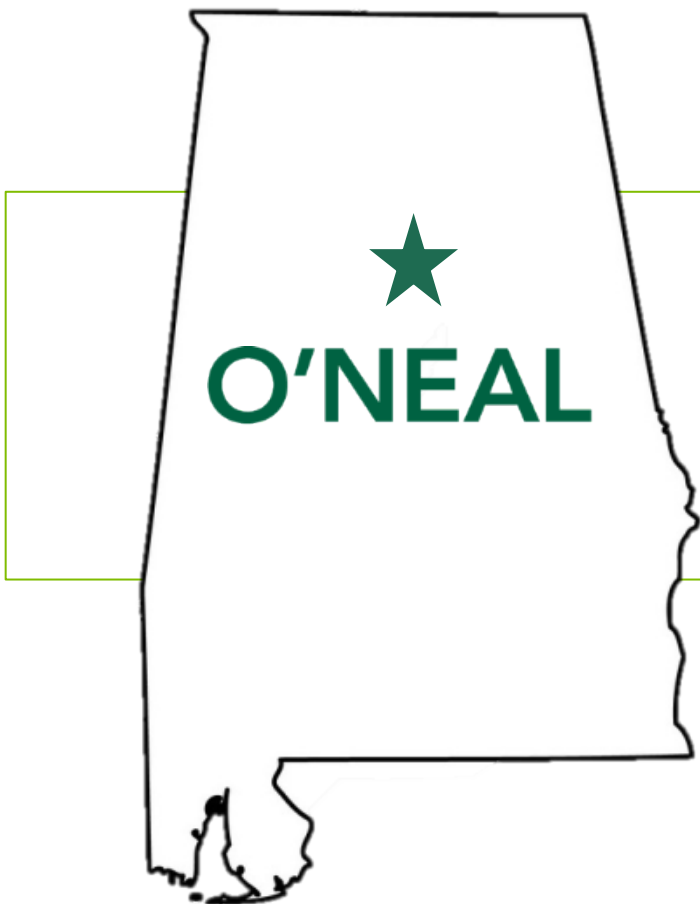


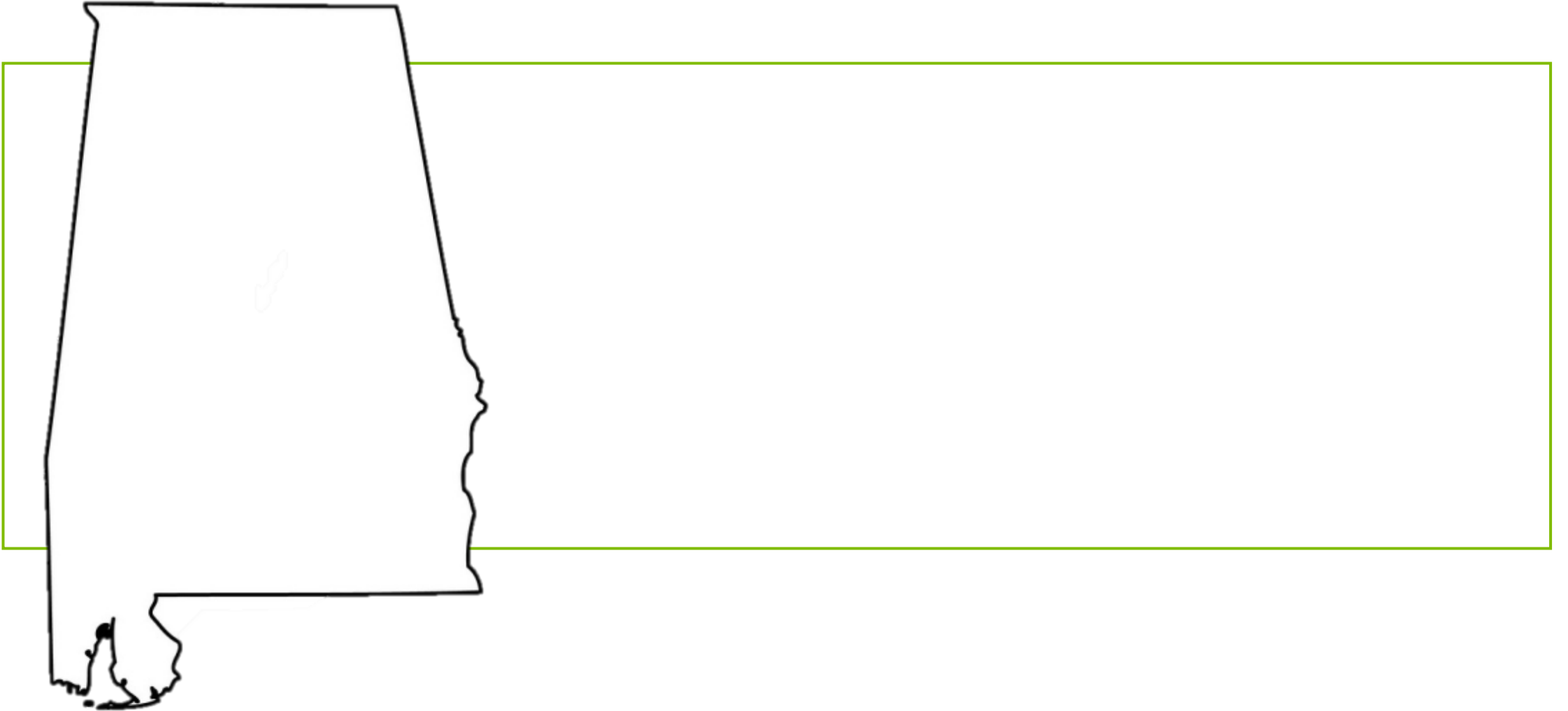


Medical Education Speakers Network
St. Vincent's Health East
February 23, 2021

Barry P. Sleckman, M.D., Ph.D.
Director, O'Neal Comprehensive Cancer Center at UAB







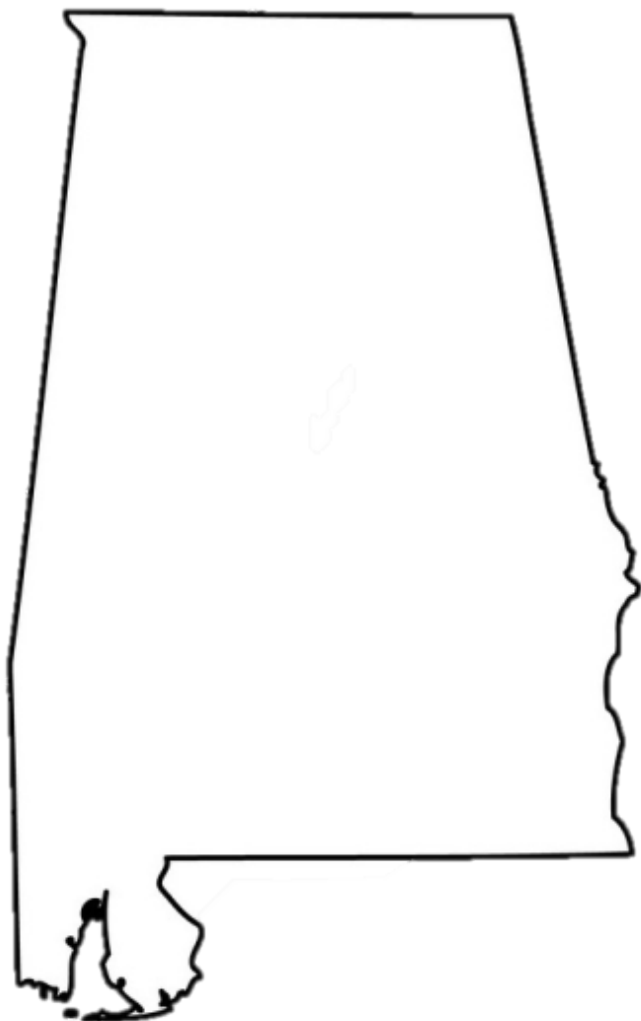
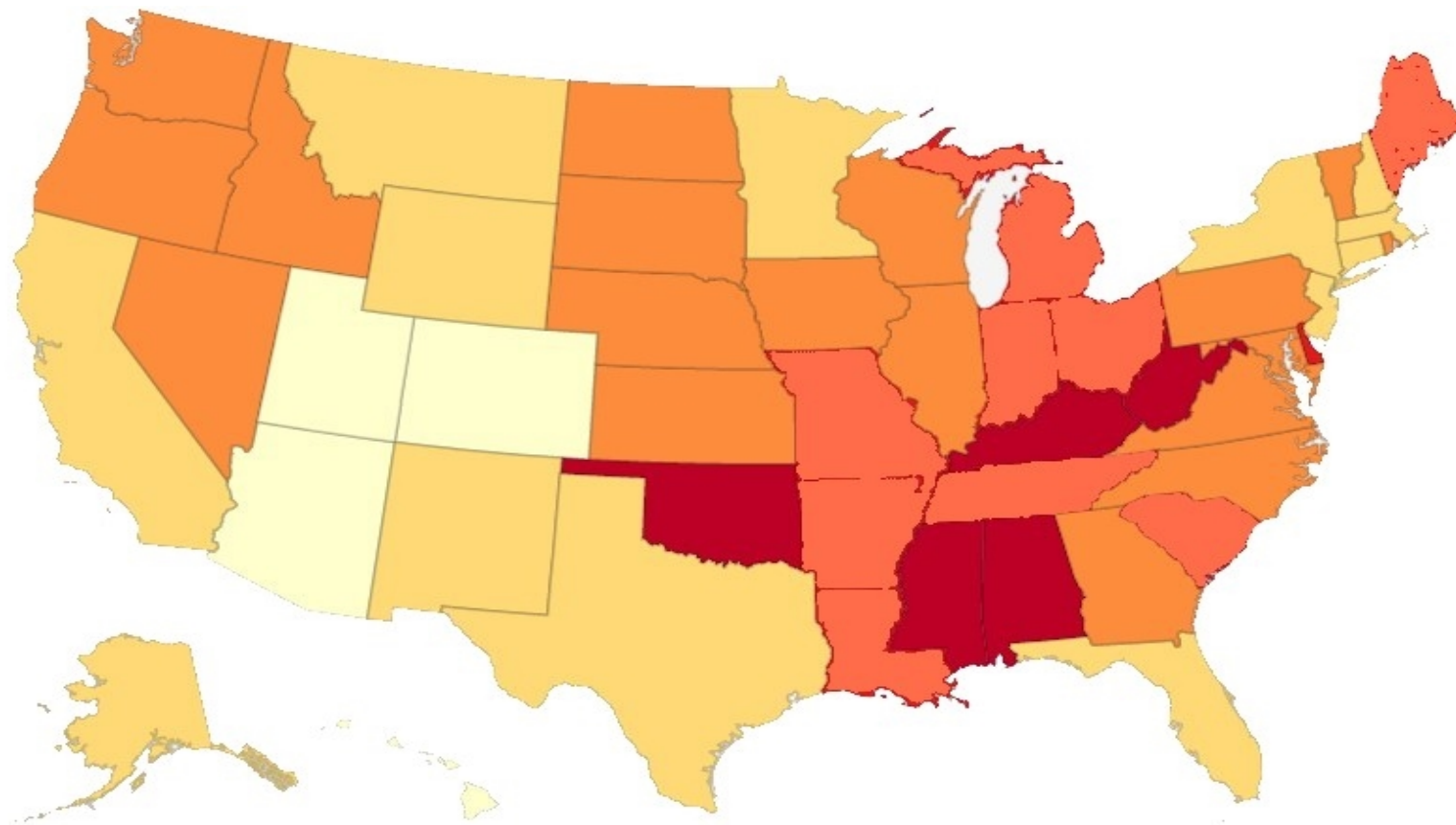
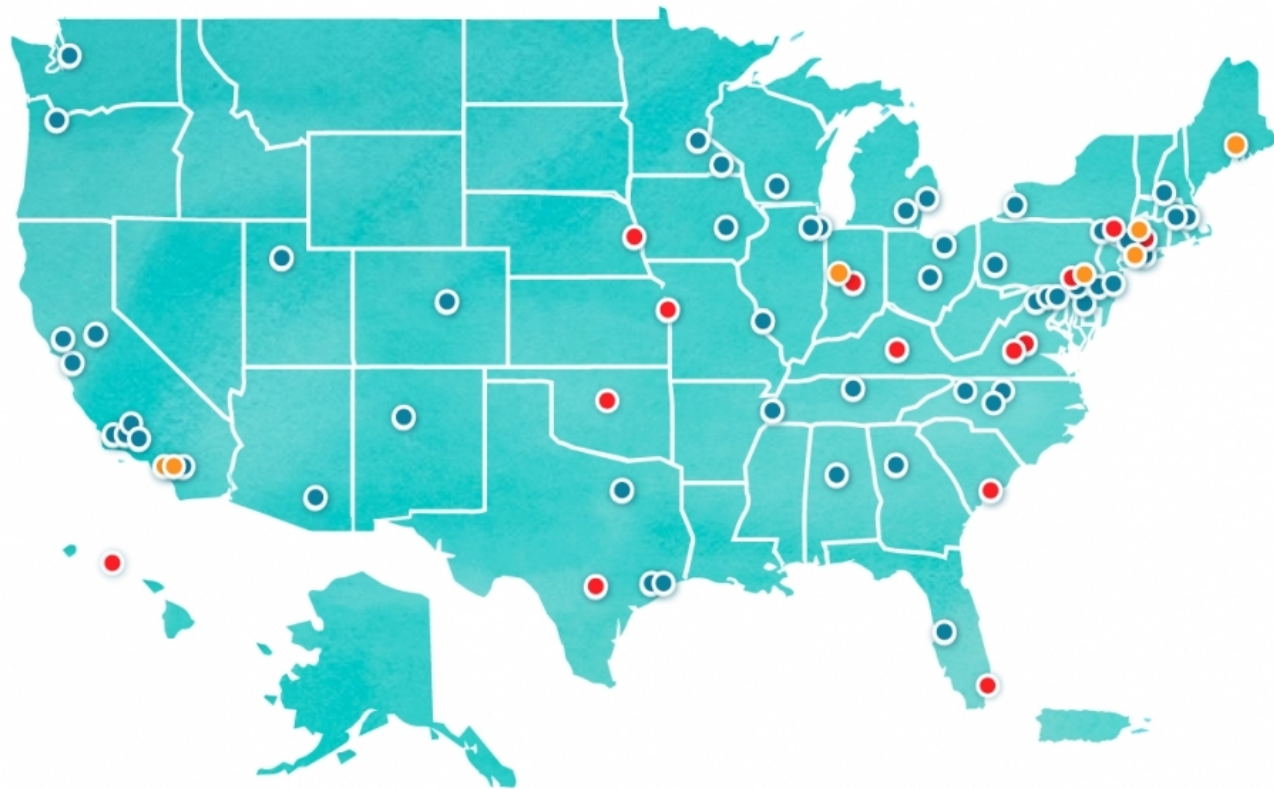


Table 5.	Age-adjusted Mortality Rates (per 100,000)			
	United States	Catchment		
		Overall	White	Black
Breast (Female)	20.1	21.5	19.9	27.1
Lung	38.5	48.5	50.4	43.6
Prostate	19.0	21.0	16.8	42.0
Colon	13.7	15.5	14.4	20.3
Cervical	2.2	3.5	3.1	4.7
Brain	4.4	5.1	5.6	3.6



- Started in 1972 at 8 U.S. institutions
- UAB was one of the first 8
- Matrix vs Stand Alone Cancer Center
- Comprehensive Status





● CANCER CENTER ● COMPREHENSIVE CANCER CENTER ● BASIC LABORATORY

- 71 NCI-designated cancer centers
- 51 are comprehensive cancer centers

Identify and mitigate cancer burdens and disparities of people in the catchment area through research and implementation of the findings of this research.



Community Outreach
and Engagement



Implementation
Approaches



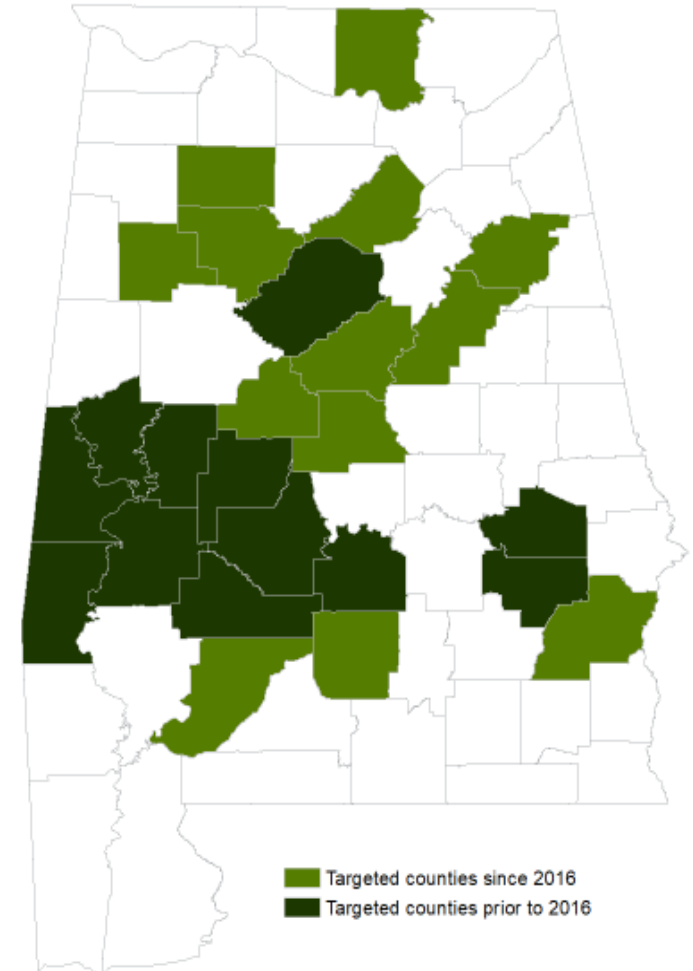
Basic and Population
Science Research



Monica Baskin
ASSOCIATE DIRECTOR FOR
COMMUNITY OUTREACH
& ENGAGEMENT



Claudia Hardy
DIRECTOR
OFFICE OF
COMMUNITY OUTREACH
& ENGAGEMENT



57 MEMBERS



Troy Randall



Sunil Sudarshan

42 MEMBERS



Elizabeth Brown



Laura Rogers

59 MEMBERS



Narendra Wajapeyee



Eddy Yang



Suzanne Lapi

21 MEMBERS



Burt Nabors



Anita Hjelmeland

Community Outreach
and Engagement

22% Smoke

Implementation
Approaches

Basic and Population
Science Research





Karen Cropsey
Cancer Control &
Population Science



Isabel Scarinci
Cancer Control &
Population Science



Peter Hendricks
Cancer Control &
Population Science



Karen Cropsey
Cancer Control &
Population Science



Isabel Scarinci
Cancer Control &
Population Science



Peter Hendricks
Cancer Control &
Population Science



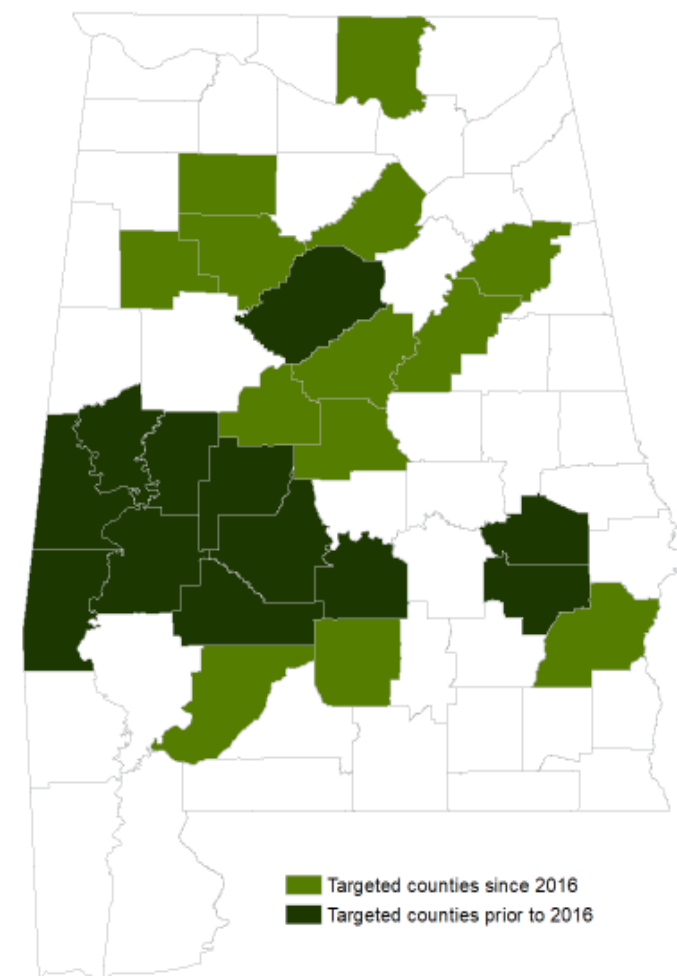
No Menthol
SUNDAY

NO MENTHOL SUNDAY | MAY 17

MENTHOL
CIGARETTES ARE
EASIER TO **START**
AND HARDER TO
QUIT.

O'NEAL COMPREHENSIVE
CANCER CENTER
UAB THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

NAATPN



Community Outreach
and Engagement

Multiple Myeloma 2
-fold higher in AA

Implementation
Approaches

Basic and Population
Science Research





Ralph
Sanderson

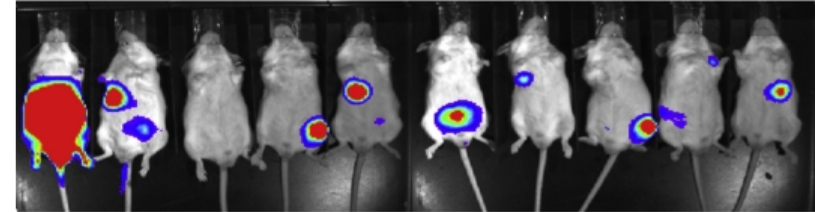
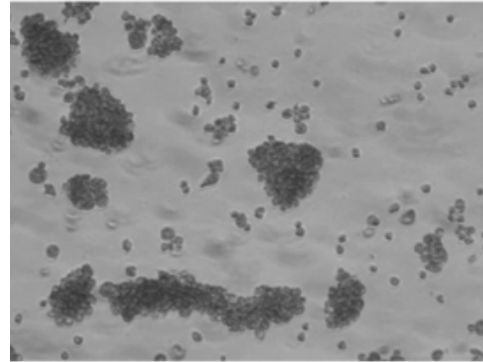
Cancer
Biology &
Immunology



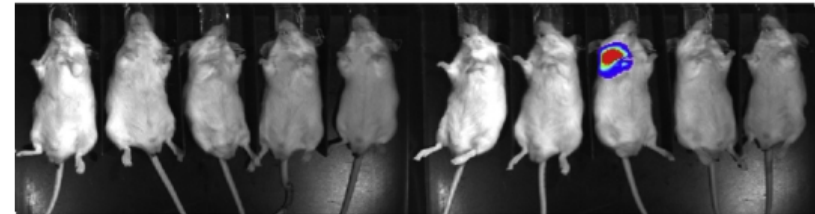
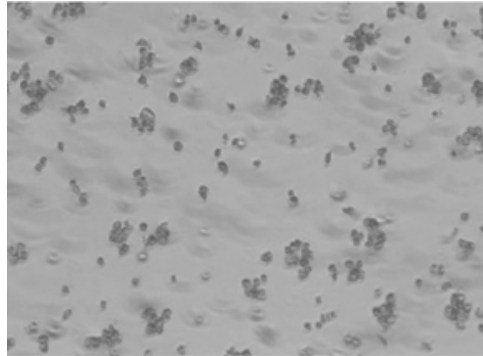
Elizabeth
Brown

Cancer Control
& Population
Sciences

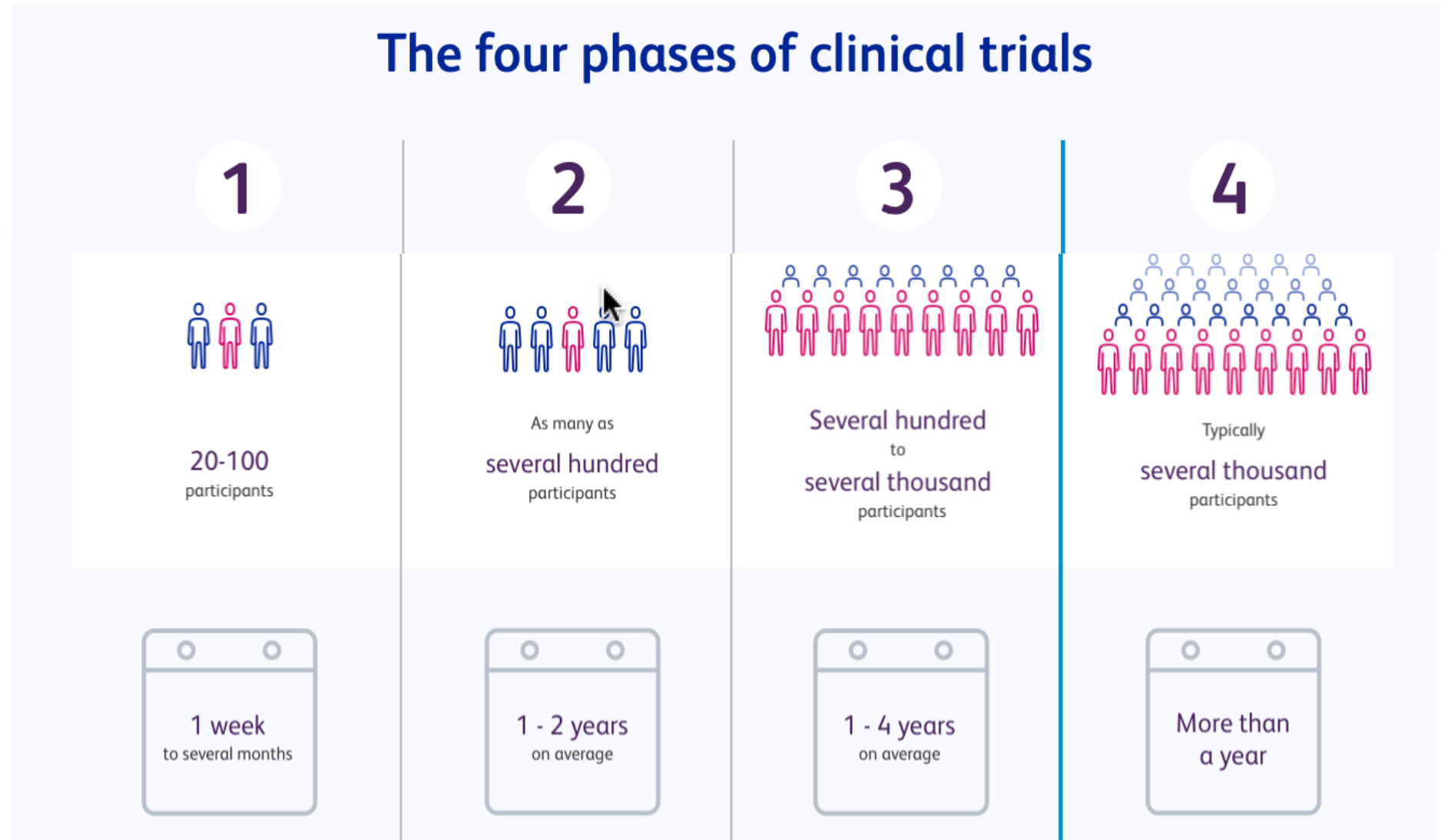
Control



Heprinase Knockdown



The four phases of clinical trials



Phase I study of the heparanase inhibitor roneparstat: an innovative approach for multiple myeloma therapy

The role that the bone marrow microenvironment plays in differentiation, migration, proliferation, survival and drug resistance of malignant plasma cells has attracted significant attention in the attempt to identify new druggable targets in multiple myeloma (MM).¹

Heparanase is an endo- β -d-glucuronidase that trims the heparan sulfate chains of proteoglycans, thereby affecting cell signaling and gene expression and promoting extracellular matrix remodeling within the tumor microenvironment.²⁻⁴ Heparanase is strongly upregulated in the great majority of MM patients and is associated with elevated microvessel density and enhanced shedding of the heparan sulfate proteoglycan syndecan-1,⁵ events that are highly relevant to disease progression.^{6,7} In preclinical models of MM, heparanase was shown to be a master regulator of aggressive tumor behavior and bortezomib and melphalan were each found to enhance heparanase expression and secretion. MM cells expressing high levels of heparanase are less susceptible to cytotoxic effects of bortezomib or melphalan.⁸⁻¹⁰

Roneparstat (laboratory codes: G4000, SST0001; Leadiant Biosciences, formerly sigma tau Research Switzerland SA) is a chemically modified 100% N-desulphated, N-acetylated and 25% glycol-split heparin with

ment by cohort of treatment are reported in Table 1.

Roneparstat was well tolerated and safe at all doses tested. Seventeen patients reported a total of 88 adverse events. The most common adverse events, occurring in at least 10% of patients, are reported in Table 2. Most of the adverse events were grade 1 or 2 and unrelated to the treatment. There were three treatment-related adverse events in three patients (viral infection, injection site reaction, abdominal pain): these were judged to be grade 1/2, transient and resolved with conservative therapy.

Grade 3/4 adverse events included general physical health deterioration (3 patients, 15.8%), anemia, thrombocytopenia and bone pain (2 patients each, 10.5%);

I

Table 1. Patients' baseline characteristics, enrollment by cohort of treatment and cycles administered.

	N. of patients	N. of cycles
Age, years, median (range): 68 (51-81)		
Male/female	8/11	
Schedule A: every day for 5 days, week 1		
1 st dose cohort: 25 mg	4*	6
Schedule B: every day for 5 days, week 1 and week 2		
2 nd dose cohort: 25 mg	3	8
2 nd dose cohort: 50 mg	0**	11

The four phases of clinical trials

1



20-100
participants

1 week
to several months

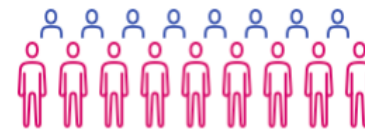
2



As many as
several hundred
participants

1 - 2 years
on average

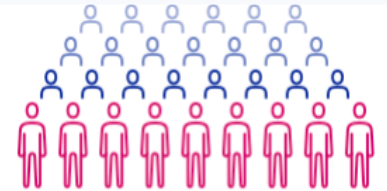
3



Several hundred
to
several thousand
participants

1 - 4 years
on average

4



Typically
several thousand
participants

More than
a year



Luciano Costa
AD for CLINICAL
RESEARCH

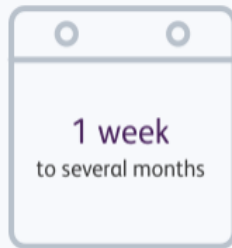


The four phases of clinical trials

1



20-100
participants

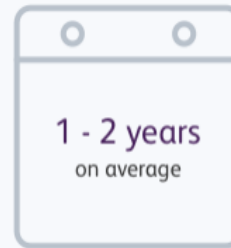


1 week
to several months

2



As many as
several hundred
participants

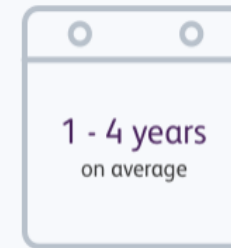


1 - 2 years
on average

3

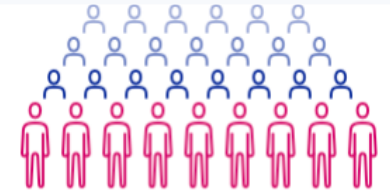


Several hundred
to
several thousand
participants



1 - 4 years
on average

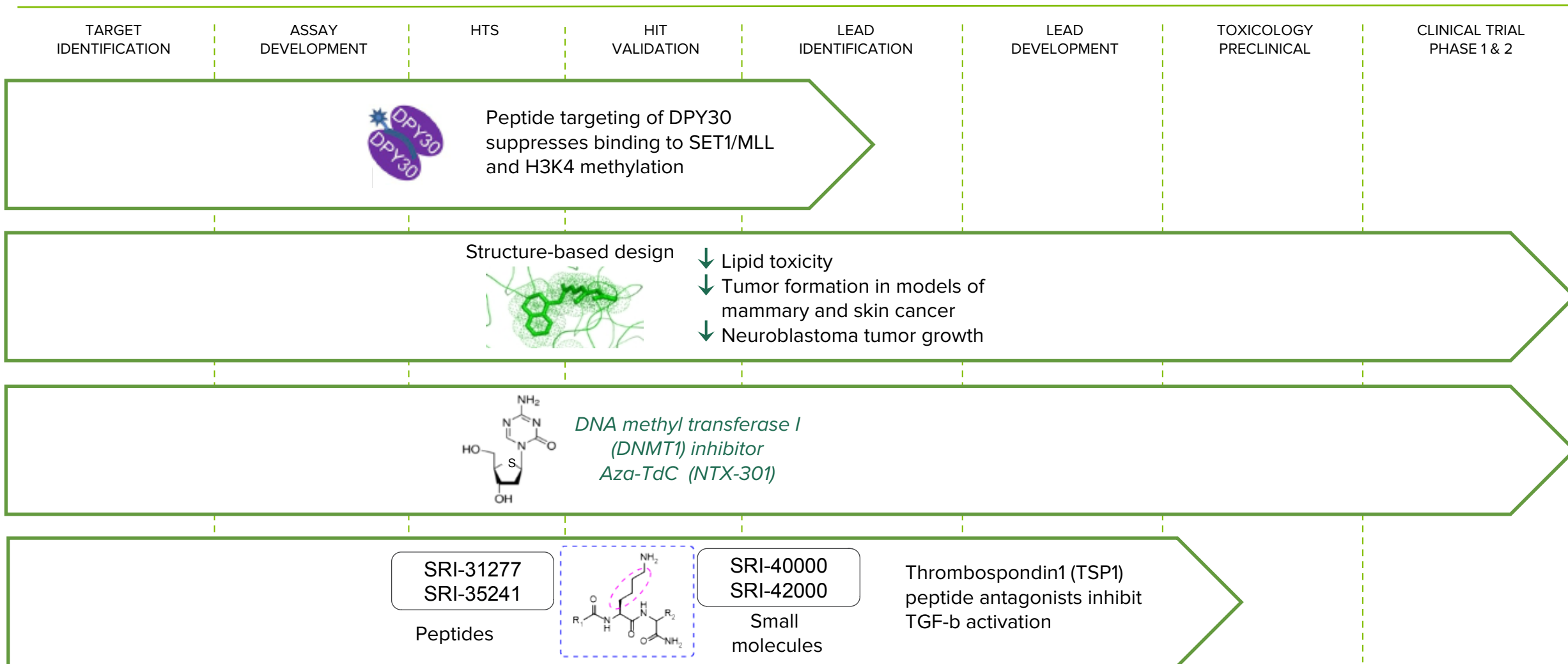
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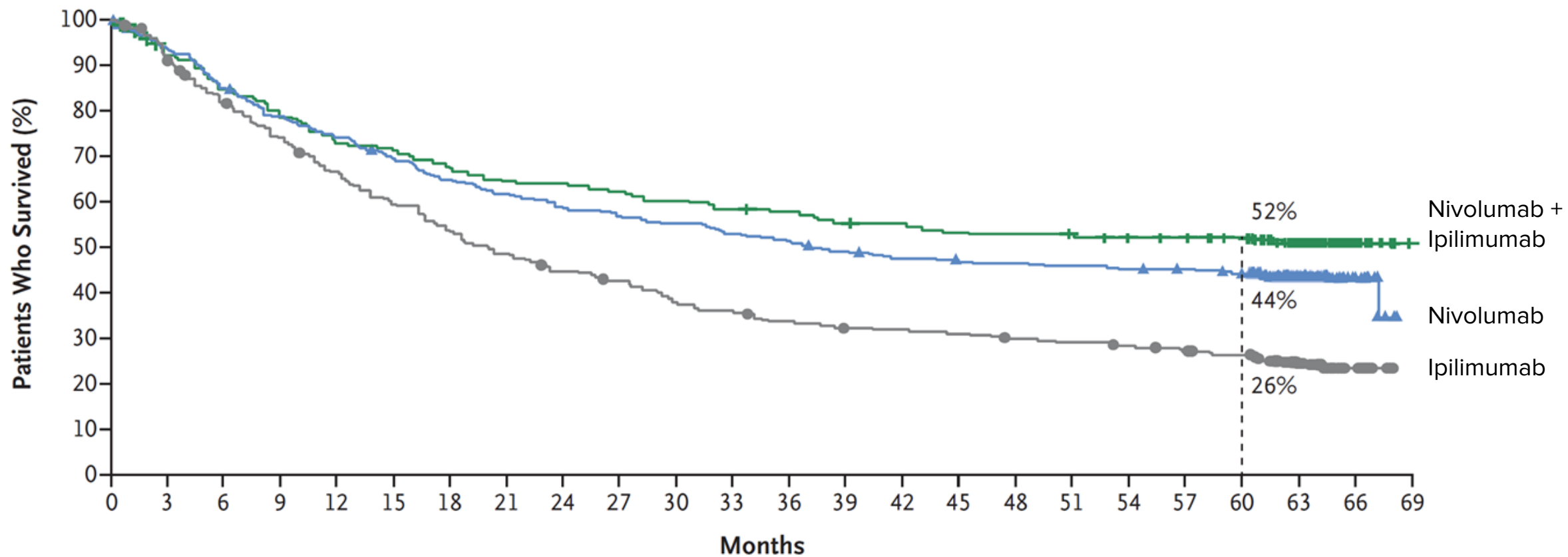


Typically
several thousand
participants



More than
a year





- Multiple myeloma for 7 years.
- 6 prior lines of therapy including 2 autologous transplants.
- No further treatment options.
- Entered O'Neal Phase 1 CAR-T Trial for Multiple Myeloma.
- 2 Months later – No evidence of disease



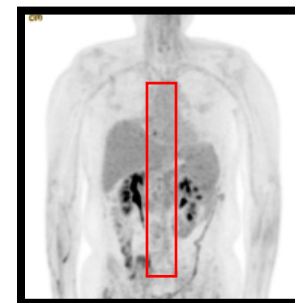
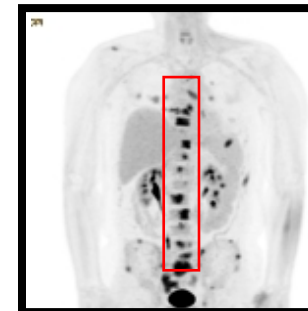
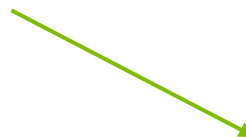
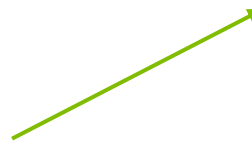
Eddy Yang
Experimental
Therapeutics



Shuko Harada
Experimental
Therapeutics



100

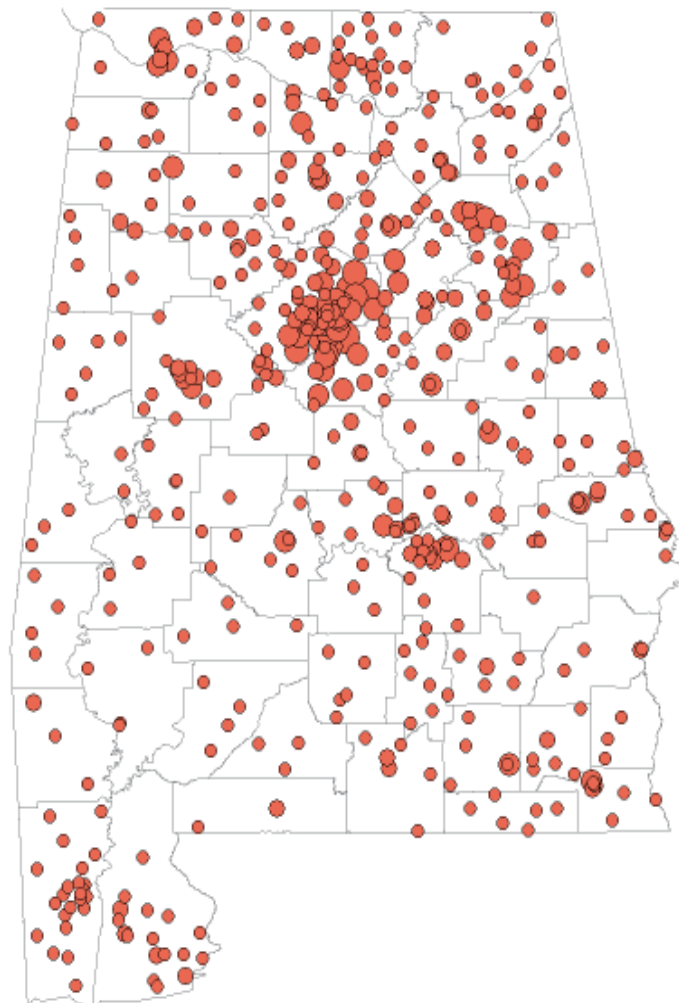


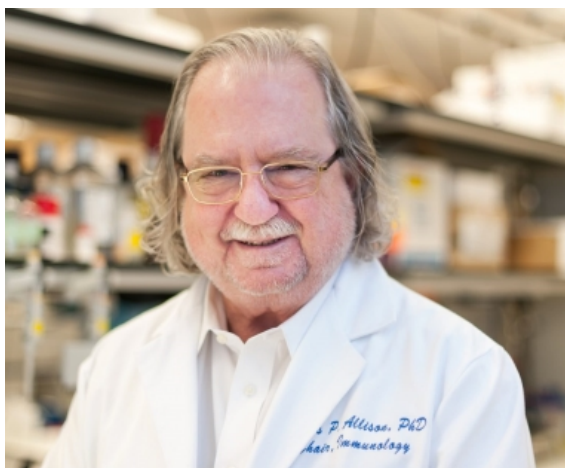


Eddy Yang
Experimental
Therapeutics



Shuko Harada
Experimental
Therapeutics



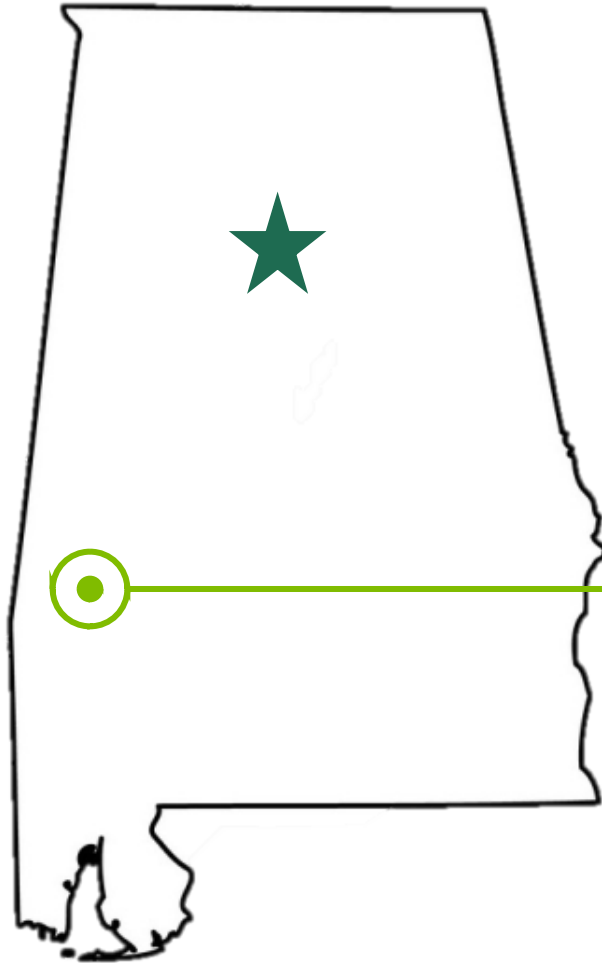


- Trust – Experimental subject
- Trust – Best treatment option
- Trust – Side Effects
- Trust – COVID-19

Navigation Promotes Trust

58% of people in Alabama are medically underserved.

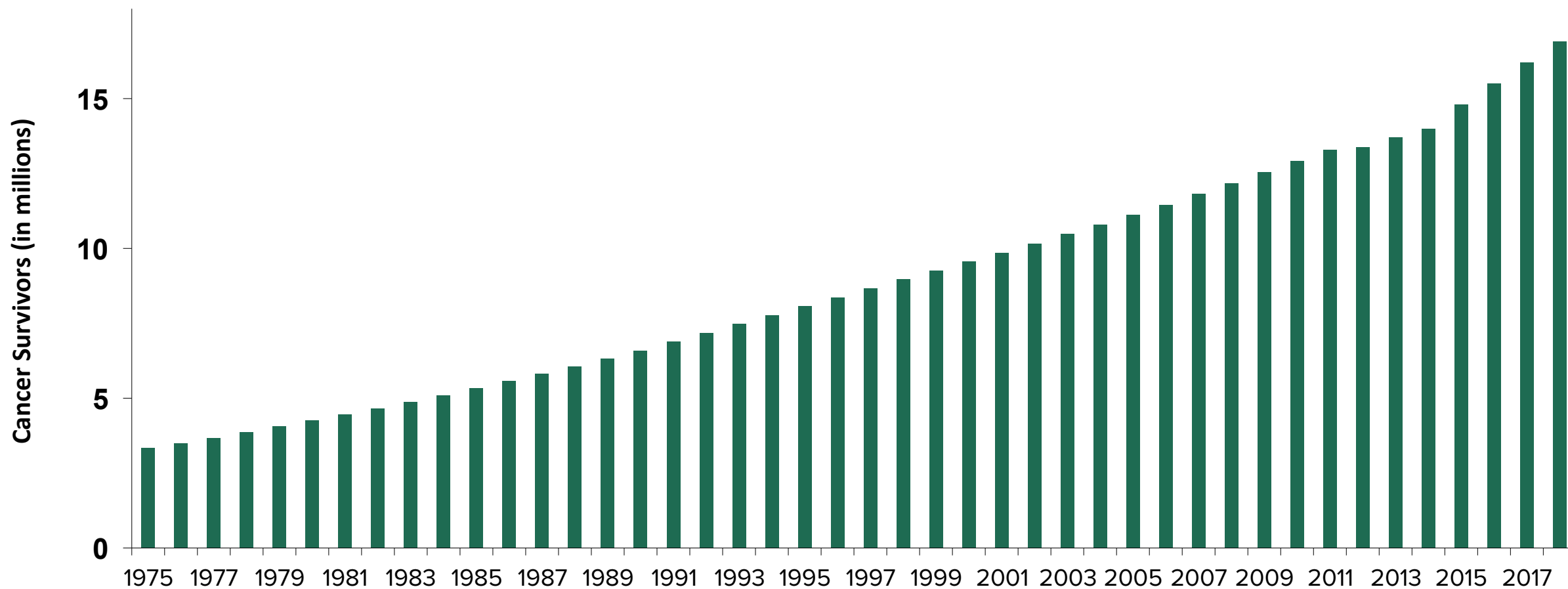
Are >58% are underserved for cancer care?



A 45-year-old woman skips her mammogram because the nearest center is 40 miles away.

A 45-year-old woman with a palpable breast mass does not seek treatment due to lack of insurance.

A 45-year-old woman with a small localized breast cancer decides not to seek out clinical trial opportunities because she has a good prognosis.



- Cognitive
- Neuropathic
- Cardiac
- Musculoskeletal
- Hematologic
- Secondary cancers
- Many others



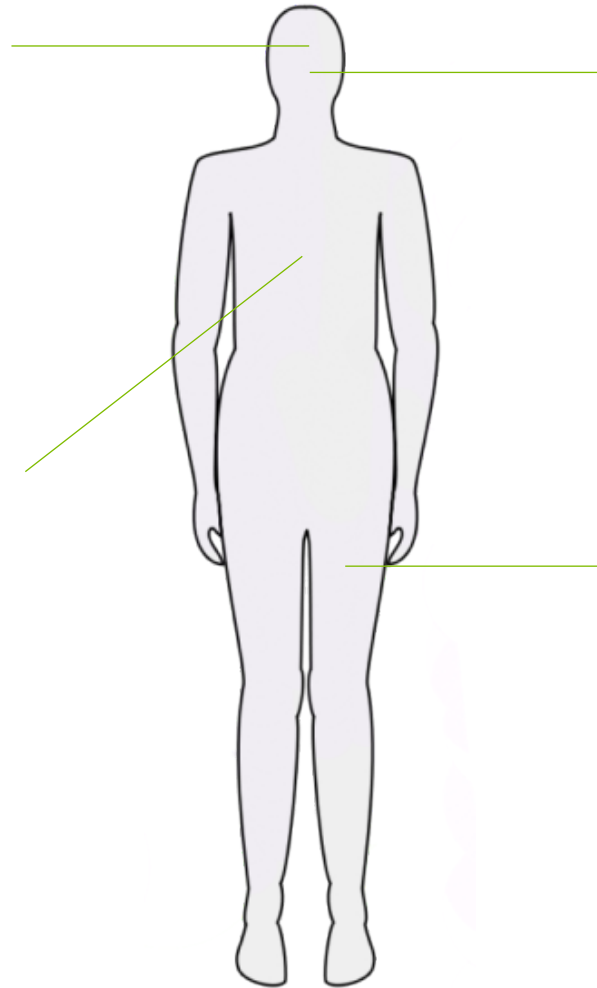
Smita Bhatia

Cancer Control &
Population Science



Noha Sharafeldin

Cancer Control &
Population Science



- Mechanistic Basis of Outcomes
- Genetic Test Development
- Targeted interventions

Promoting Healthy Behaviors in Cancer Survivors



Wendy Demark-Wahnefried
CANCER PREVENTION
& CONTROL

Follow up and
appropriate cancer
survivor screening and
prevention

- Cancer screening and cancer care access for all people in Alabama through community outreach.
- Merger of cancer clinical trials into standard of care for all cancer patients.
- Dovetail cancer care with cancer survivor care.

