

# BDIAP Slide Seminar 2017

## Case 1

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FFPath

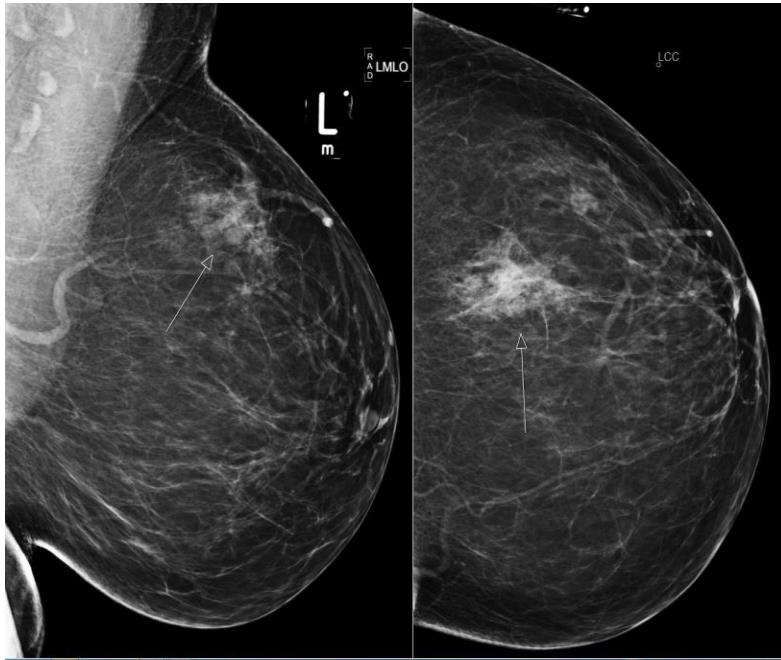
Clinical Professor, School of Medicine, University College Dublin &  
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Programme,

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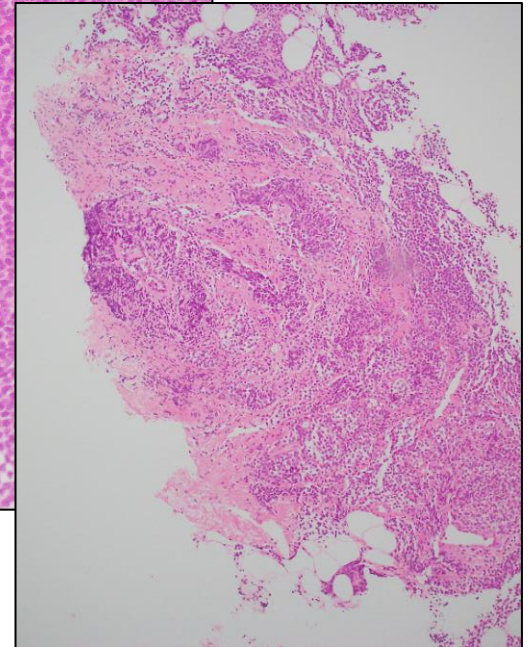
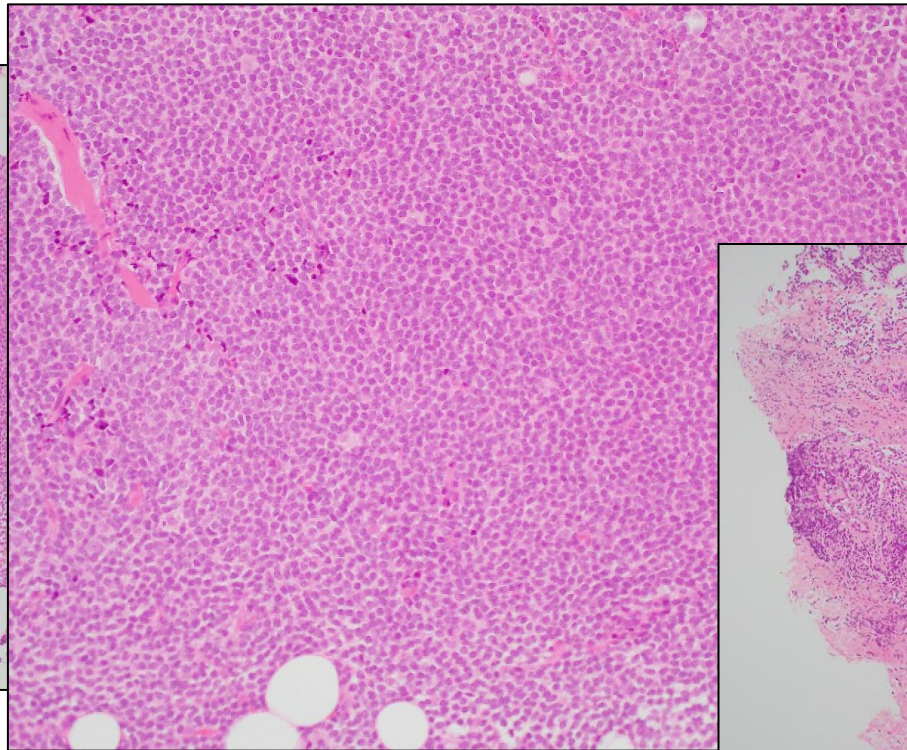
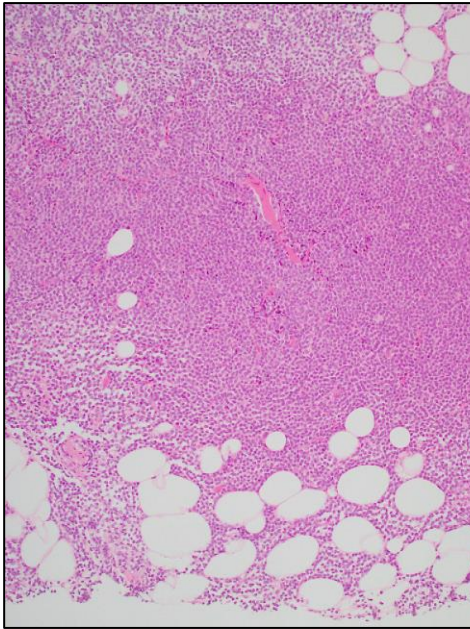
- **58 year old female**
- **Incident round screening mammogram**





- **55mm asymmetry left breast**
- **Needle core biopsy**
- **? Invasive lobular carcinoma but not typical**
- **R code 4**

# Needle core biopsy



# Submitted diagnoses (N = 39)

Lymphoma

Lymphoma vs lymphocytic lobulitis

Lymphoma vs invasive lobular carcinoma

Lymphoid proliferation B3

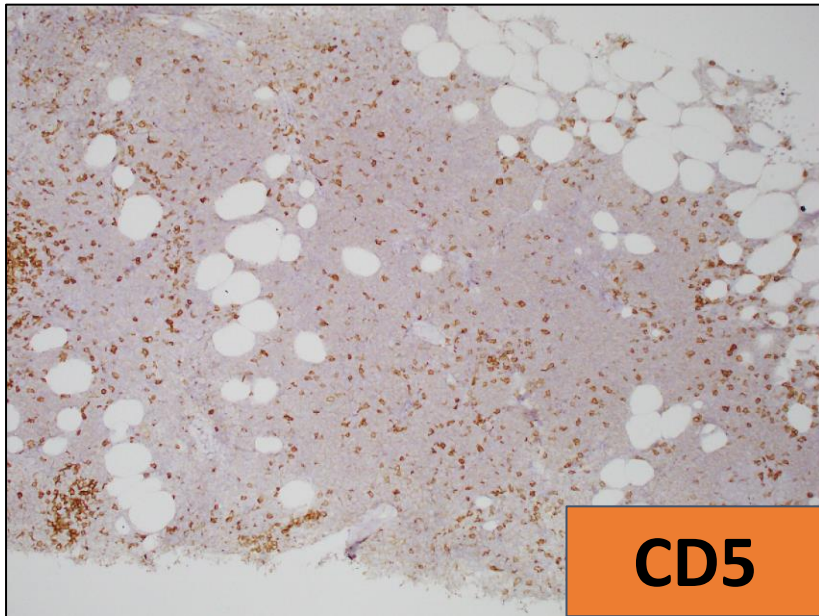
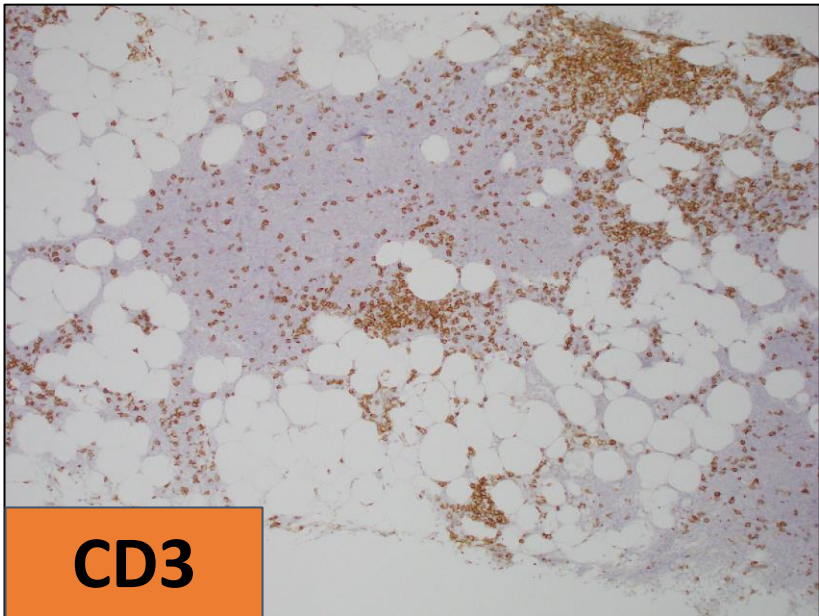
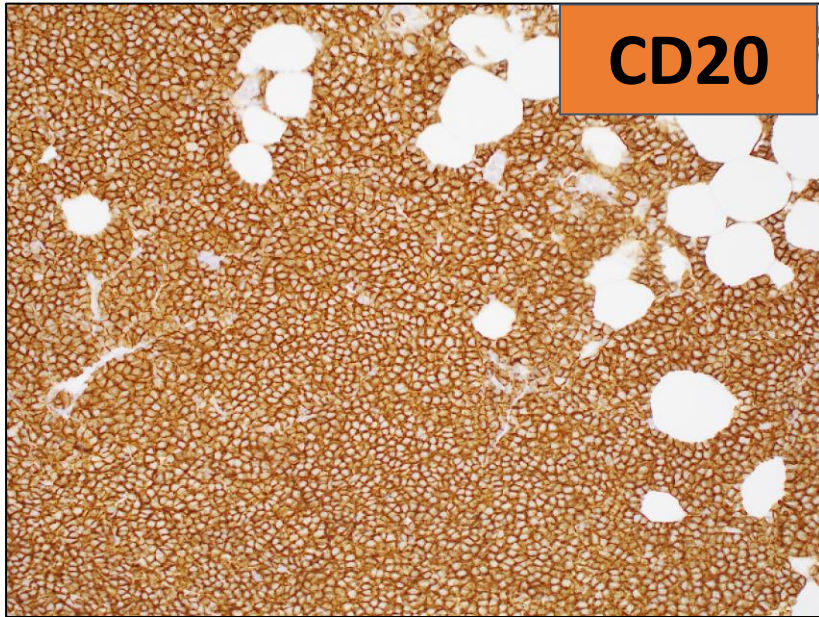
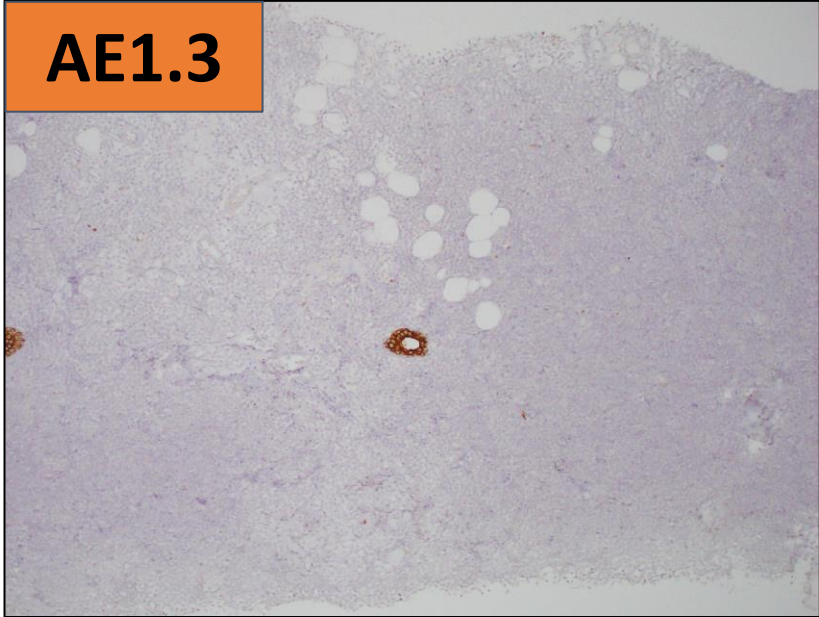
Small blue cell tumour

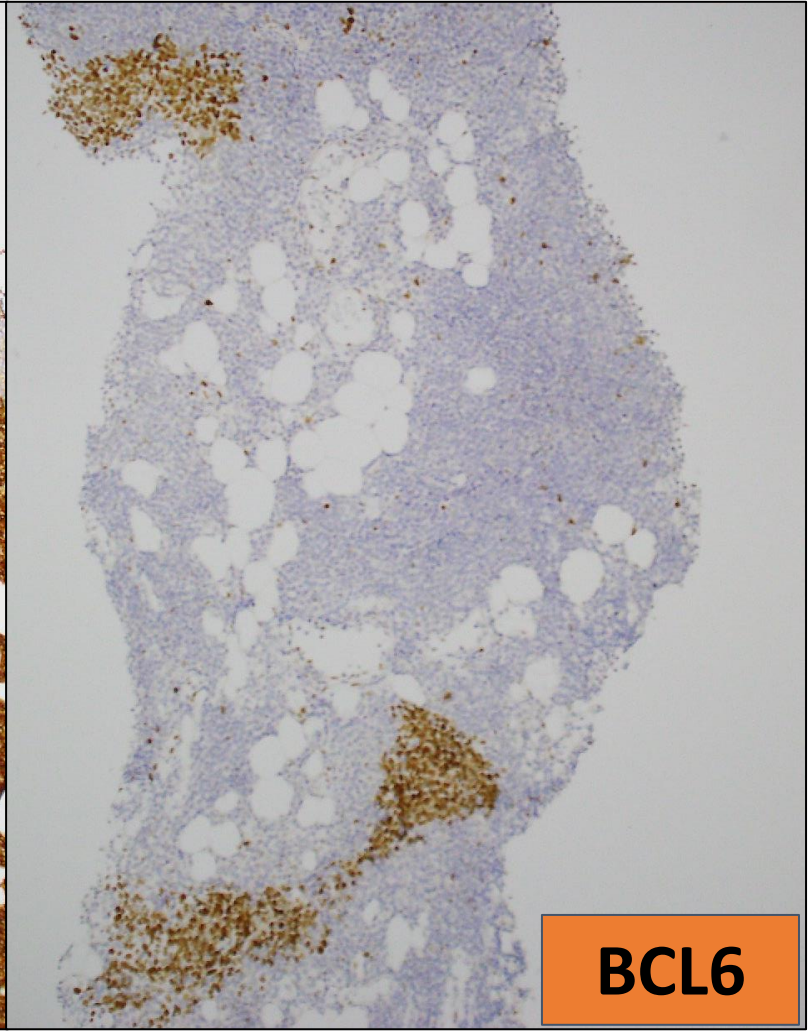
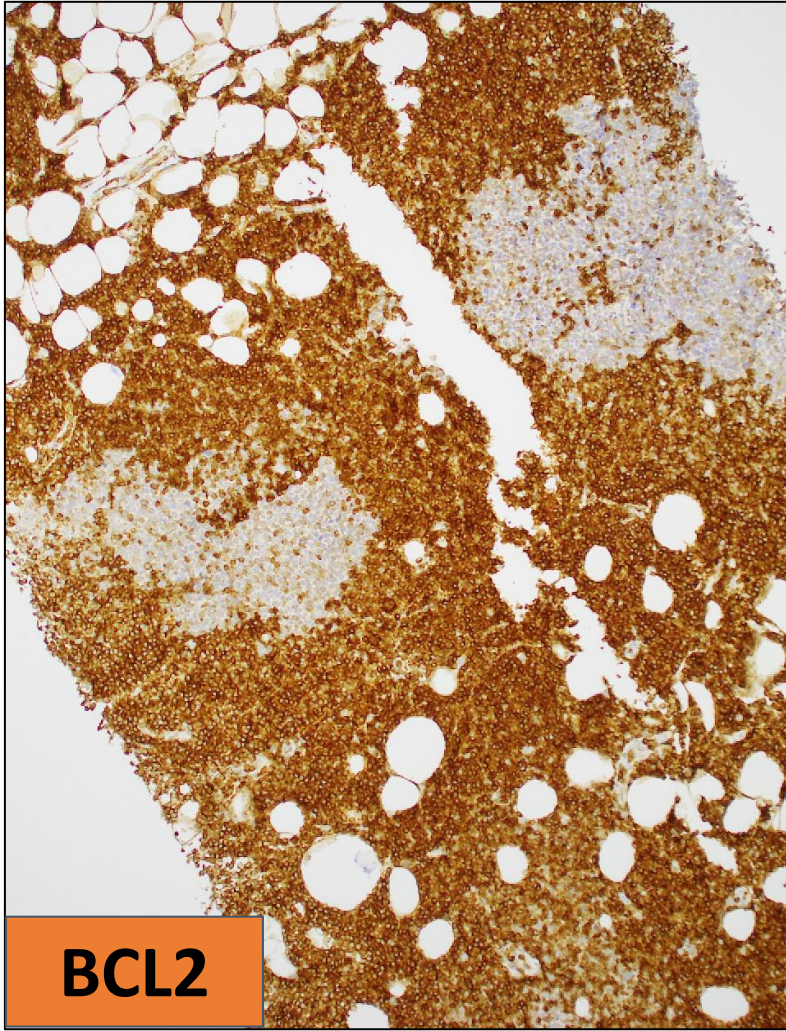
Malignant tumour B5

Neuroendocrine carcinoma

Invasive lobular carcinoma, solid variant

Clear cell carcinoma ? metastases





# Extranodal marginal zone lymphoma of MALT

- **MALT lymphoma of breast**
- **Rare < 0.1% breast malignancies**
- **Primary or secondary in breast**
- **Female adults in 6<sup>th</sup> or 7<sup>th</sup> decade**
- **Cause unknown**
  - ? association with autoimmune disease
- **Solitary breast mass**
- **+/- regional node involvement**



# Extranodal marginal zone lymphoma of MALT

- **Diffuse proliferation of small - intermediate sized lymphocytes**
- **Hyperplastic lymphoid follicles**
- **Lymphoepithelial lesions**
- **May not be seen in breast**
- **IHC + CD20, CD79a, Pax5, BCL2**
- **IHC – CD3, CD5, BCL6, Cyclin D1**

# Marginal zone lymphoma of the breast—A diminished role for surgery

Suman B. Koganti, MD,\* [Alejandra Lozada](#), MD, [Ernesto Curras](#), MD, and [Ajay Shah](#), MD, FACS

[Author information](#)

**Abstract**

**Introduction**

Primary  
of region  
armamen

**Present**

A 62 year  
diagnosti  
up was p  
localized  
received

Case Reports in Hematology

Volume 2016 (2016), Article ID 1831792, 6 pages

<http://dx.doi.org/10.1155/2016/1831792>

## Case Report

### Primary MALT Lymphoma of the Breast Treated with Definitive Radiation

Mohammad Hissourou III,<sup>1</sup> Sayyad Yaseen Zia,<sup>2</sup> Mahfood Alqatari,<sup>3</sup> James Strauchen,<sup>3</sup> and Richard L. Bakst<sup>2</sup>

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Primary MALT  
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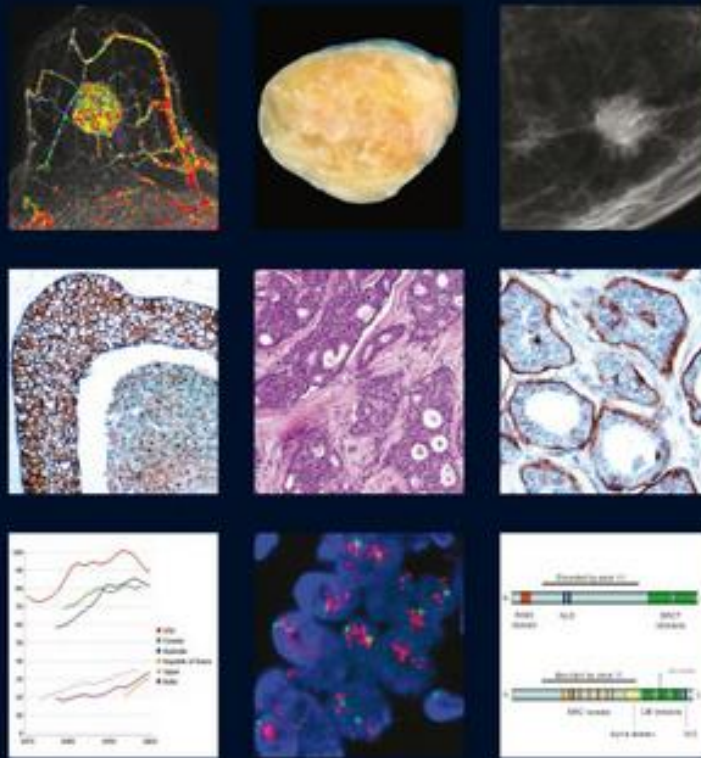
# Breast lymphoma facts

- Primary or secondary
- Rare
  - < 0.5% all breast malignancies
  - 1% NHL
  - < 3% extranodal lymphomas
- Age range 12 – 90 years
- 98% female



# WHO Classification of Tumours of the Breast

Edited by Sunil R. Lakhani, Ian O. Ellis, Stuart J. Schnitt, Puay Hoon Tan, Marc J. van de Vijver

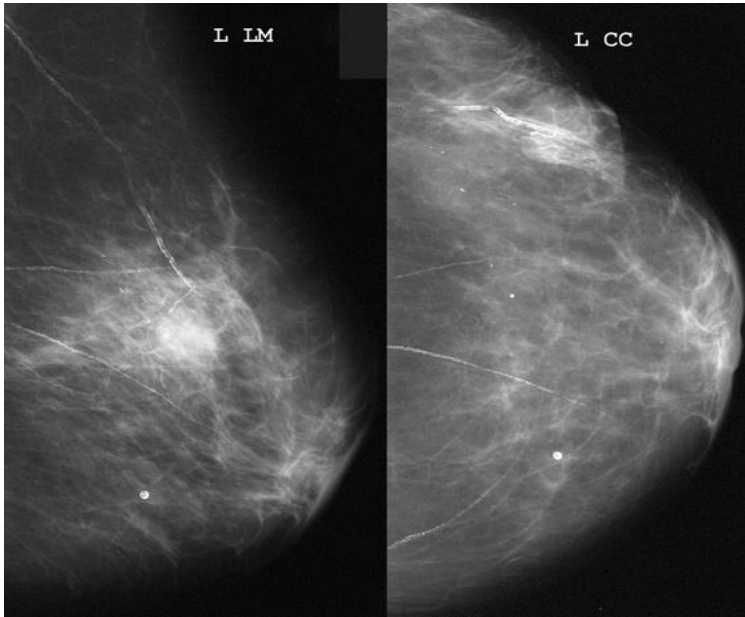


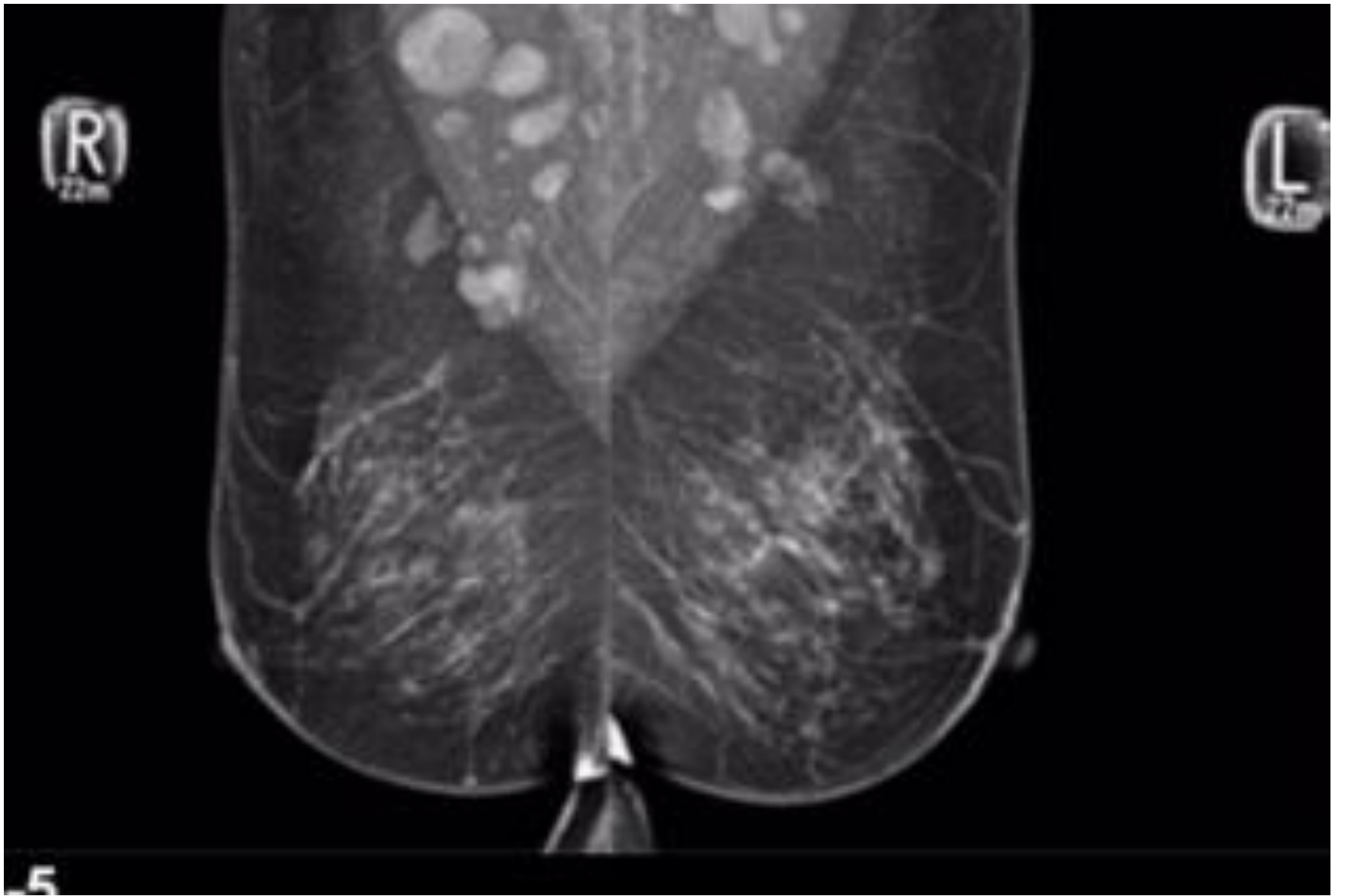
# Presentation



**80%**

**20%**





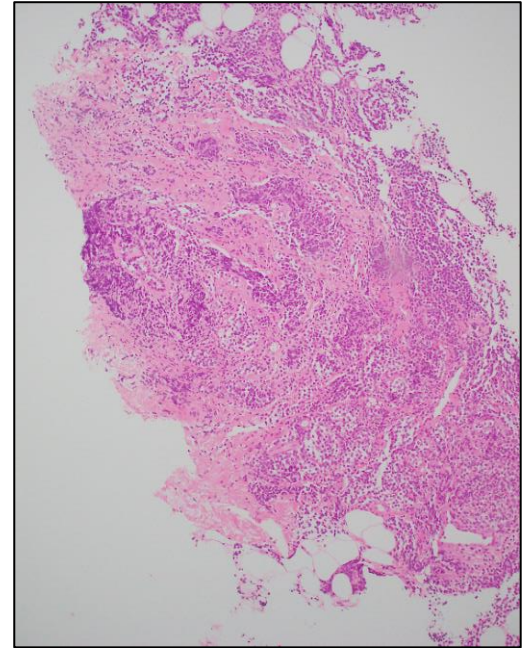
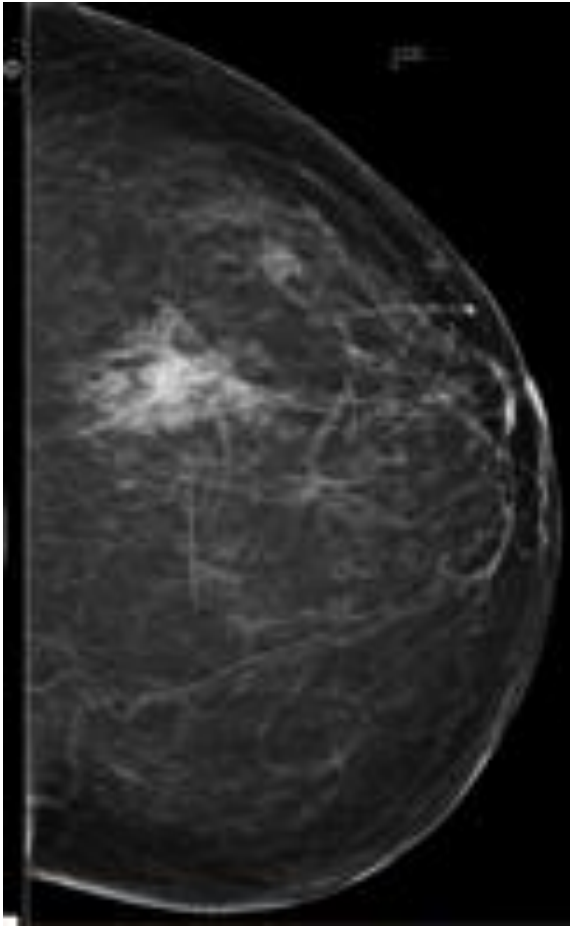
# Breast lymphomas

Diffuse large B cell	60–80%
Marginal zone	10-30%
Follicular	10-20%
Burkitts	<6%
Implant associated anaplastic	<1%
Chronic lymphatic leukaemia	<1%
Peripheral T cell	<1%
Hodgkins disease	<1%
Others	<1%

**90% B cell**



# Daily practice vs slide seminar



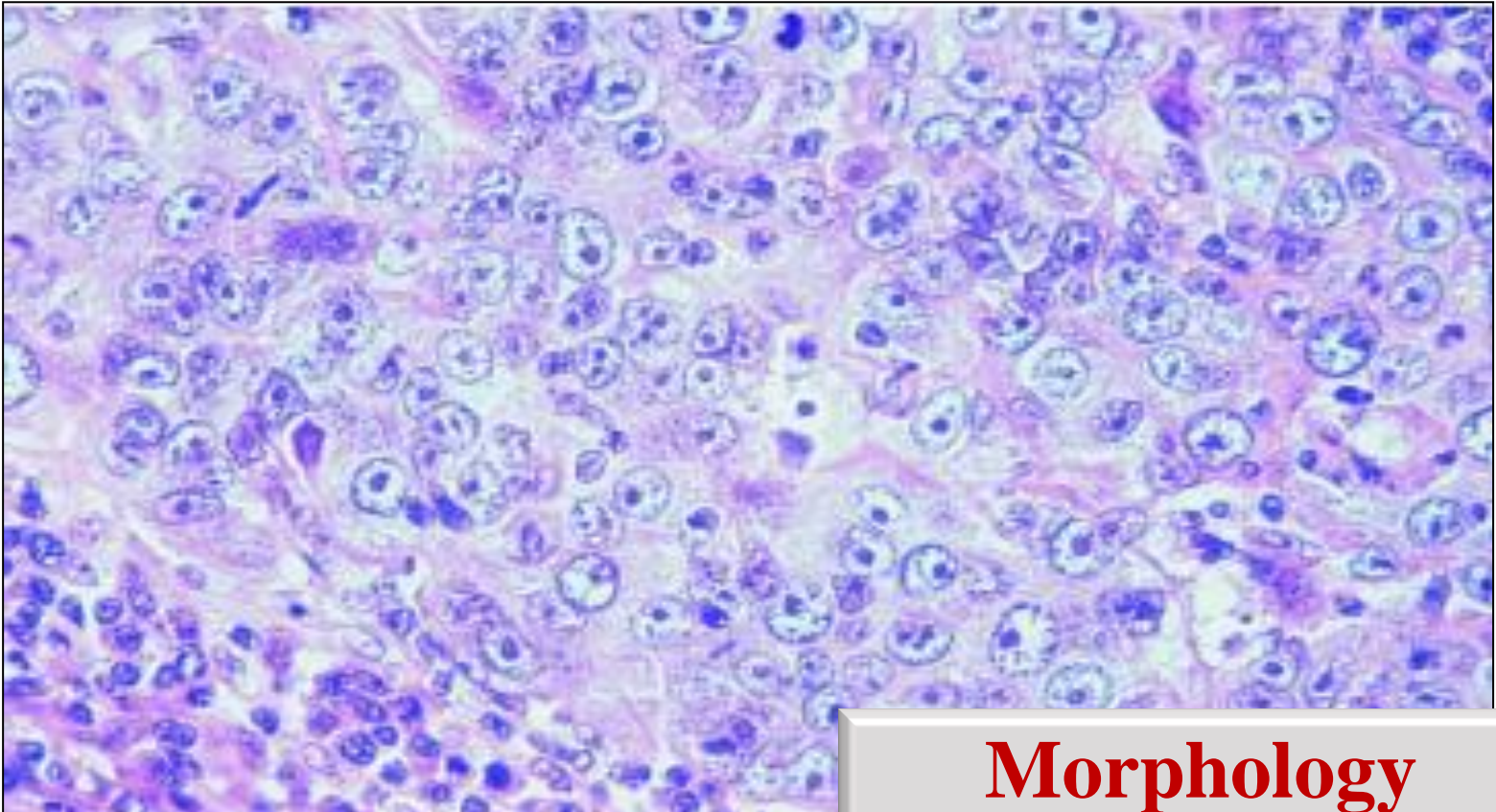


Don't Think  
Outside The Box  
Think Like There Is  
NO BOX!

# Diagnostic considerations ?



# Carcinoma with medullary features

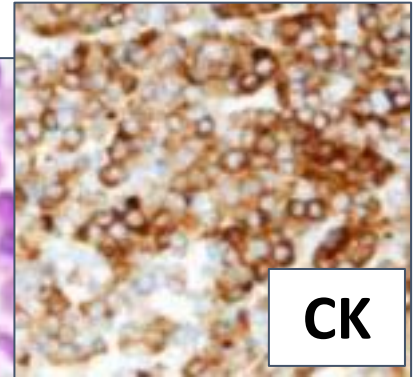
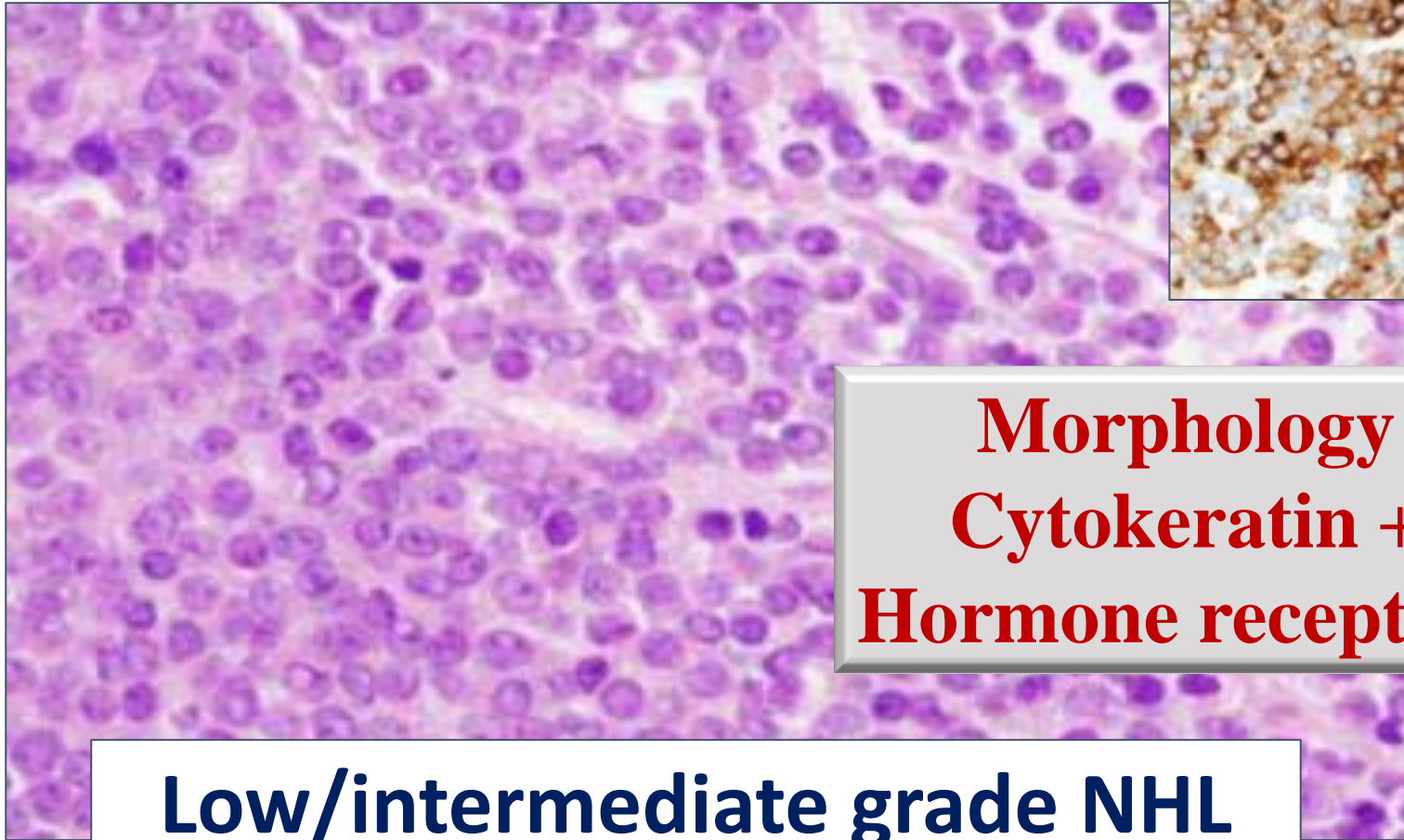


**Or high grade NHL ?**

**Morphology  
Cytokeratin +  
LCA -**

# Invasive lobular carcinoma

## *Solid variant*



CK

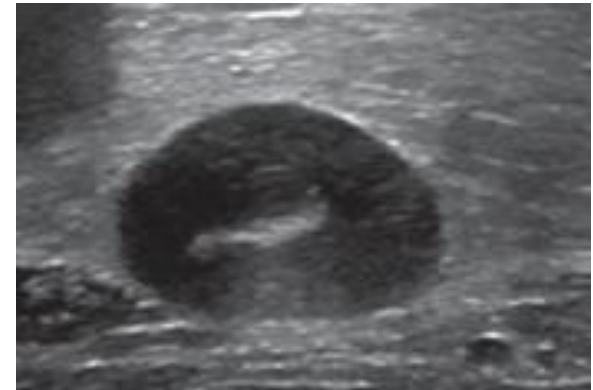
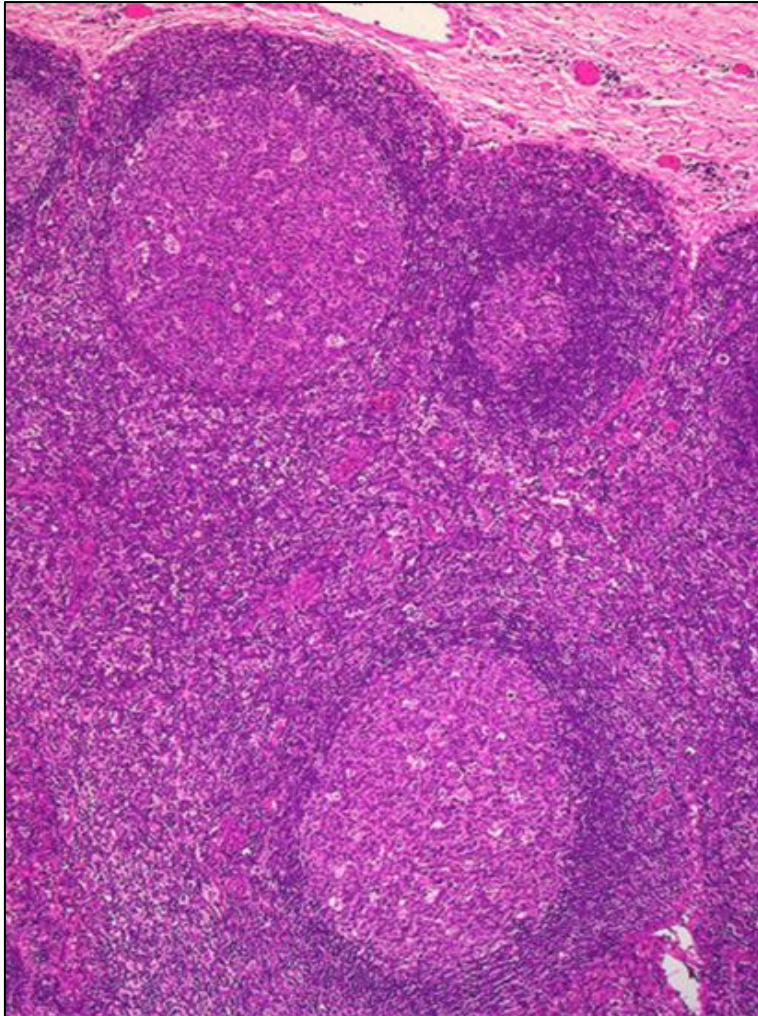
**Morphology**  
**Cytokeratin +**  
**Hormone receptors**

**Low/intermediate grade NHL**  
**may resemble ILC**

# Triple negative breast tumour

- Invasive carcinoma, NST, grade 3
- Invasive lobular ca, pleomorphic
- Carcinoma with medullary features
- Apocrine carcinoma
- Metaplastic carcinoma
- Myoepithelial carcinoma
- Adenoid cystic carcinoma
- Metastasis
- **Lymphoma**

# Intramammary lymph node



**Radiology  
benign**

**Morphology  
+/- IHC  
Excise if in doubt**

# Other possible diagnoses

- Leukaemic breast involvement  
*Granulocytic sarcoma*
- Reactive inflammation  
*Duct ectasia, ruptured cyst*
- Florid lymphocytic lobulitis
- IgG4 related sclerosing mastitis
- Inflammatory fibroblastic tumour
- Lupus mastitis





# Role of breast pathologist

Recognise as lymphoid

Exclude  
carcinoma

IHC

Reactive or  
neoplastic

Work  
up

Refer to  
HMDS