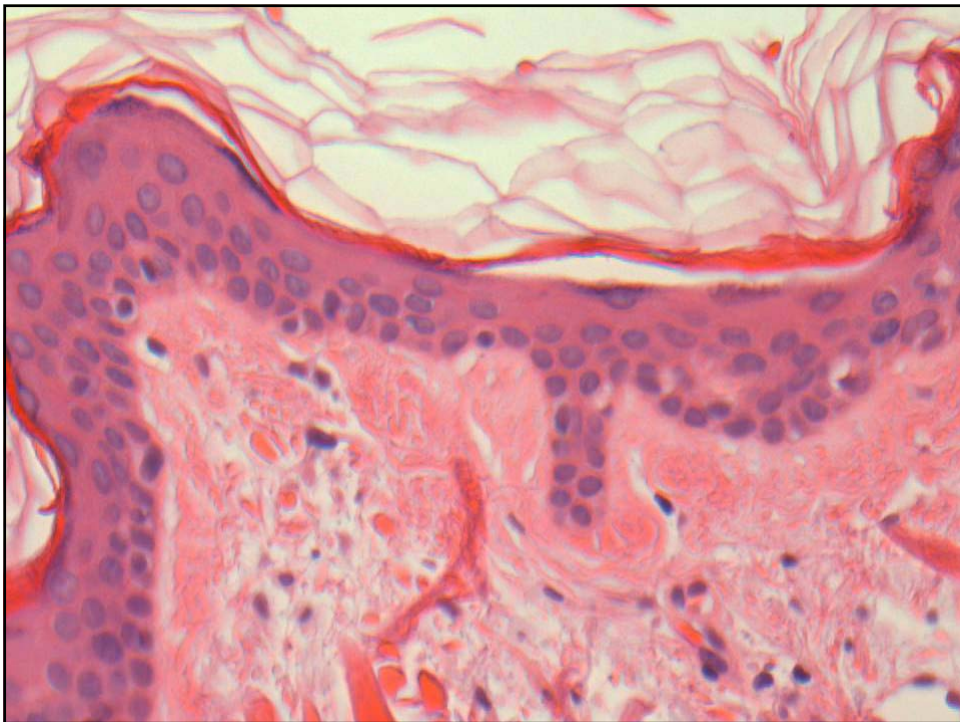
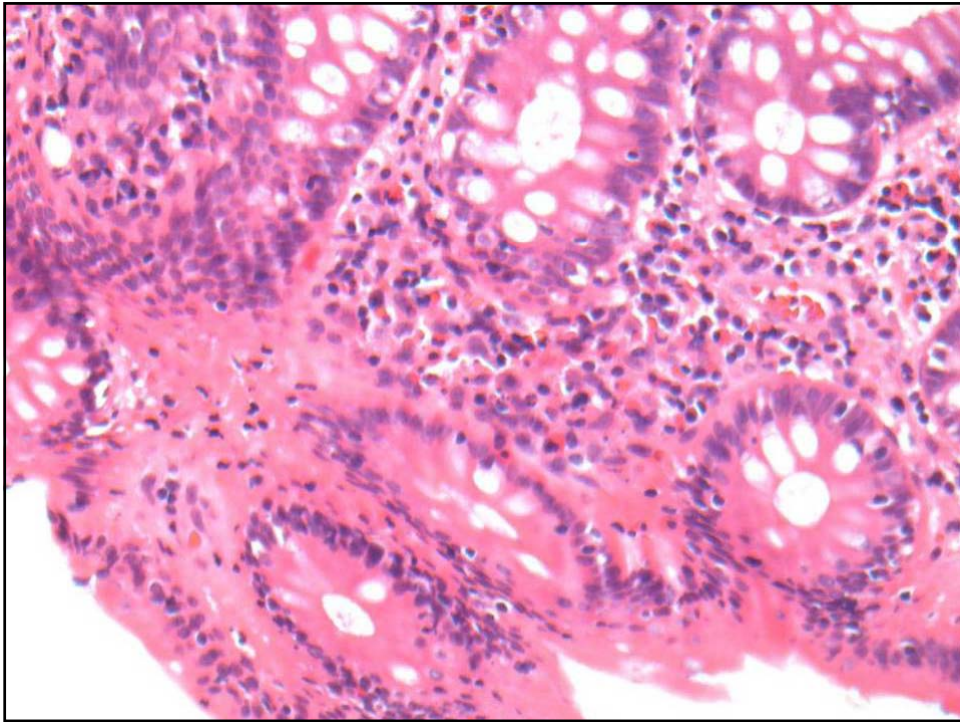


Basic Histopathology

Dr Susan Andrew
North West Wales NHS Trust

Types of tissue

- Epithelial
 - Squamous
 - Glandular
 - Transitional (bladder)



Types of tissue

- **Stromal**
 - Muscle
 - Blood vessel
 - Fat
 - Bone
 - Cartilage

Types of tissue

- **Mesothelial**
 - Pleura
 - Peritoneum
 - Pericardium
 - Coverings of testis

Types of tumour I

- Benign or malignant
- Papilloma..... Squamous cell carcinoma
- Adenoma..... Adenocarcinoma
- LipomaLiposarcoma
- LeiomyomaLeiomyosarcoma
- NaevusMalignant melanoma

Types of tumour II

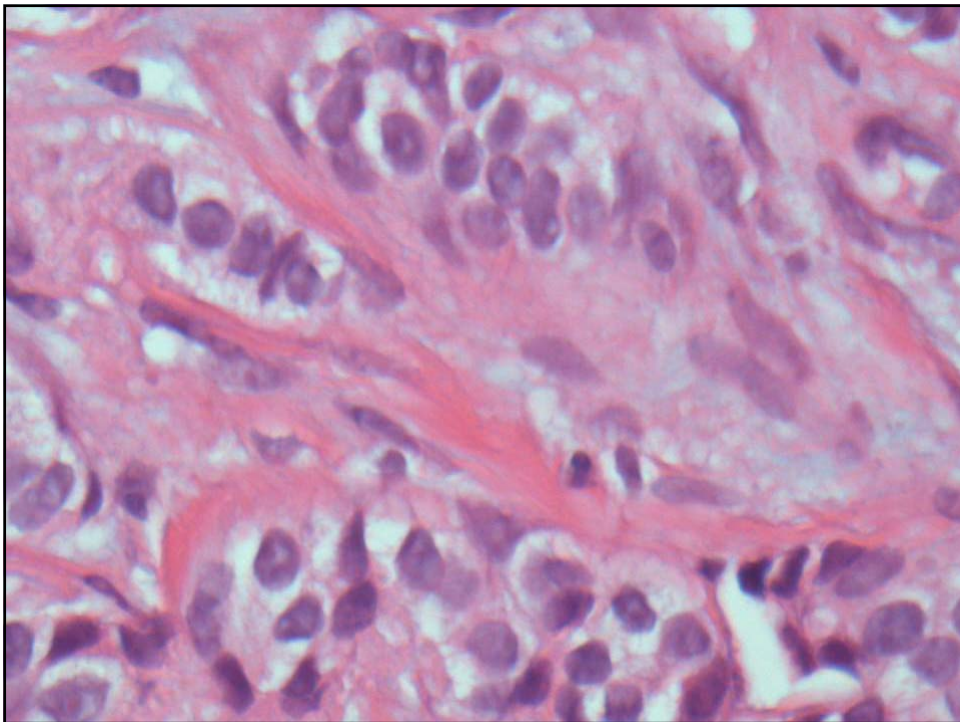
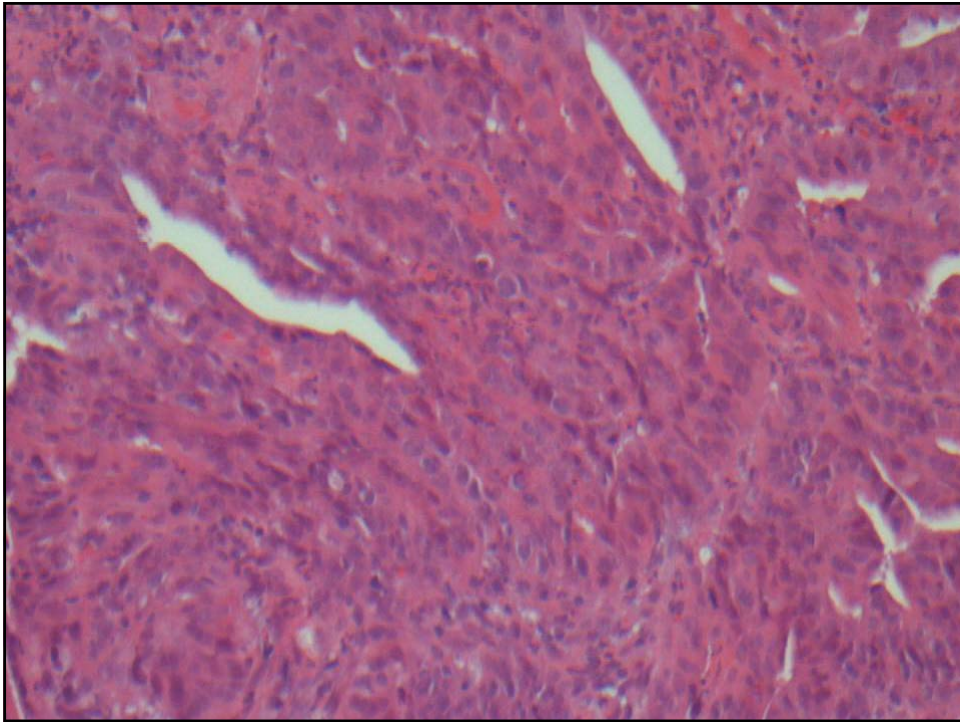
- Carcinoma
- Sarcoma
- Melanoma
- Lymphoma/Myeloma/Leukaemia
- Seminoma/Teratoma

Types of tumour III

- Carcinoma
 - Squamous cell carcinoma
 - Adenocarcinoma
 - Transitional cell carcinoma

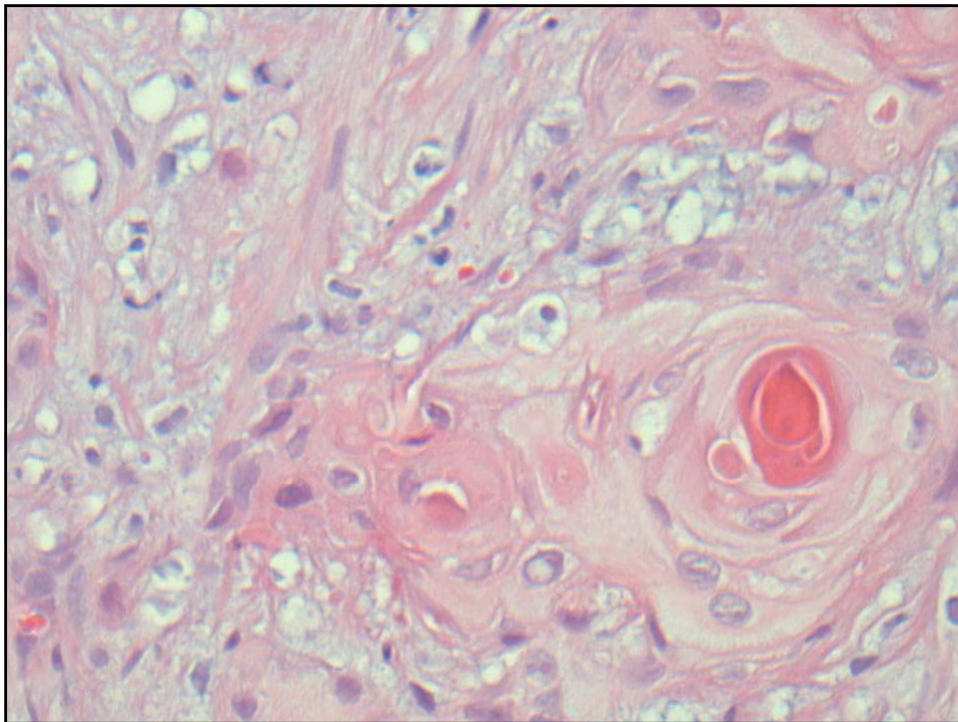
Types of tumour IV

- Adenocarcinoma
 - Ductal carcinoma
 - Lobular carcinoma
 - Intestinal carcinoma
 - Signet ring carcinoma
 - Endometrial carcinoma
 - Carcinoid
 - Small cell carcinoma



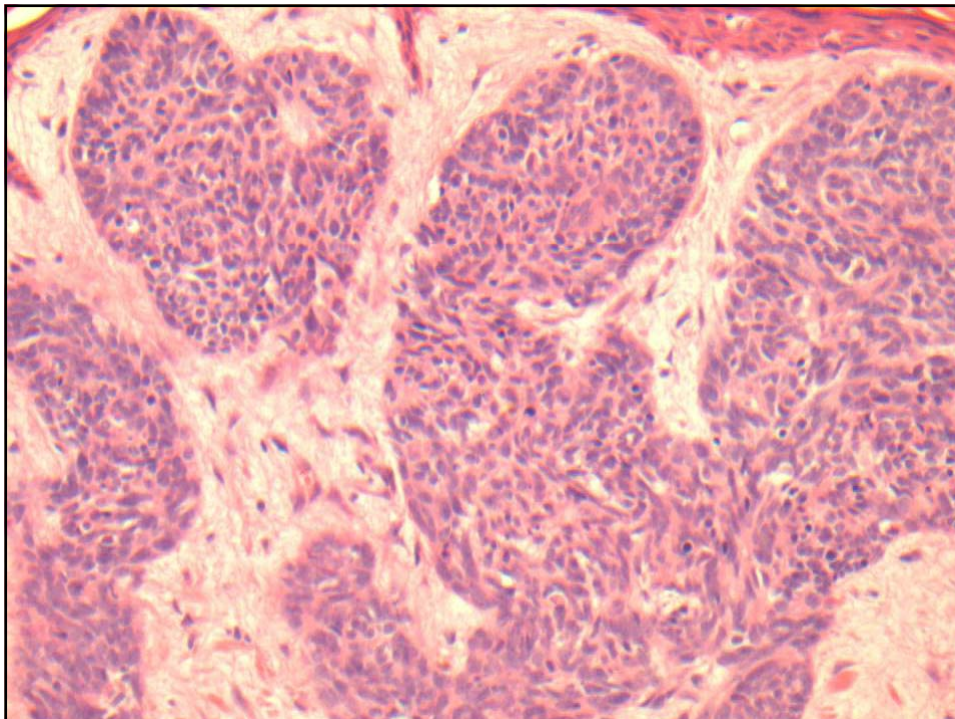
Types of tumour V

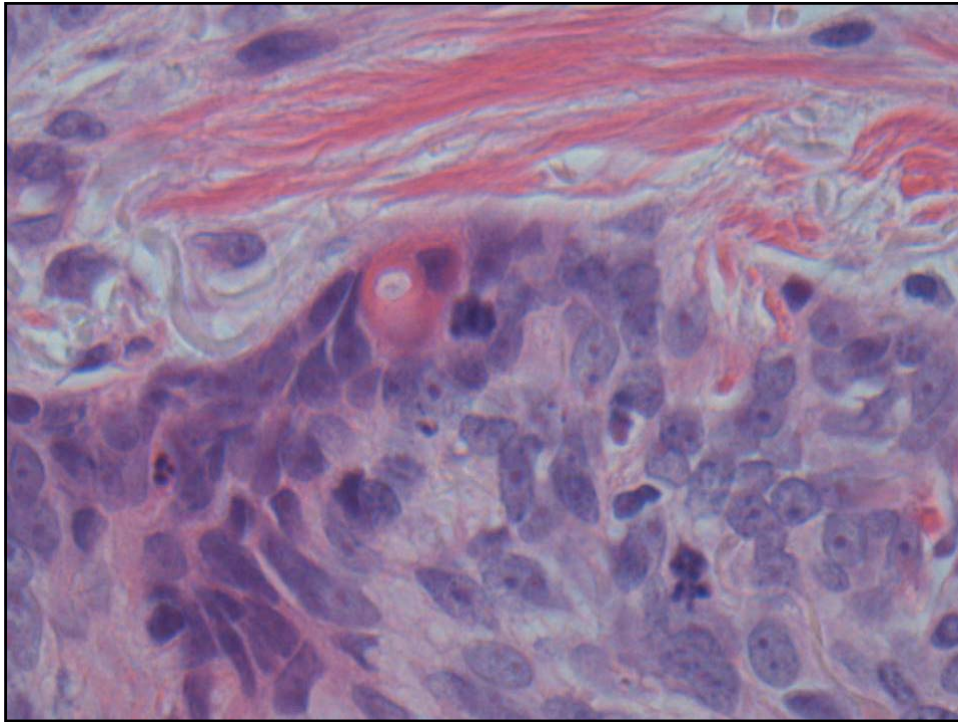
- Squamous cell carcinoma
- Small cell carcinoma
- Transitional cell carcinoma



Grade of tumour

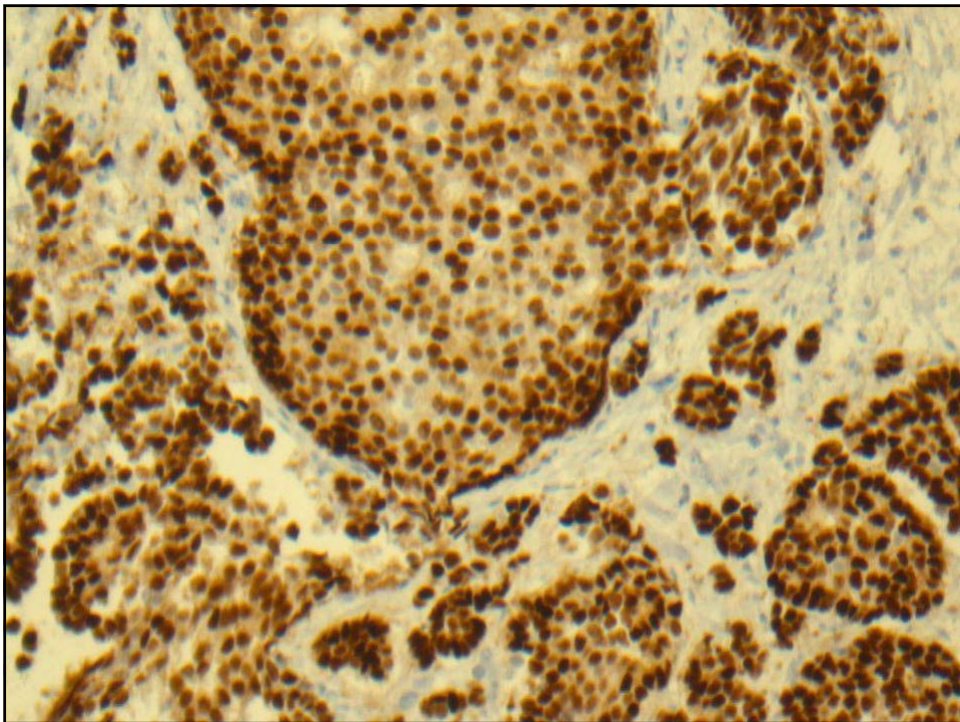
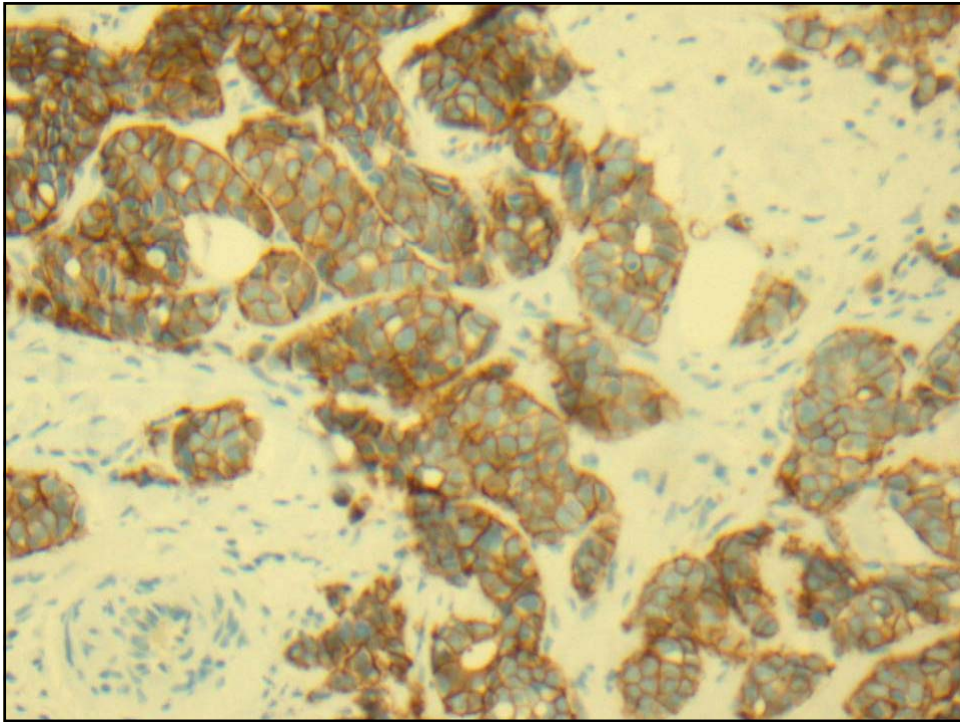
- **Differentiation**
 - Resemblance to mature tissue type
- **Pleomorphism**
 - Cells/nuclei of different shapes
- **Mitoses**
 - Number of mitotic figures/abnormal mitoses





Immunohistochemistry

- Special staining of tissue using antibodies against specific proteins
- Position of antibody label revealed by brown stain
- Proteins labelled can be in cytoplasm, on membrane, in nucleus or in stroma



Stage I

- Tumour size and extent
 - Depends on anatomy (site)
- Nodal involvement
- Metastases

Stage II

- TNM
- Dukes
- Figo

- Stage grouping
- tis

Dysplasia

- Low grade/ high grade
- High grade/in-situ carcinoma
- Breast
 - DCIS/LCIS
- Skin
 - Bowen's disease
- Cervix

Multifocal disease

- Separate tumours within one breast
- Separate origins of bladder carcinoma
- Separate areas of cervical dysplasia
- Many separate non-melanomatous skin cancers

Nottingham prognostic index

- Tubules 1-3
- Mitoses 1-3
- Nuclear pleomorphism 1-3
- Add up the score..... Grade the tumour