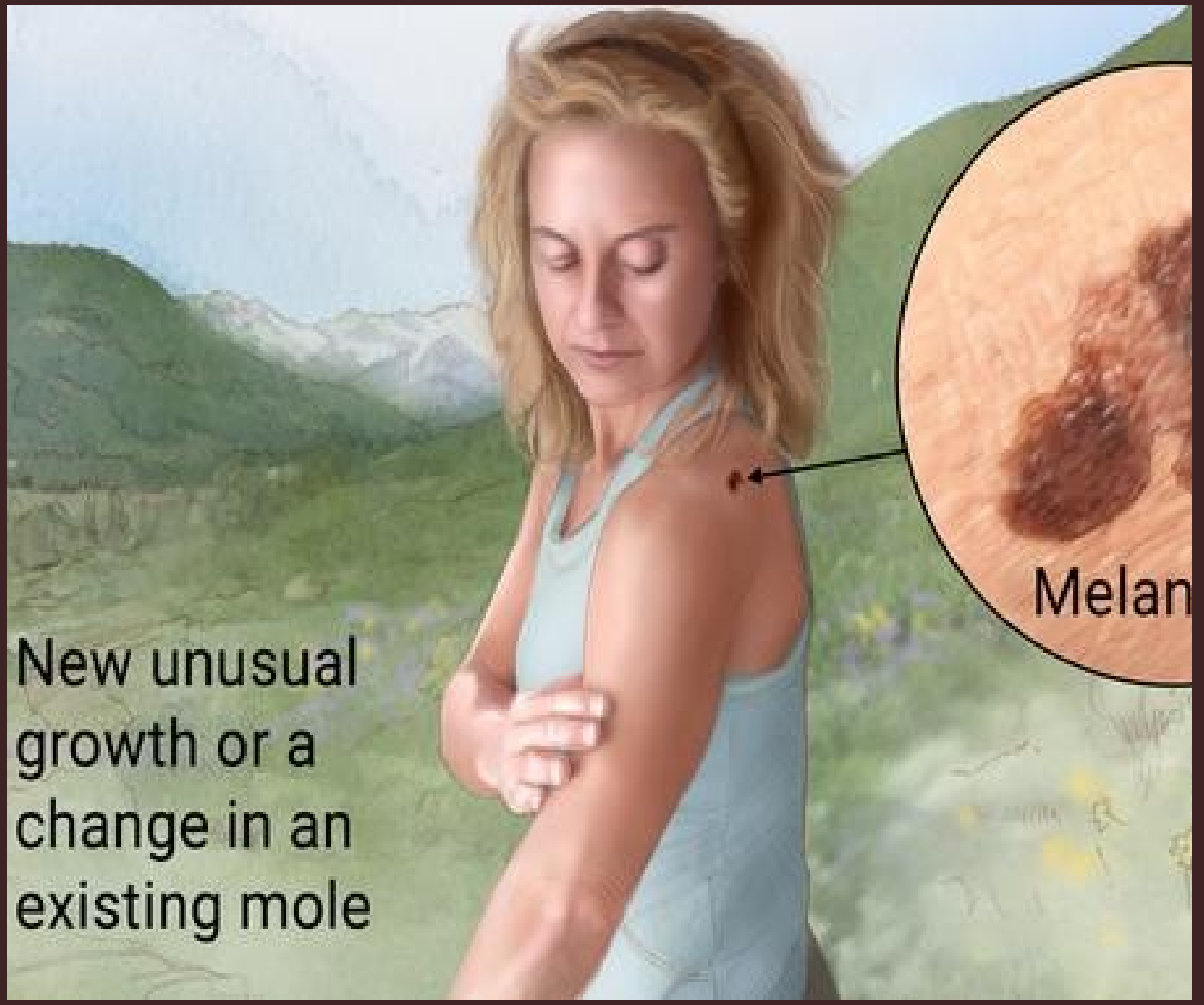
Randomized Controlled trial of the MySmartSkin to promote sun protection behavior

By Kevin Nguyen

Introduction

- → * There are about 90000 cases of malignant melanoma cases that must be diagnosed
- → This is the 5th most diagnosed cancer where incidents typically increase over time



What is the purpose of this project

→ The goal of the researchers is to conduct a randomized controlled trial to a new intervention (MySmartSkin) to determine skincare behavior amongst cancer patients

Project Overview

→We conduct this project into 2 phases:

→*Phase 1 focuses on the development the MySmartSkin intervention

→* Phase 2 focuses on a randomized controlled trial of the MySmartSkin vs

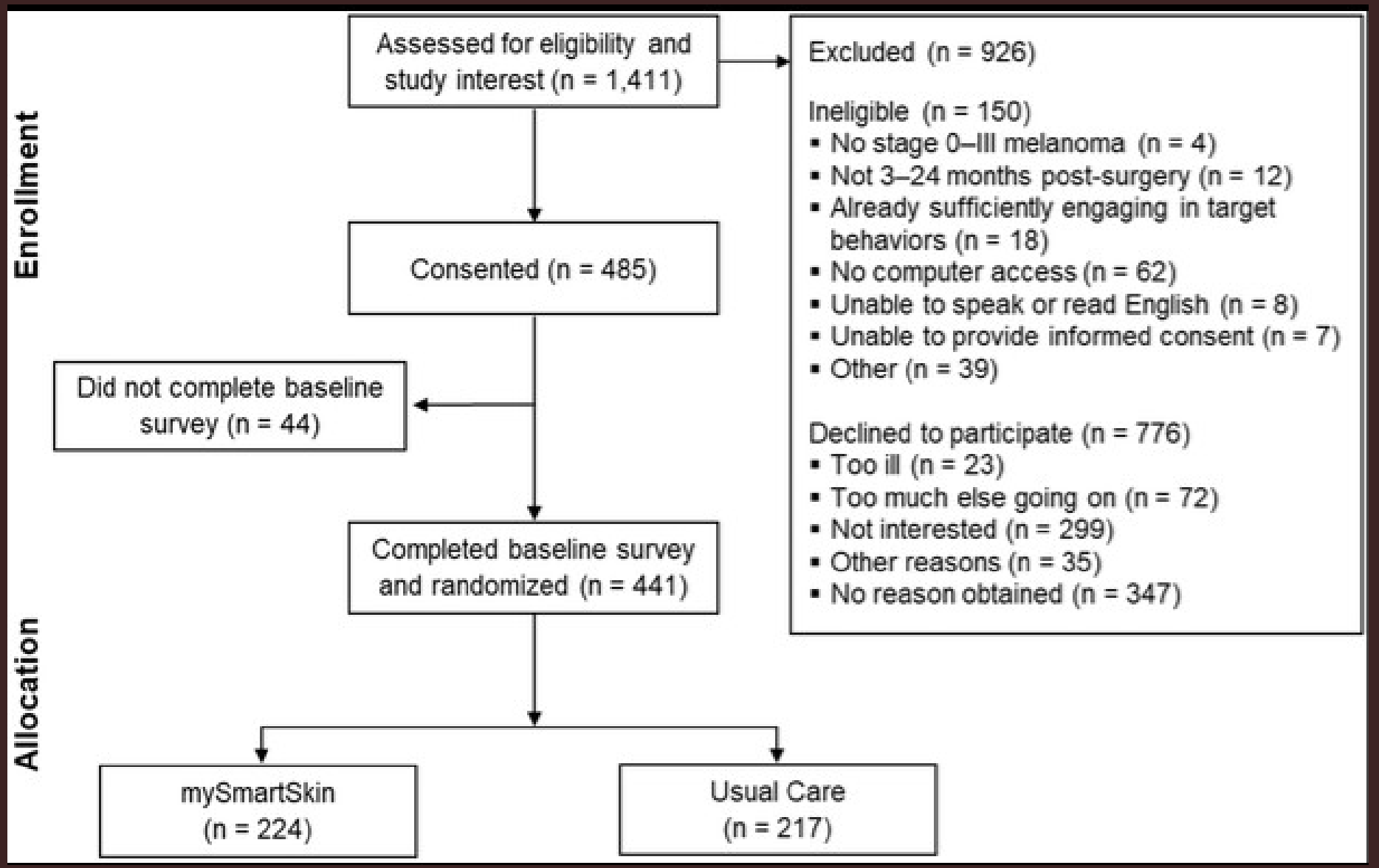
Phase 1

- → Development and refinement of the MySmartSkin intervention.
- → Basically a web-based online survey that participants fill out regarding their cancer status.

Phase 2

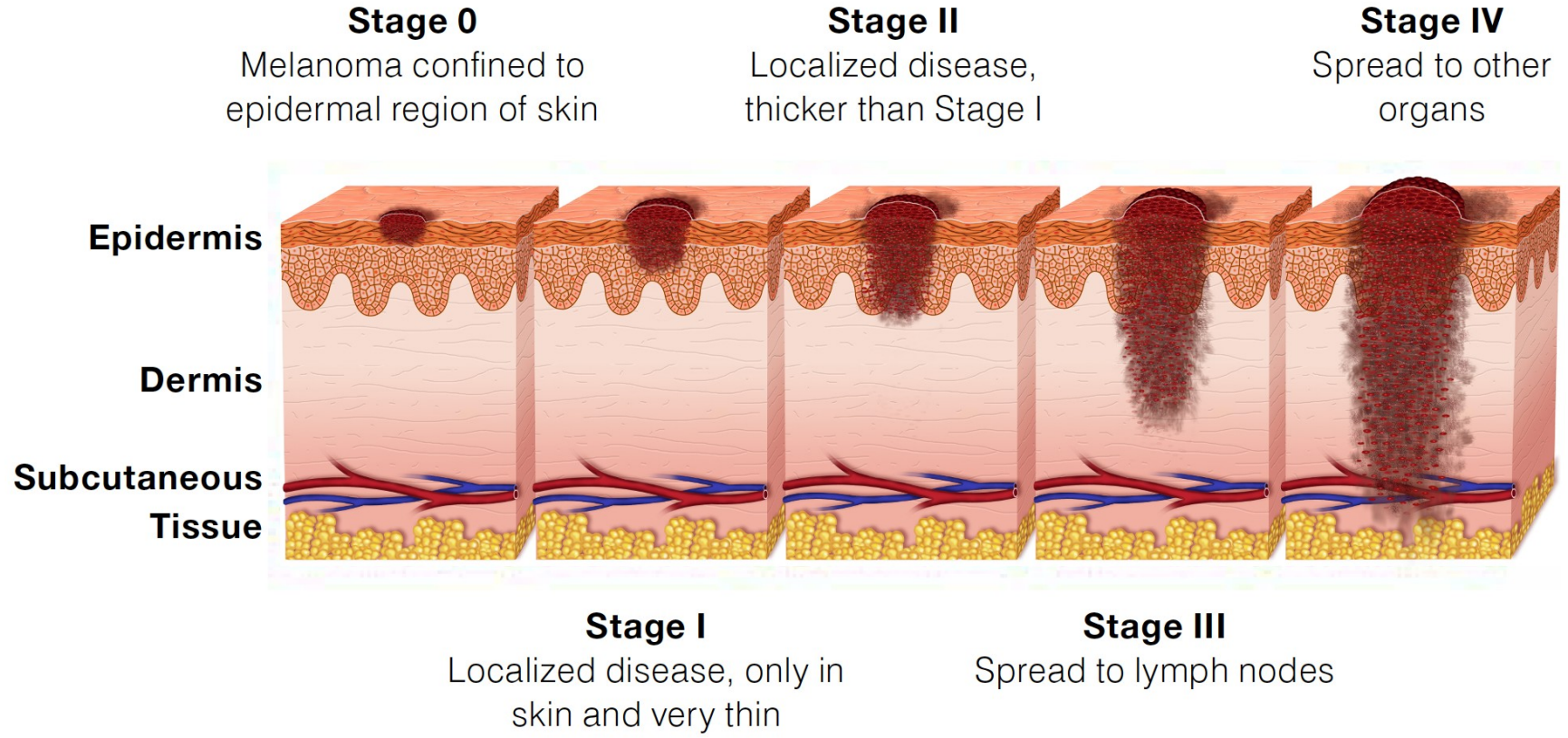
- Goal is to evaluate the results of MySmartSkin vs usual care of skin cancer patients
- Patients were chosen based on characteristics and placed into randomized groups.

To Quickly Summarize the Process of the Trial

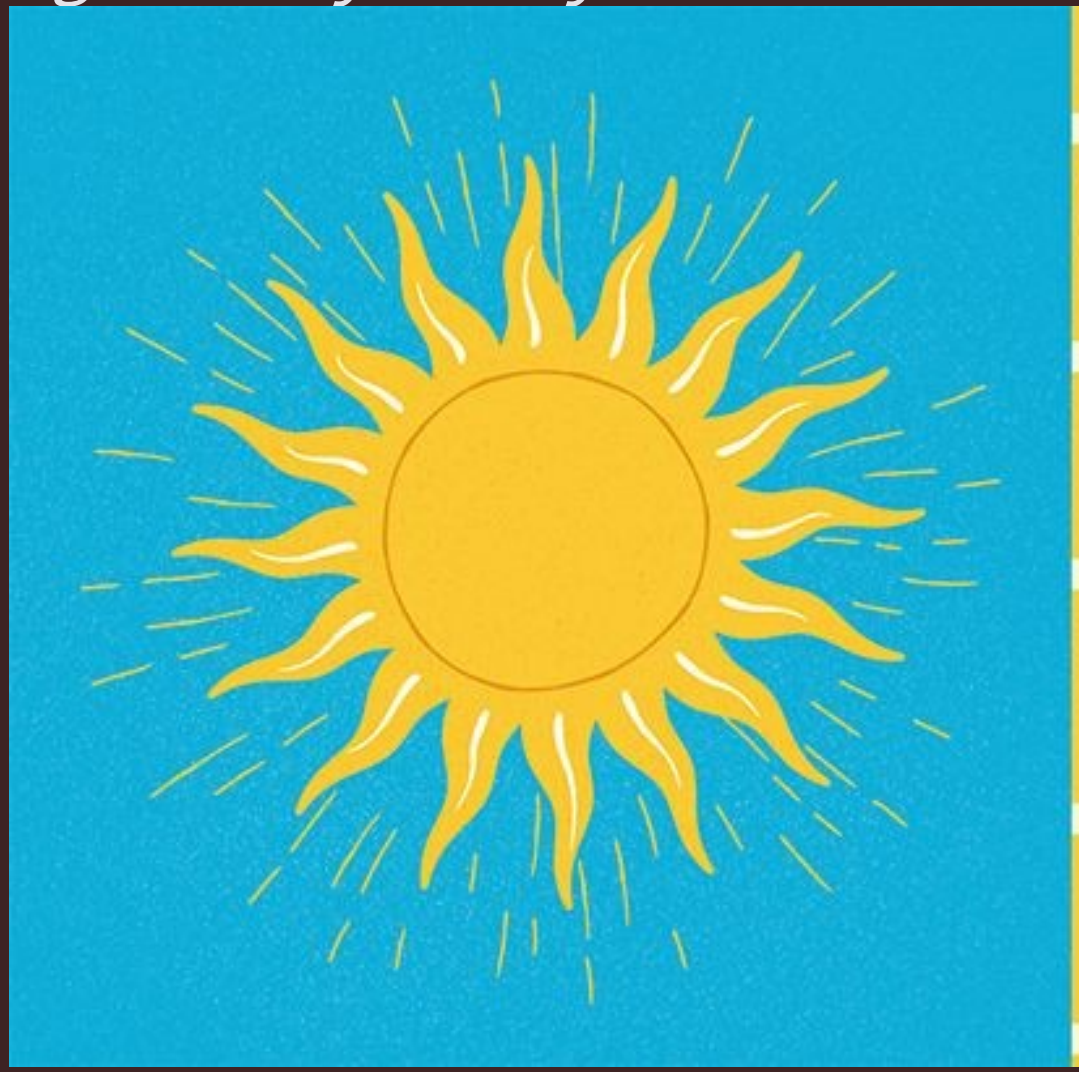


Patients are chosen based on their stage of skin-cancer and are randomized to either the treatment or control groups

FIGURE 2. Stages of Melanoma[5]



Treatment group gets the MySmartSkin whereas control group gets the usual-care treatment on their skin cancer. Results were measured through surveys every 8 weeks, 24 weeks, and 48 weeks later.



Statistical Methods that are used in this trial

→Randomized Controlled trial

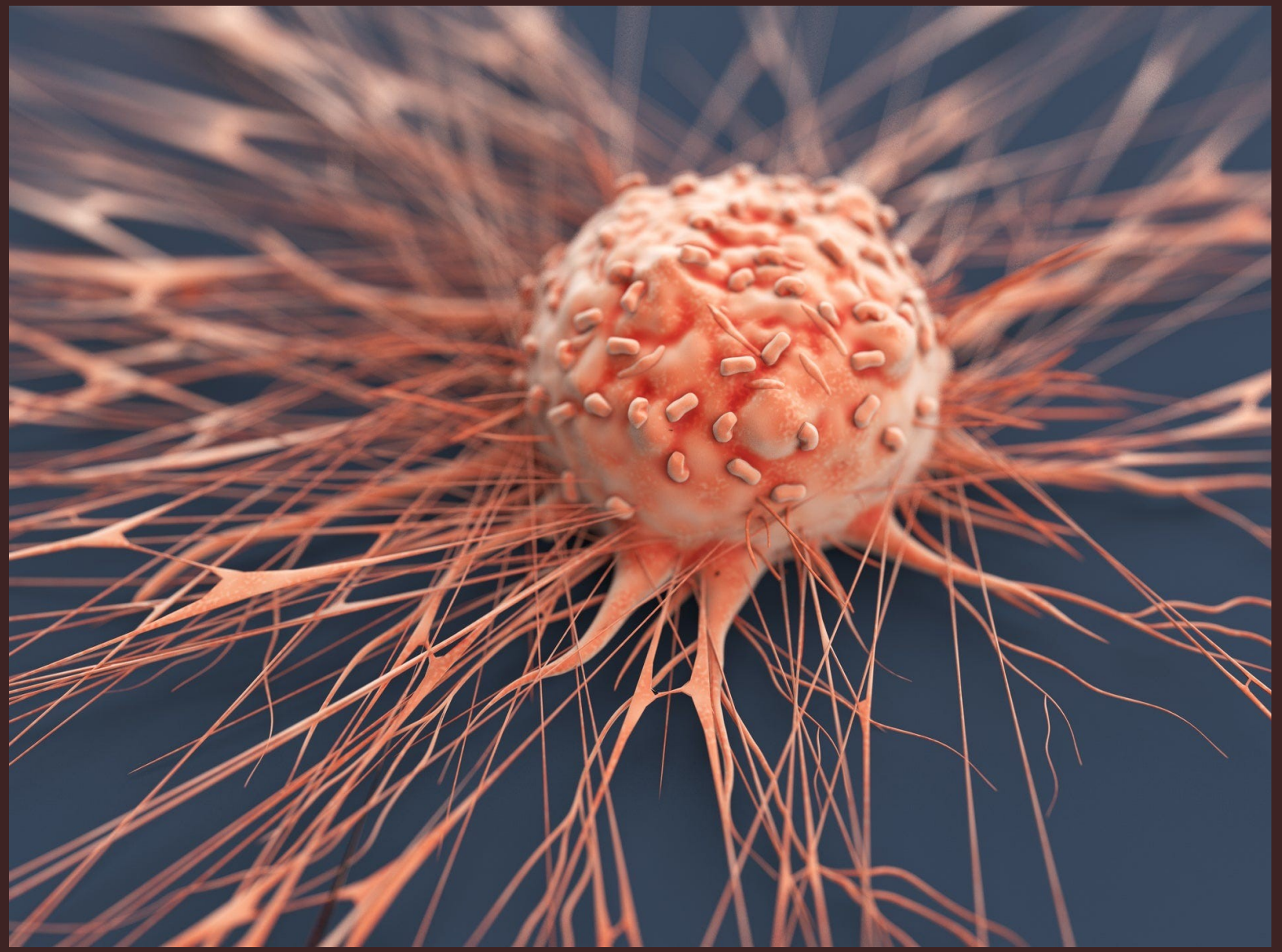
→T-tests

→Chi Squared tests to examine differences in demographic and clinical differences in the individuals

Page 11

Results

- → Of the 441 patients that consented to the trial
  - → N1=224 were placed into the treatment group, assigned MySmartSkin
  - → N2=217 patients were placed in the control group which is basically standard treatment

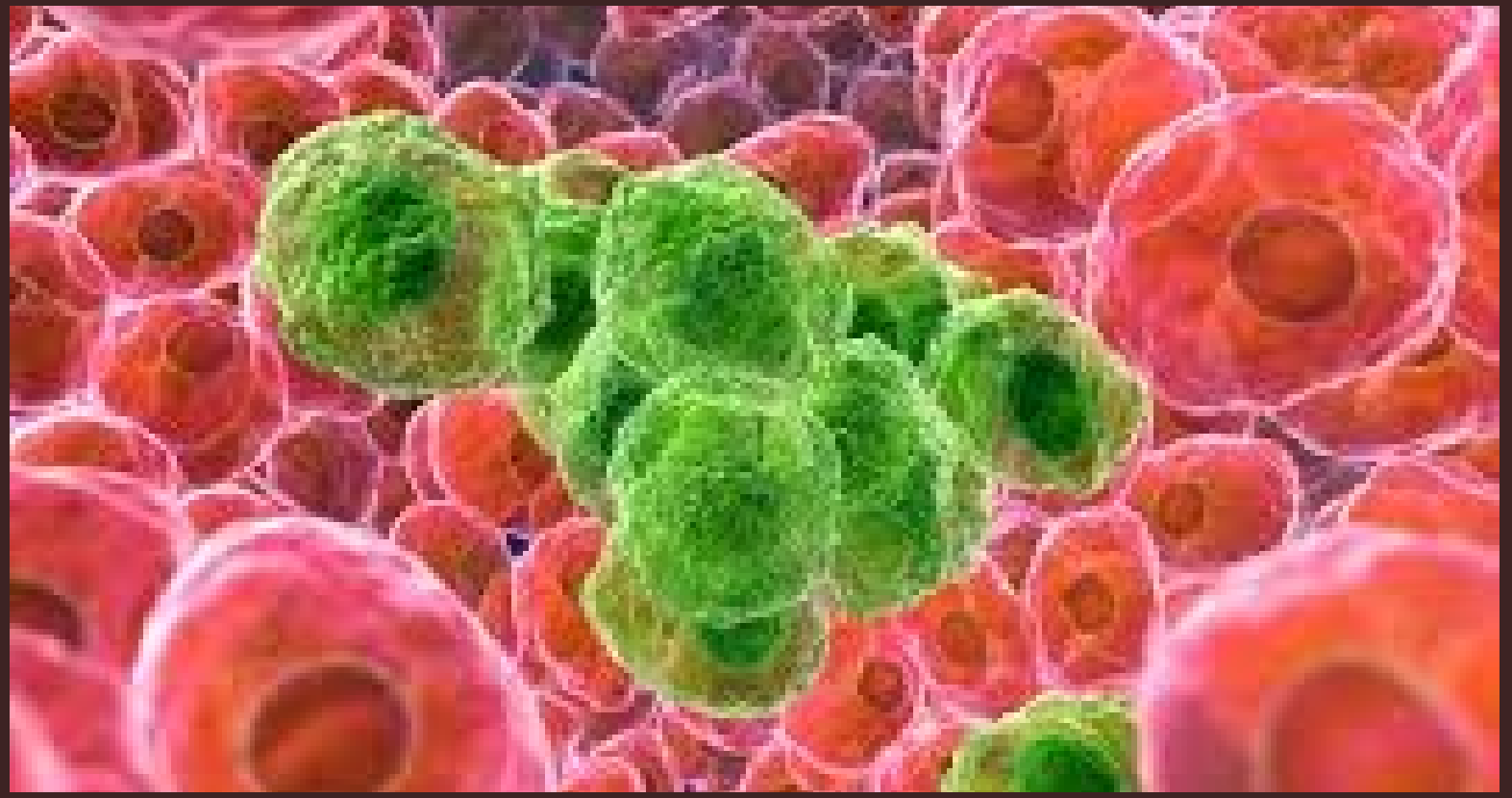


From the results of the intervention (MySmartSkin), we see that certain body parts showed a reduction in tumor size; however, the dif

Table 5
Areas of the body examined during the most recent skin self-examination in the past 2 months.[a]

	Total (N = 287)	mySmartSkin intervention (n = 139)	Usual care (n = 148)
Body areas examined, % (n)			
Scalp	37.9 (108)	39.6 (55)	36.3 (53)
Face	98.3 (282)	99.3 (138)	97.3 (144)
Neck	89.8 (256)	90.7 (126)	89.0 (130)
Shoulders	88.2 (253)	87.8 (122)	88.5 (131)
Front of arms	97.9 (280)	98.6 (137)	97.3 (143)
Back of arms	79.8 (229)	78.4 (109)	81.1 (120)
Chest	93.7 (268)	94.2 (130)	93.2 (138)
Stomach	87.7 (250)	87.7 (121)	87.8 (129)
Upper back	54.9 (157)	55.1 (76)	54.7 (81)
Lower back	48.8 (139)	50.0 (69)	47.6 (70)
Front of legs	94.0 (266)	93.4 (128)	94.5 (138)
Back of legs	72.6 (204)	71.3 (97)	73.8 (107)
Bottom of feet	41.6 (119)	40.6 (56)	42.6 (63)
Buttocks	40.4 (116)	39.6 (55)	41.2 (61)
Genitals	44.4 (127)	42.0 (58)	46.6 (69)

Conclusion



- → There is some reduction in skin-tumor size for the treatment group
- → However, the difference is not too significant
- → More research as to be done on MySmartSkin to further test and evaluate its effectiveness.

Reference

Manne, Sharon L et al. “Randomized controlled trial of the MySmartSkin web-based intervention to promote skin self-examination and sun protection among individuals diagnosed with melanoma.” Translational behavioral medicine vol. 11,7 (2021): 1461-1472. doi:10.1093/tbm/ibaa103

Thank you