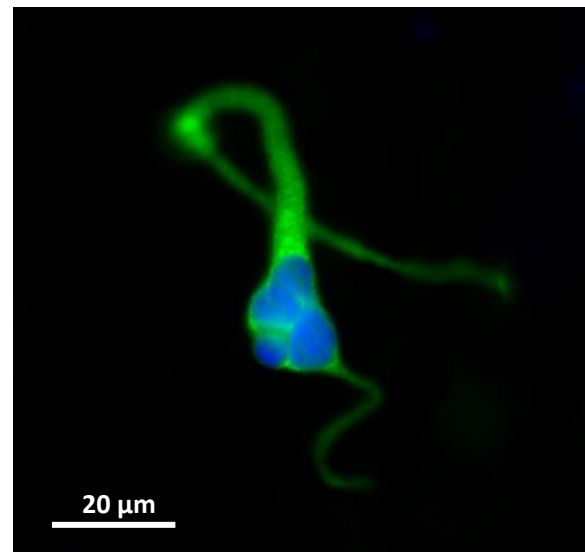


Cancer Associated Macrophage-Like cells

A Circulating Stromal Cell Subpopulations that act as a Screening Tool for Invasive Solid Tumors and Prognosticates for Highly Aggressive Cancer Subtypes

Daniel L Adams
CSO - CreatvBio

14th EDRN Scientific Workshop
May 20-22, 2025

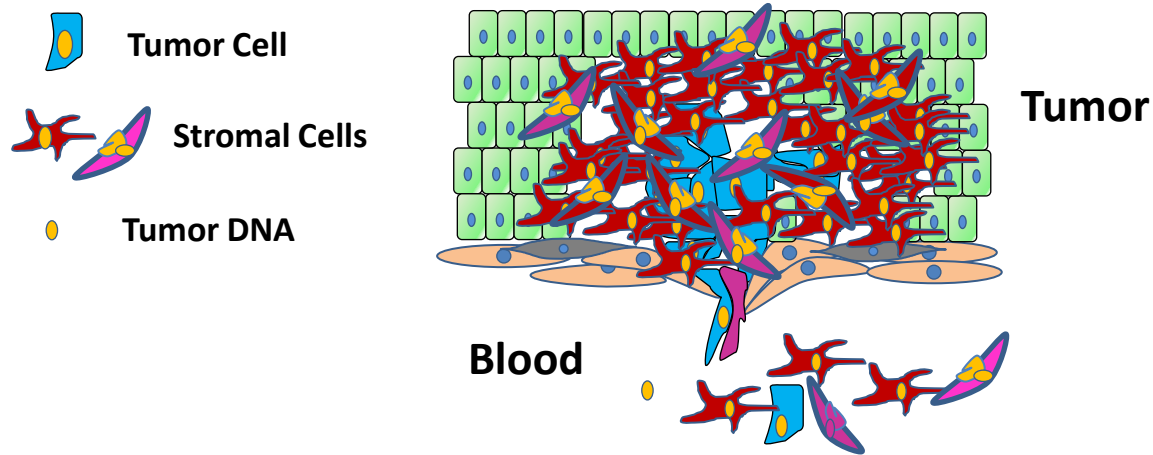


Disclosures

- Employee and hold equity in CreatvBio (Private Biotech)

Tumor Associated Markers in Blood

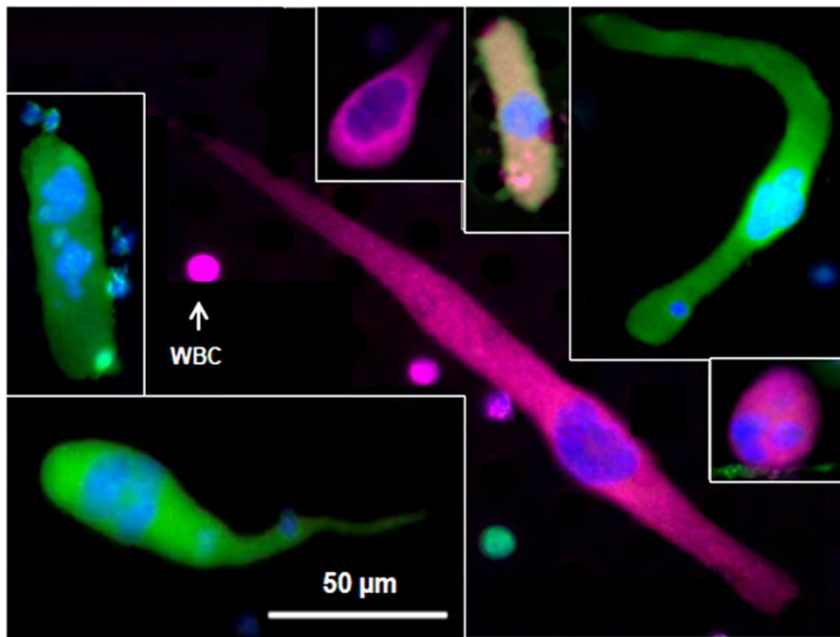
Tumors are surrounded by a variety of **stromal cells** including macrophages, which engorge tumor cells at the tumor site



Stromal cells enter the blood stream along with tumor cells and tumor DNA

CAMLs – An Important New Class of Biomarker

Cancer Associated Macrophage-Like Cells CAMLs



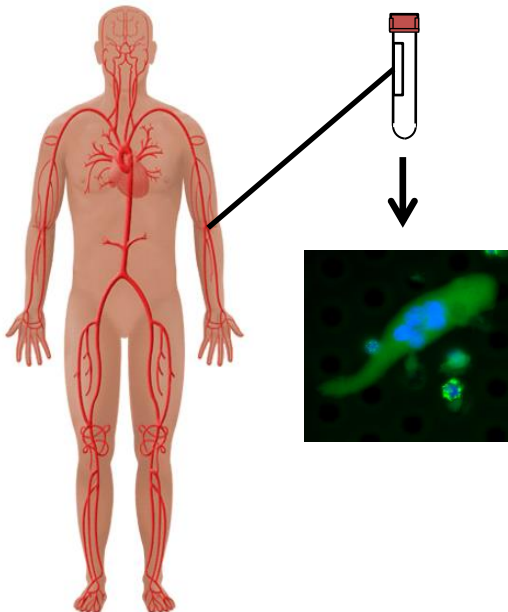
Characteristics

- 25-300 μm in size
- Polynucleated
- Macrophages that have engorged tumor cells
They contain:
 - Tumor proteins
 - Tumor DNA- tumor mutations, amplifications, and deletions
- **Engorgement correlates with Poor Clinical Outcomes**
- Found in the blood stream of
 - **All types of solid tumors**
 - **All stages of disease**
- Not found in healthy individuals

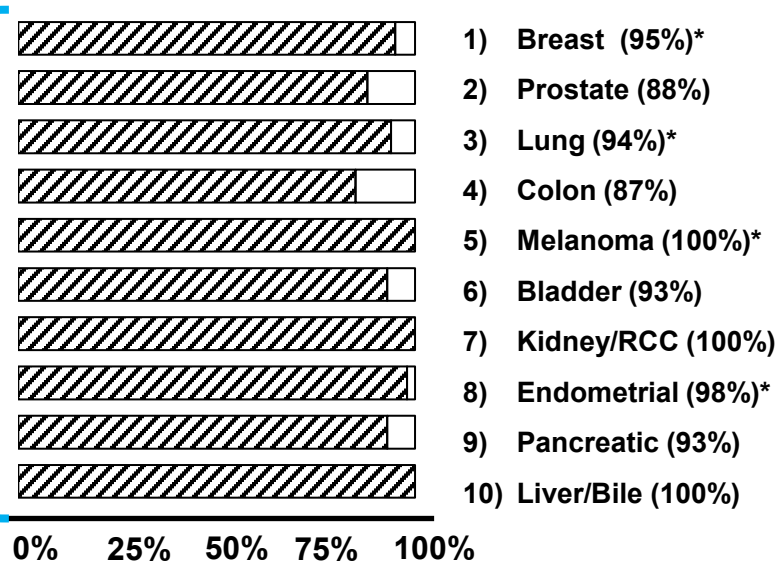
CAMLs in Various Cancers

Top 10 Most Common Cancers (# New cases/year)

- 1) Breast ~290,000
- 2) Prostate ~269,000
- 3) Lung ~237,000
- 4) Colon ~151,000
- 5) Melanoma ~100,000
- 6) Bladder ~81,000
- 7) Kidney/RCC ~79,000
- 8) Endometrial ~66,000
- 9) Pancreatic ~62,000
- 10) Liver/Bile ~41,000



Commonality of CAMLs in Cancer Patients (Sensitivity in Patient Blood)



*CAML sensitivity based on published works from academia

CAMLs in Cancer Screening (Pooled Analysis)

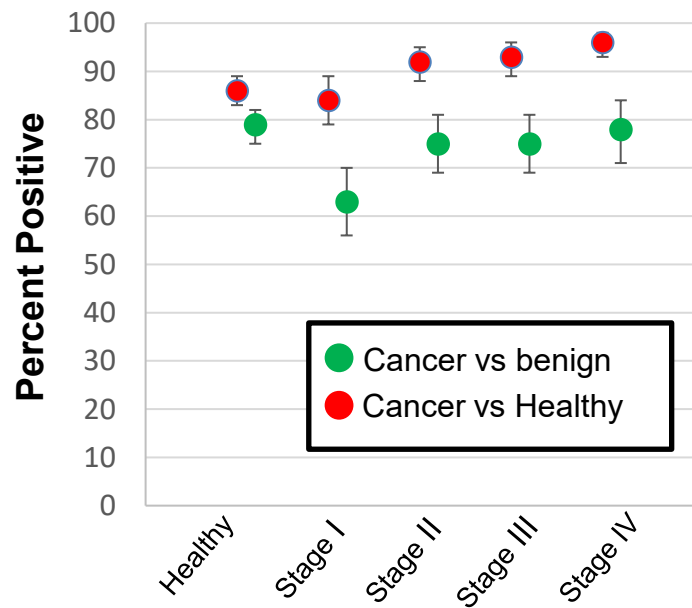
Prospective single blind multi-institutional analyses

- 441 total Patients with Newly Diagnosed Treatment Naïve or patients undergoing biopsy for suspicious lesion by PET/CT
 - Stage I n=105
 - Stage II n=125
 - Stage III n=114
 - Stage IV n=97
- Cancers included: Lung=84, Breast=73, Prostate=65, Pancreas=61, Esophageal=34, Renal Cell=29, Sarcoma=27, Other=68
 - Other (Colon, head & neck, bladder, lymphoma, neuroblastoma cholangiocarcinoma, etc)
- Healthy Control Volunteer **(n=125)**
- Benign Conditions **(n=78)**
 - Benign Prostate Conditions (BPH)=24, Mammography Positive Breast=24, Untreated Lupus=11, Pancreatic Cysts=7, Liver Cirrhosis=6, Hepatitis C n=2, Other n=4

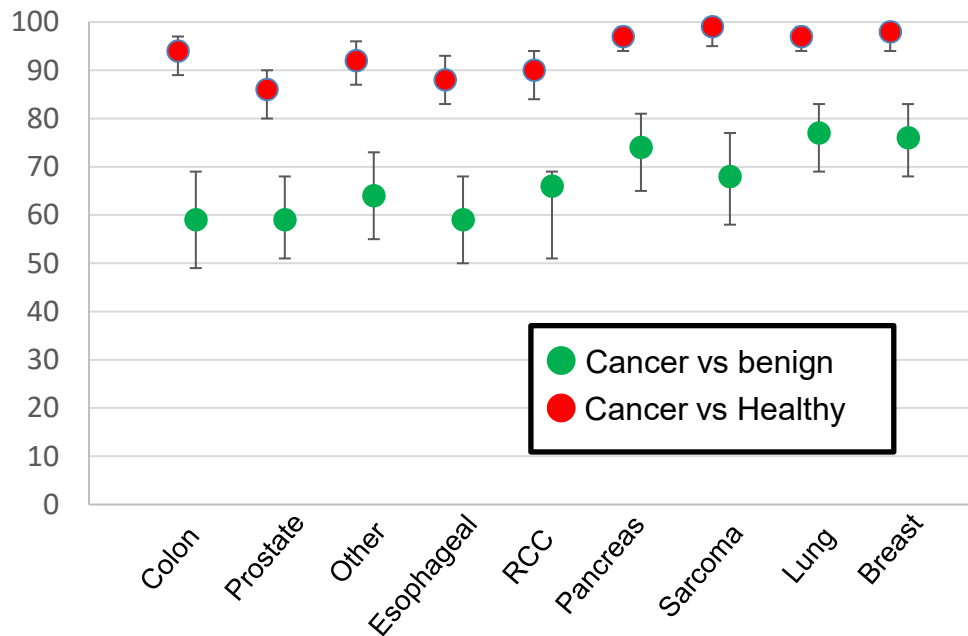
CAML Presence - Accuracy vs Healthy or Benign

Cancer (n=441) Healthy (n=125) Benign (n=78)

Stage

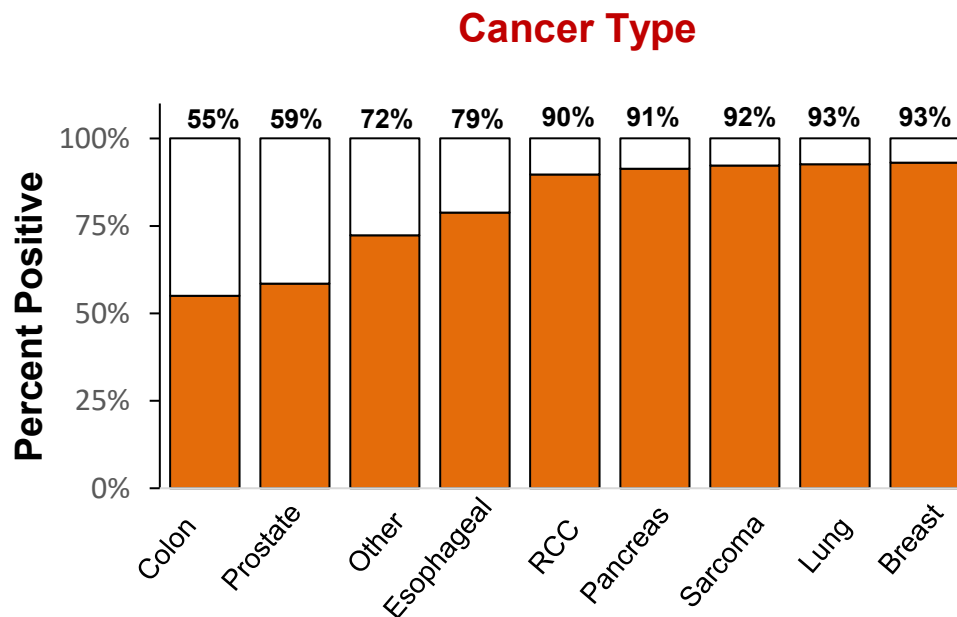
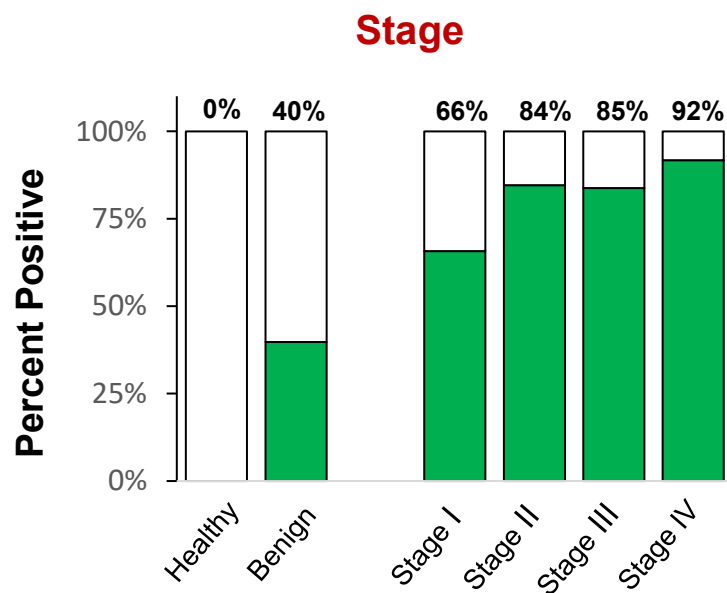


Cancer Type



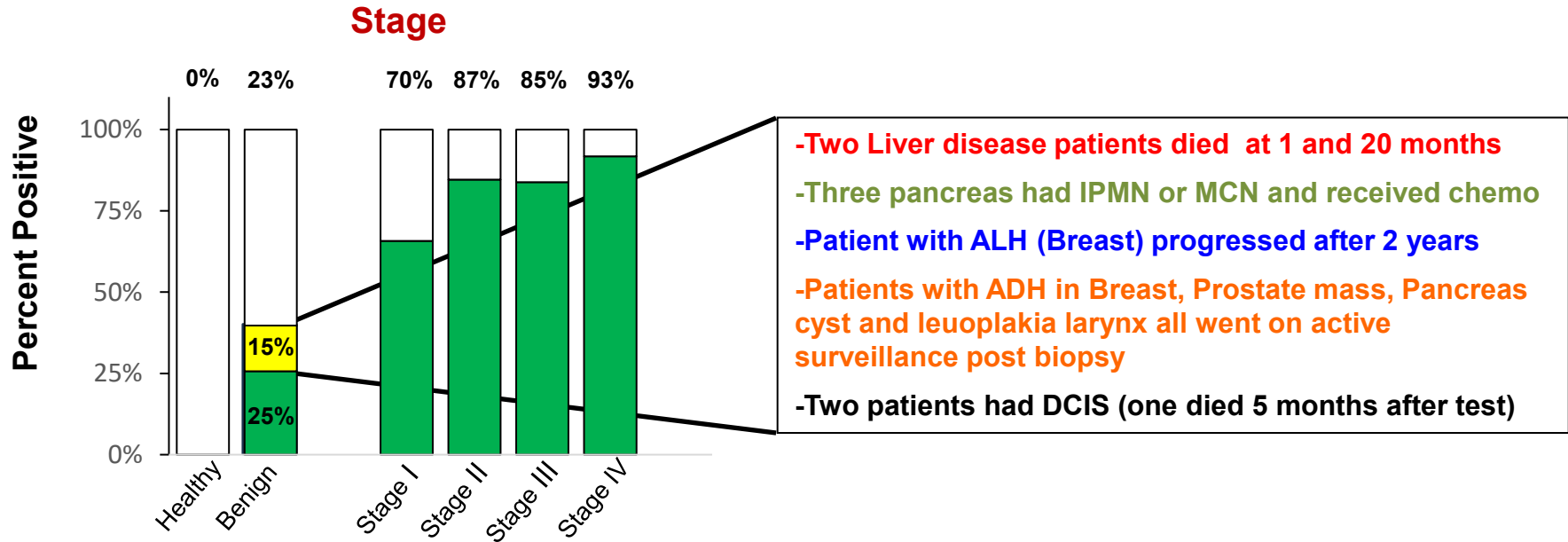
CAML Sensitivity

Cancer (n=441) **Healthy (n=125)** **Benign (n=78)**



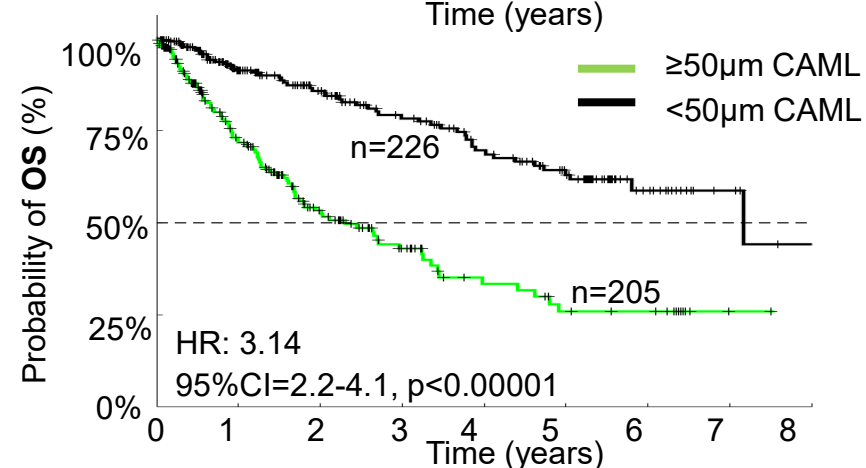
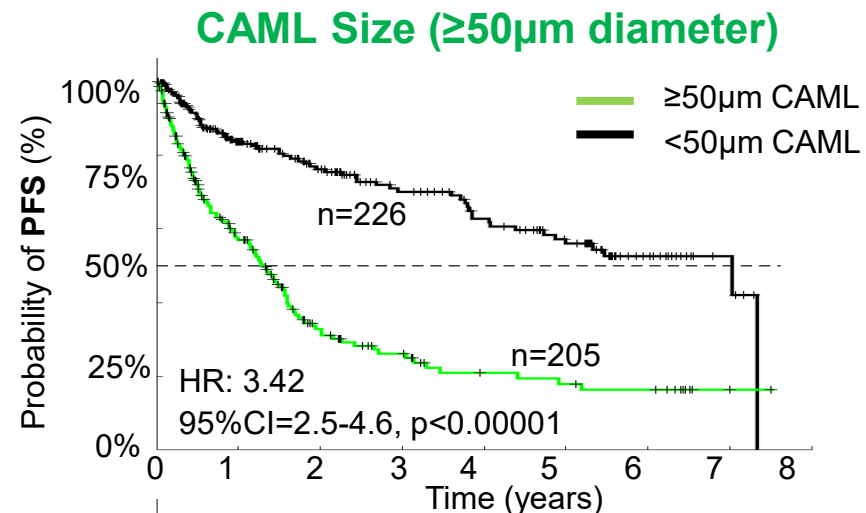
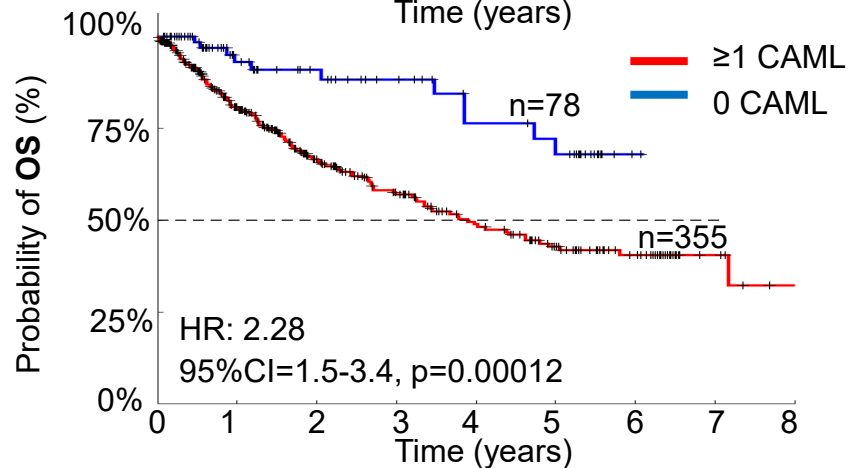
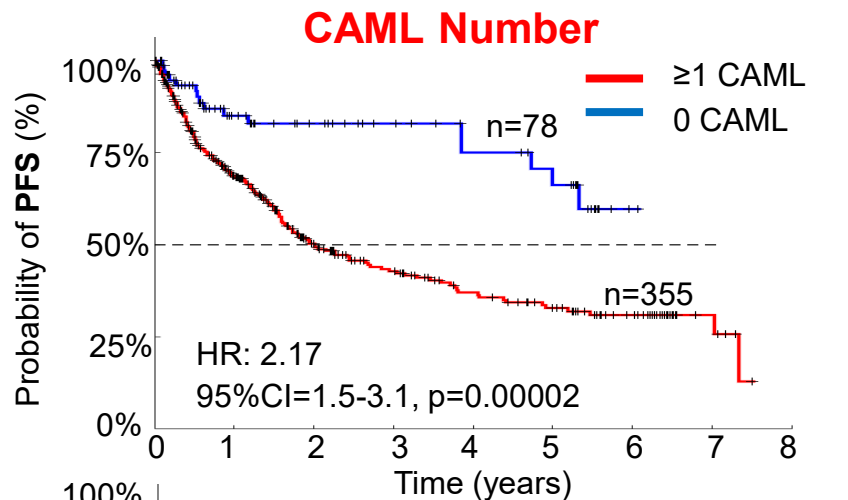
N=10 samples failed phlebotomy

“Benign” Patient Post-Biopsy Reassessment



*Follow up Surveillance is ongoing

Progression Free and Overall Survival by CAML # and Size



Collaborators, Advisors and Customers



11



Don't confuse our CAMLs
with these



Daniel Adams
CSO/Director Clinical R&D
dan@creatvmicrotech.com

Project Funding:

NIH: NCT04240327, U01CA214183, R43CA206840

DOD-DARPA: W911HF14C0098

Adams Lab Members

Kirby Gardner (Yale University)

Ashvathi Raghavakaimal (University of Pennsylvania)

Daniel Gironda (Wake Forest)

Jillian Moran (Dartmouth)

Dimpal Kasabwala- Student Intern (Rutgers University)

Aravind Aryasomayajula- Student Intern (Rutgers University)

Amama Ali- Lab Manager (Creatv Microtech)

Alexia Duffy- Associate Scientist (Creatv Microtech)

