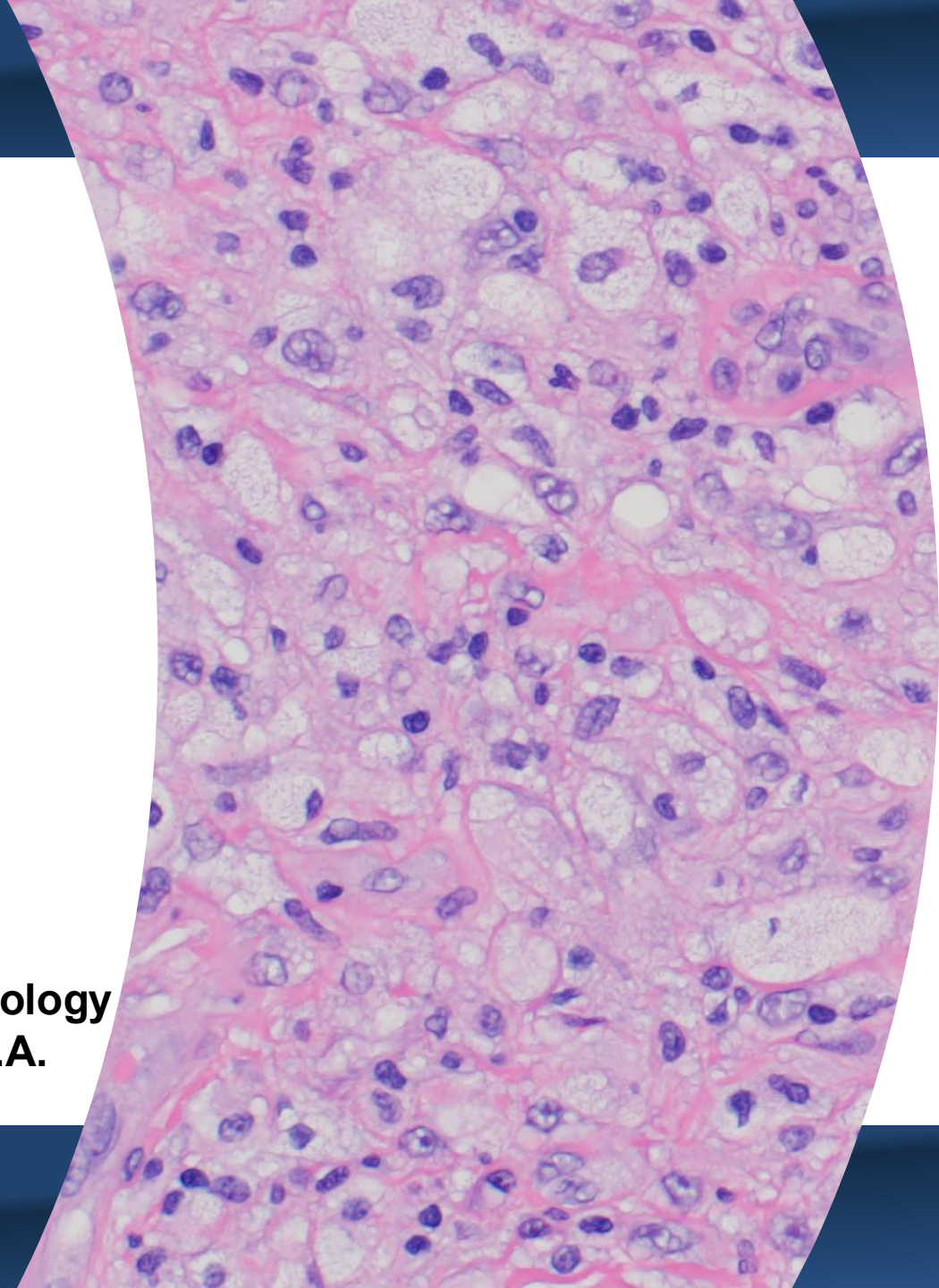




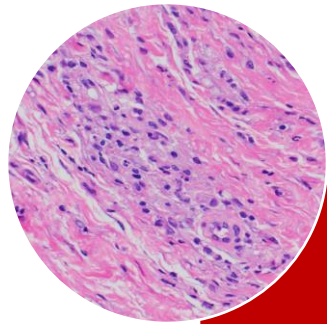
# UNPACKING THE PATHOLOGY REPORT

**Aishwarya Ravindran, M.D.**  
**Assistant Professor of Pathology**  
**Division of Laboratory Medicine- Hematopathology**  
**University of Alabama at Birmingham, U.S.A.**



**Financial Disclosures: None**

# Why do I need a tissue biopsy ?



**DIAGNOSIS**

Is it Normal Or Abnormal tissue?  
Is it Cancer or Not?

Adequacy of tissue → *Critical for Diagnosis*;  
Repeat biopsies may be performed



**GENETIC TESTING  
(NGS) →  
TREATMENT**

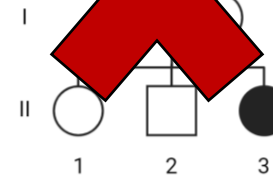
DNA  
damage



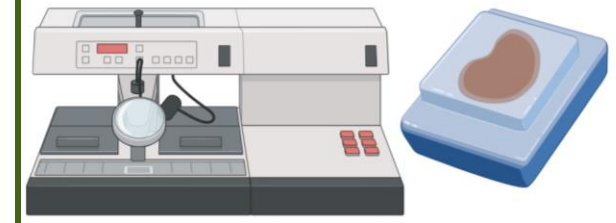
**TUMOR**



HEREDITARY/  
GERMLINE



**RESEARCH** (if adequate tissue  
present after Diagnosis)



NGS: Next Generation Sequencing

# What Happens after a Tissue Biopsy?

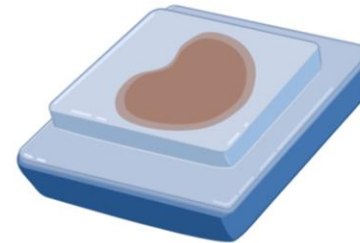
## Tissue Collection & Technical Processing



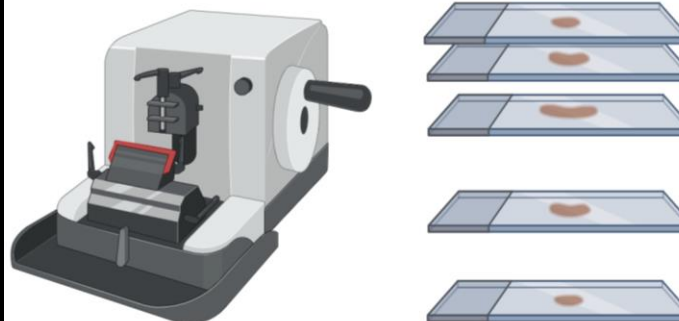
## GROSS DESCRIPTION (Details of Tissue Size, Color, Texture)



## TISSUE PROCESSING IN PARAFFIN BLOCK



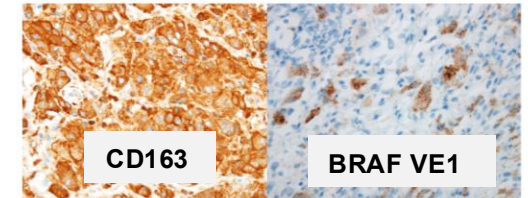
## TISSUE SECTIONING & STAINING



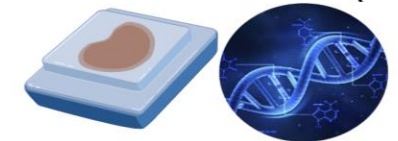
## MICROSCOPIC DESCRIPTION Is It Tumor?



## IMMUNOSTAINS



## GENETICS STUDIES (NGS)



## PATHOLOGY REPORT





Patient Name  
Age/Sex/DOB  
Medical Record No.



**FINAL DIAGNOSIS**



**PATHOLOGIST COMMENT:**



**Gross Description:**



**Microscopic Description:**



**Ancillary Studies:**



- Immunostains
- Genetics studies (NGS)

# PATHOLOGY REPORT

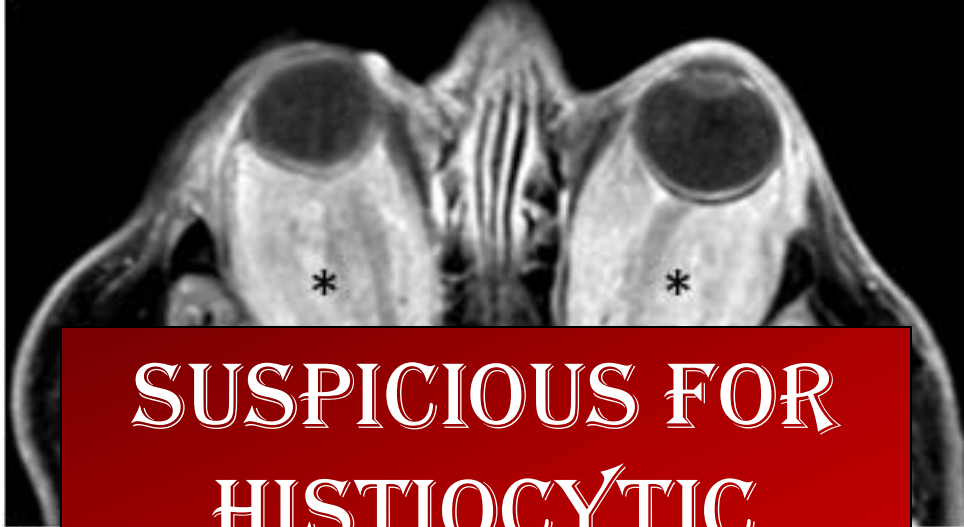
## **FINAL DIAGNOSIS:**

**Atypical Histiocytic (or Xanthogranuloma) Infiltrates.  
See Comment.**

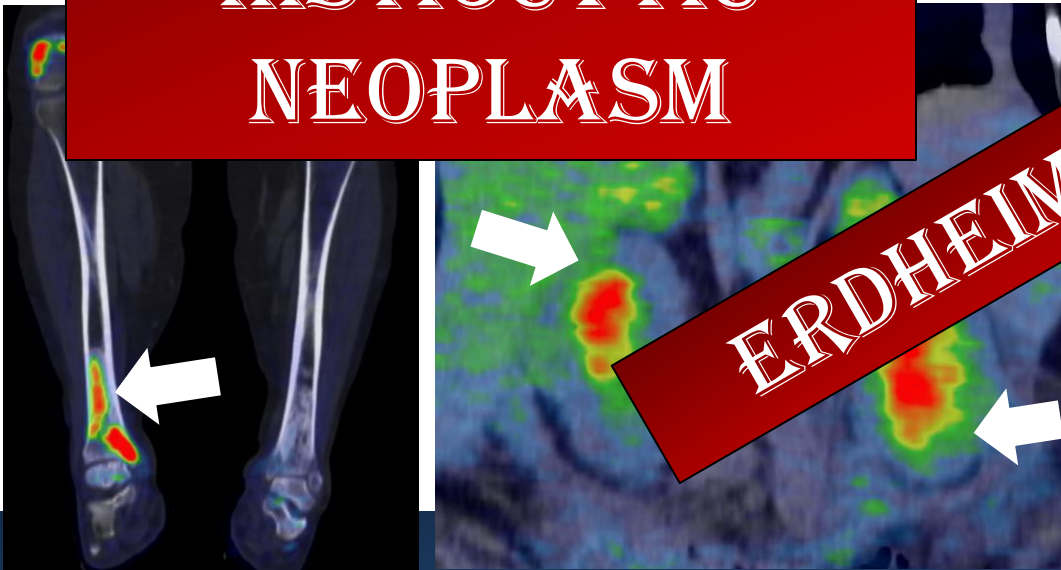
## **PATHOLOGIST COMMENT:**

**In the appropriate clinical and radiologic context, this is  
compatible with Erdheim-Chester Disease.**

# Case Study

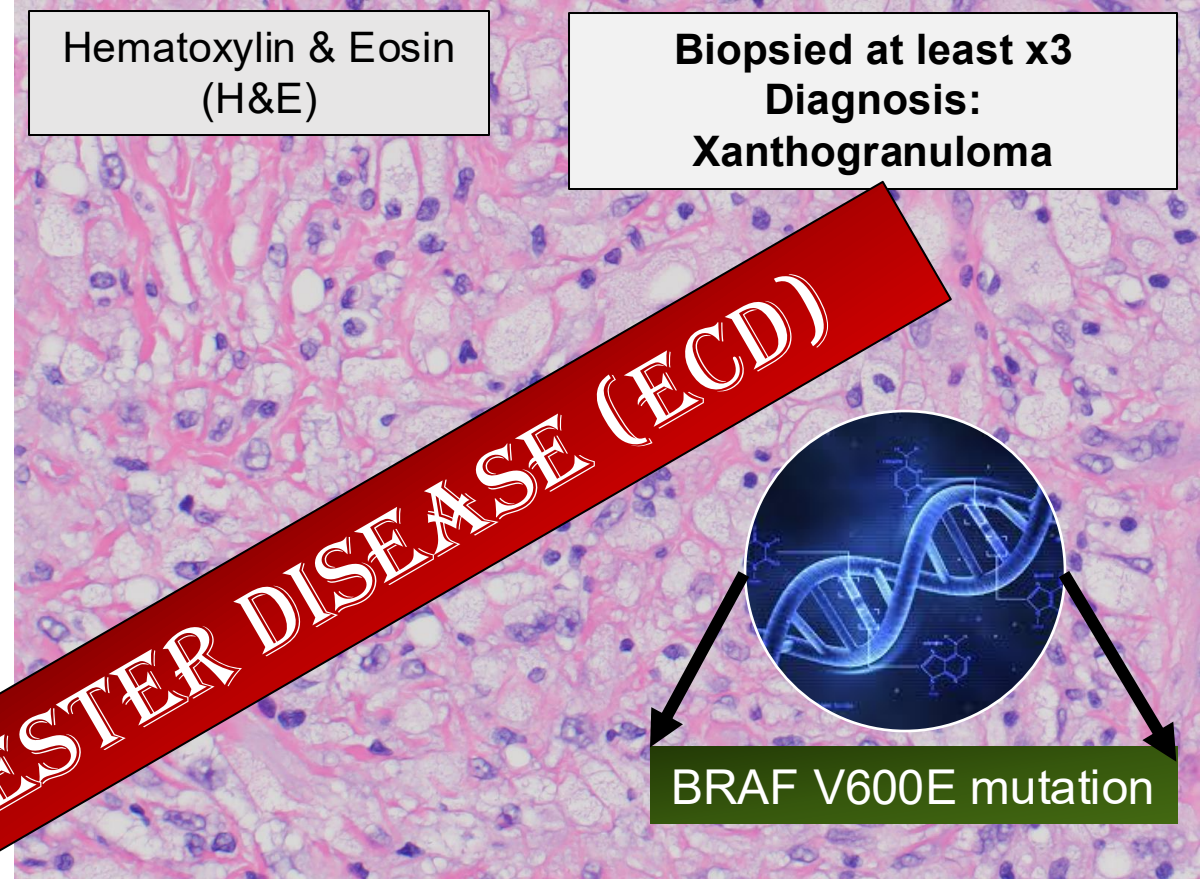


SUSPICIOUS FOR  
HISTIOCYTIC  
NEOPLASM

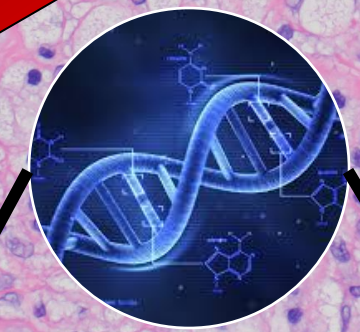


ERDHEIM-CHESTER DISEASE (ECD)

Hematoxylin & Eosin  
(H&E)

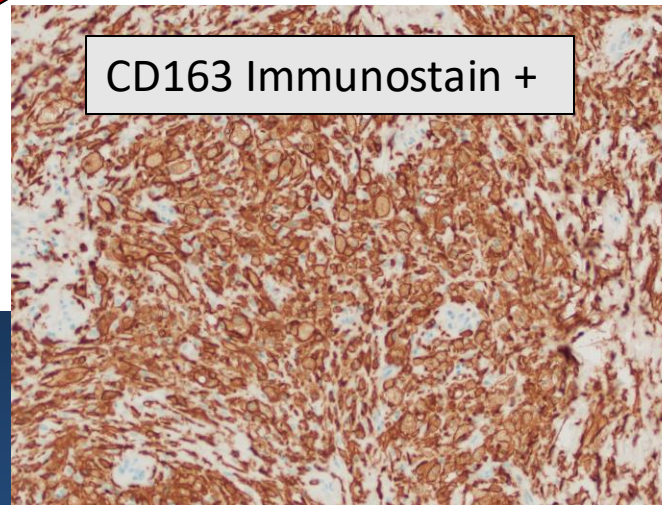


Biopsied at least x3  
Diagnosis:  
Xanthogranuloma

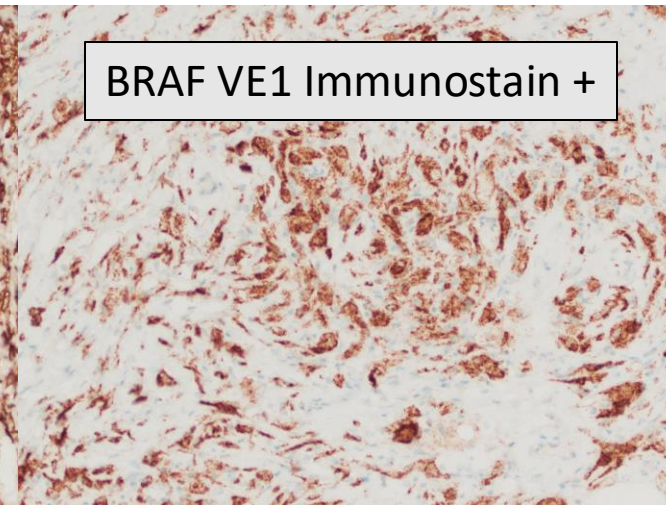


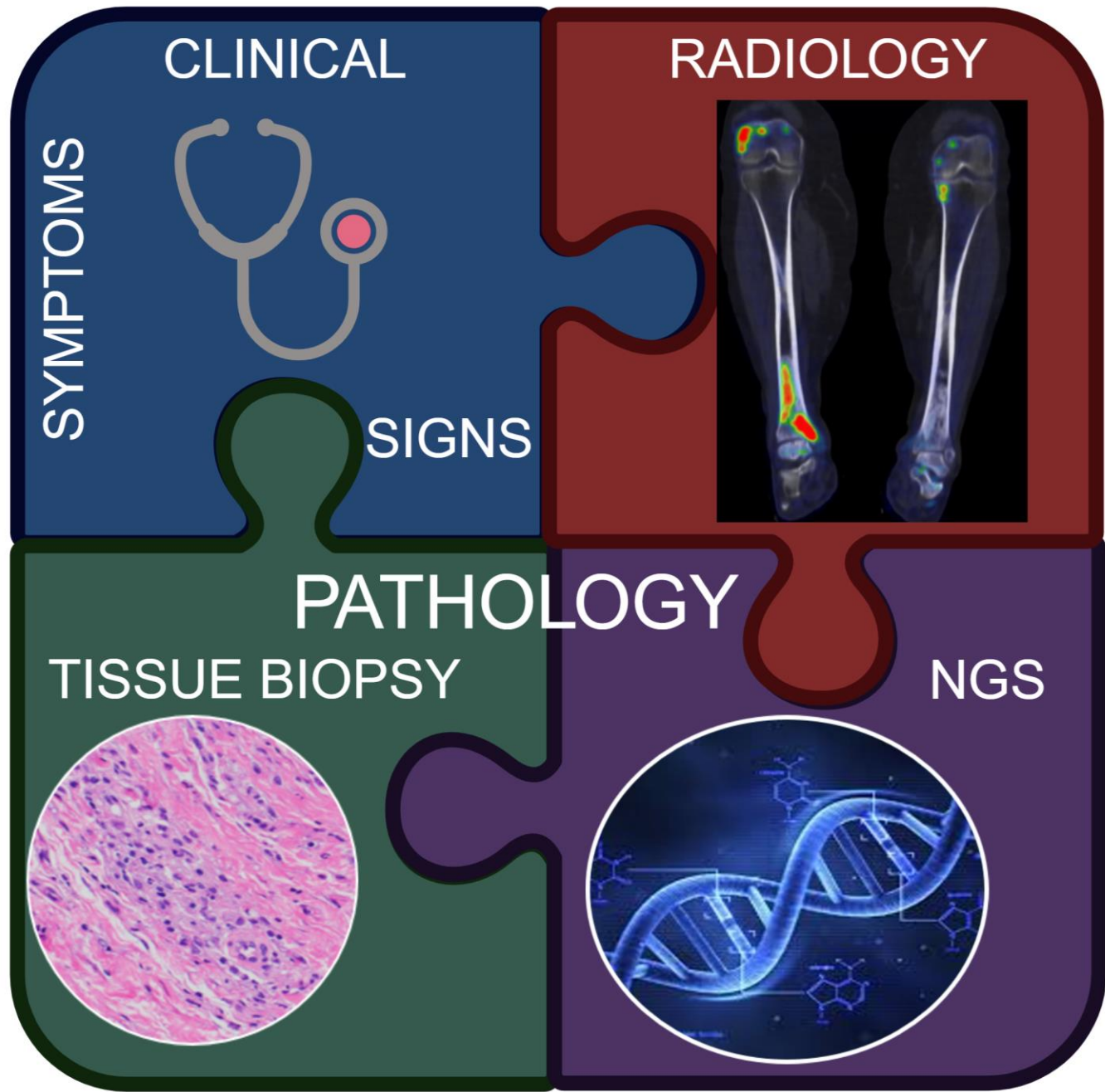
BRAF V600E mutation

CD163 Immunostain +



BRAF VE1 Immunostain +





# QUESTIONS & DISCUSSION