



**ASDP 62<sup>nd</sup>**  
Annual Meeting #ASDP25

**November 6-9, 2025**  
Hilton Baltimore Inner Harbor **Baltimore, MD, USA**



## NUT Adnexal Carcinoma with Delayed Pulmonary Metastasis: a case report

Harrison White MS4<sup>1</sup>, Klaus Busam MD<sup>2</sup>, James Huang MD<sup>3</sup>, Aimee Craigo MD PhD<sup>4</sup>,  
Marina Baine MD PhD<sup>2</sup>, Melissa Pulitzer MD<sup>2</sup>



✕ f @ in ④  
asdp.org

1



**ASDP 62<sup>nd</sup>**  
Annual Meeting #ASDP25

**November 6-9, 2025**  
Hilton Baltimore Inner Harbor **Baltimore, MD, USA**




✕ f @ in ④  
asdp.org

# Disclosures

We do not have any relevant financial relationships to disclose.

#ASDP25  
✕ f @ in ④

2

**ASDP** 62<sup>nd</sup>  
Annual Meeting

November 6-9, 2025  
Hilton Baltimore Inner Harbor Baltimore, MD, USA

  
asdp.org

## Case Presentation

- 35 yo F presented in early 2013 for evaluation of a 2.5 cm x 2.5 cm firm, brown, fungating mass on the R thigh, present for several weeks
- Biopsy performed

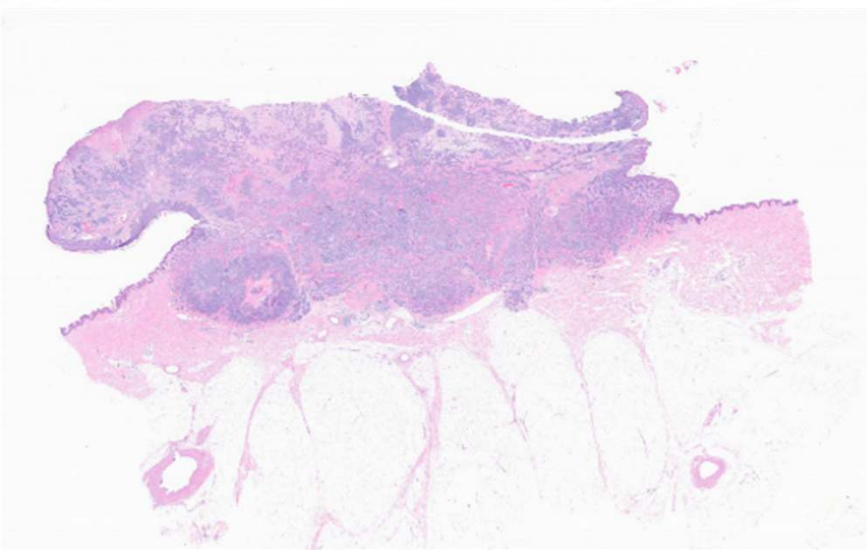
#ASDP25  
X f @ in

3

**ASDP** 62<sup>nd</sup>  
Annual Meeting

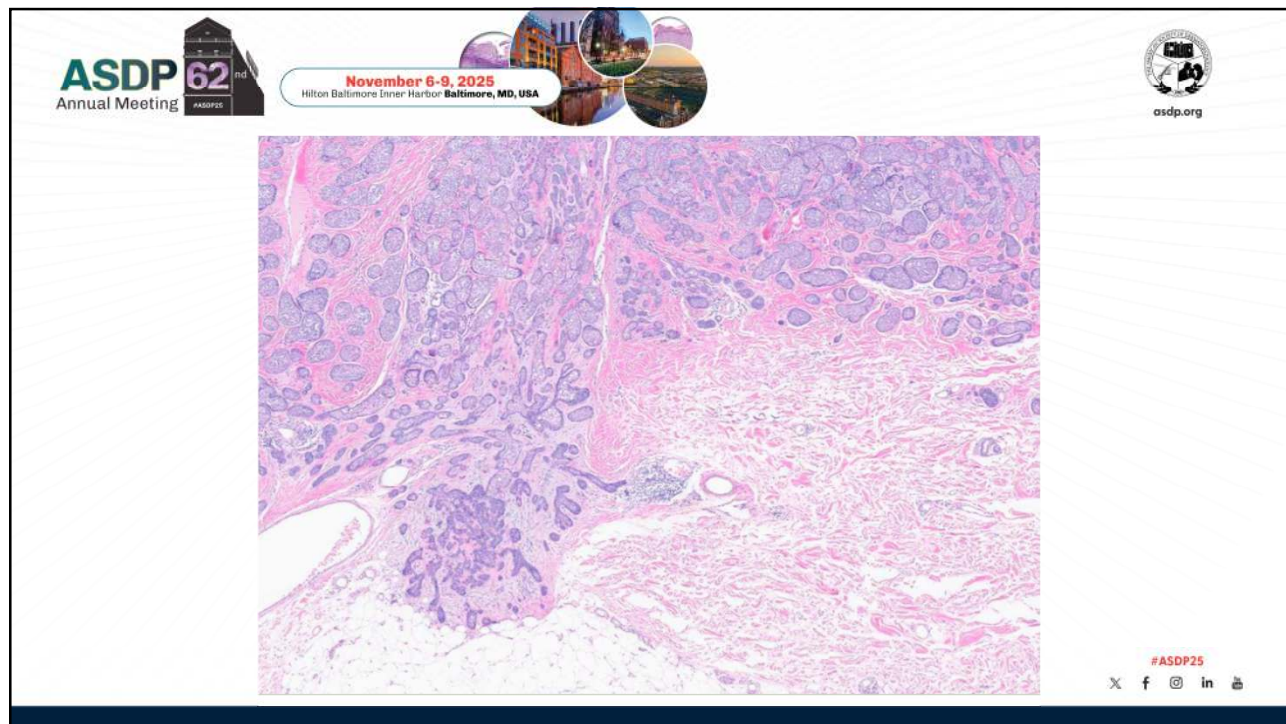
November 6-9, 2025  
Hilton Baltimore Inner Harbor Baltimore, MD, USA

  
asdp.org

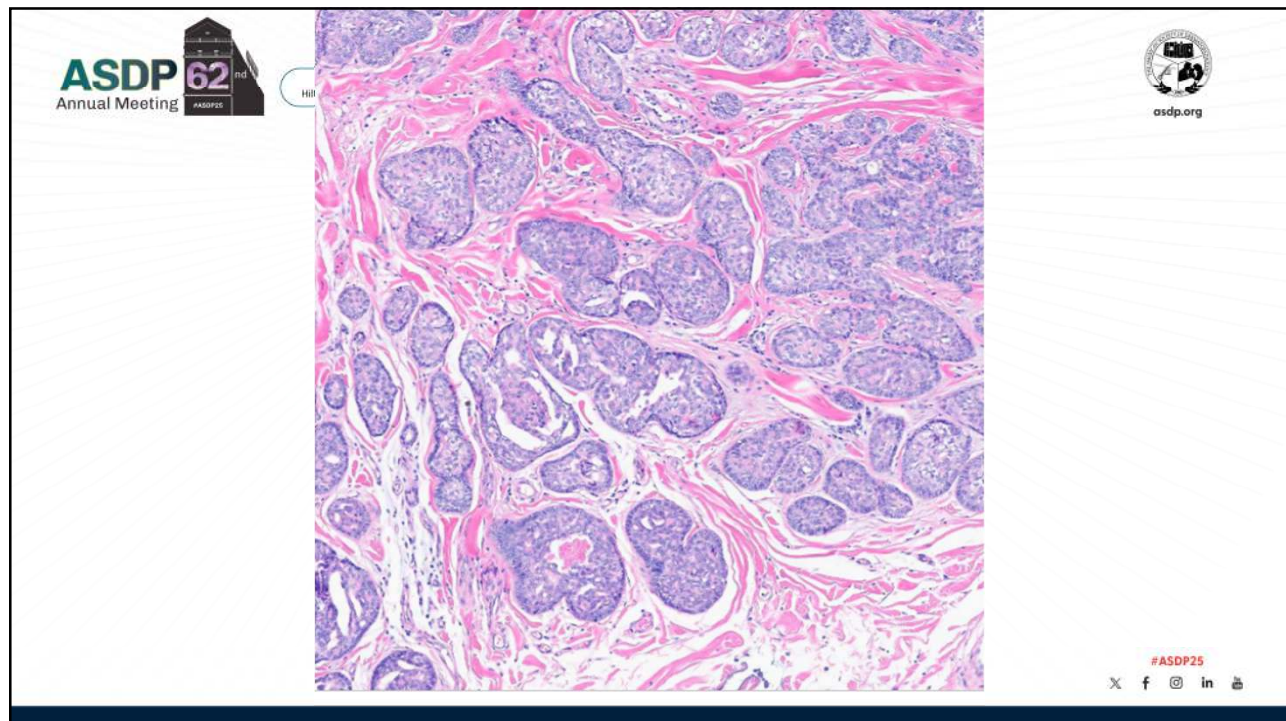


#ASDP25  
X f @ in

4



5



6



**November 6-9, 2025**  
Hilton Baltimore Inner Harbor **Baltimore, MD, USA**





asdp.org

## Pathology Report

- Ulcerated polypoid nodulocystic and infiltrative tumor with ductal differentiation in the dermis and superficial subcutis without satellites.
- Note: The findings fit with a primary cutaneous adenocarcinoma of sweat gland origin. The features of the tumor suggest a carcinoma that has likely arisen from a precursor adenoma.

#ASDP25







7



**November 6-9, 2025**  
Hilton Baltimore Inner Harbor **Baltimore, MD, USA**





asdp.org

## Further History

- The lesion was surgically excised and a SLN biopsy was performed and was positive

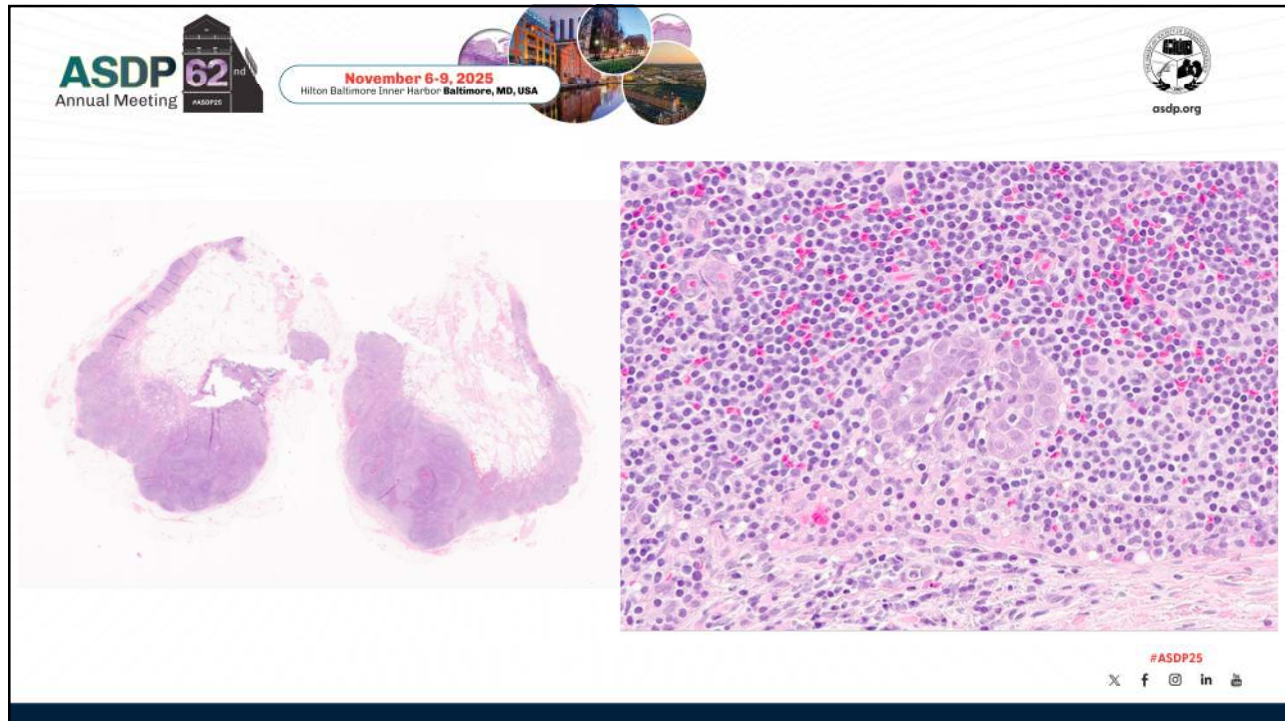
#ASDP25







8

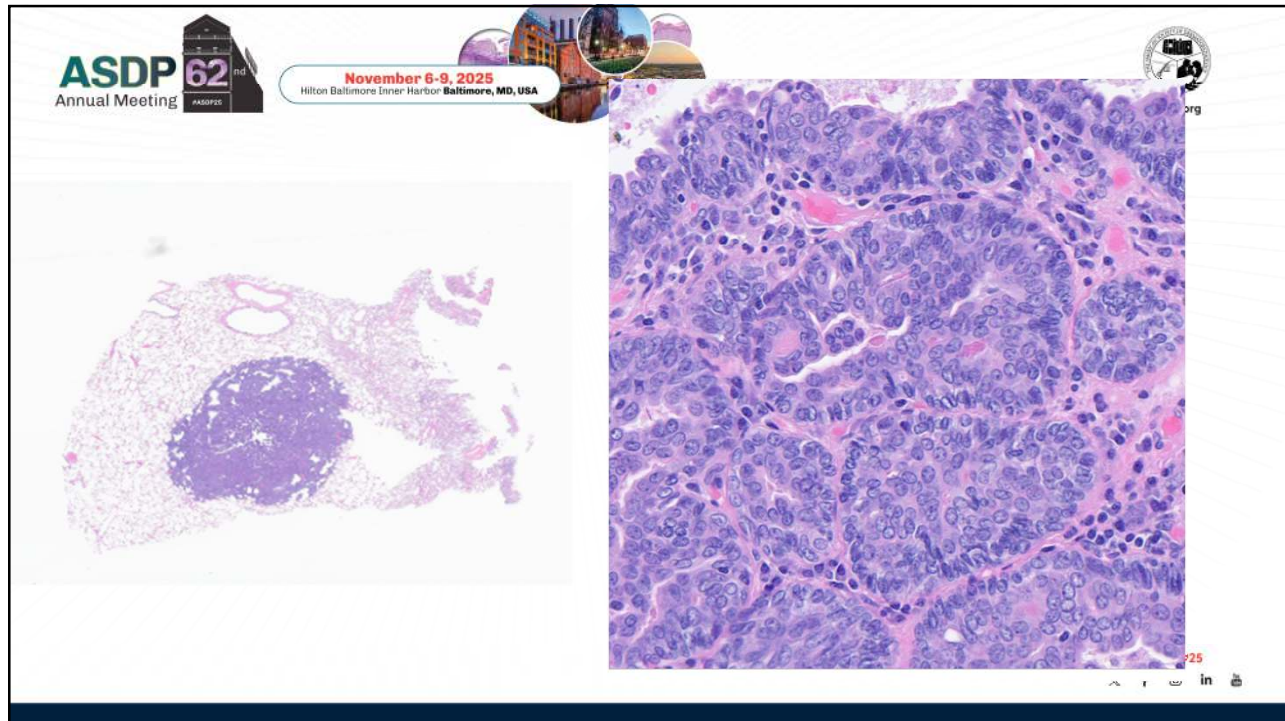


9

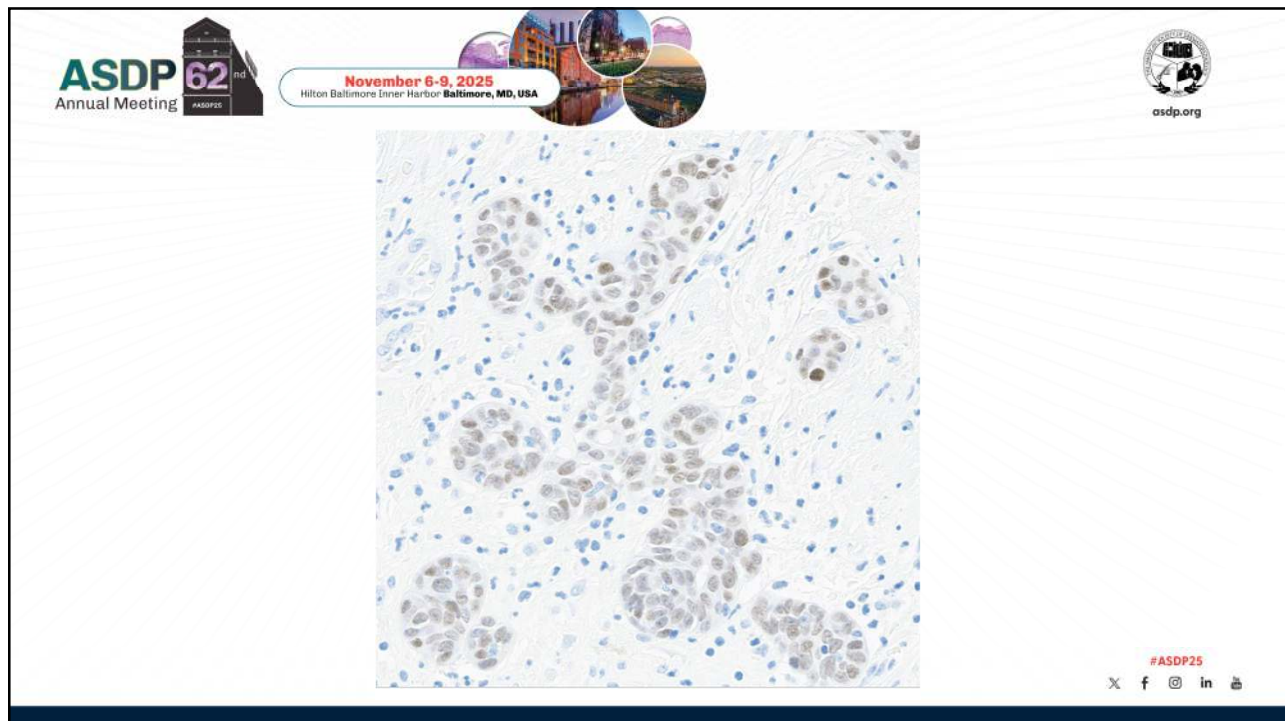
## Further History

- Completion lymphadenectomy of 8 right inguinal and 1 right thigh lymph node was performed, and all nodes were negative
- The patient was monitored for evidence of recurrence/metastasis and was disease-free until 12/2024 at which point surveillance CT demonstrated RLL lung nodules slowly enlarging from prior imaging
- Subsequent wedge resection was performed

10



11



12



**November 6-9, 2025**  
Hilton Baltimore Inner Harbor **Baltimore, MD, USA**





asdp.org

## Further History

- Pathology revealed metastatic sweat gland carcinoma
- Molecular analysis demonstrated BRD3::NUTM1 fusion, permitting subclassification as a NUT adnexal carcinoma with delayed lung metastasis

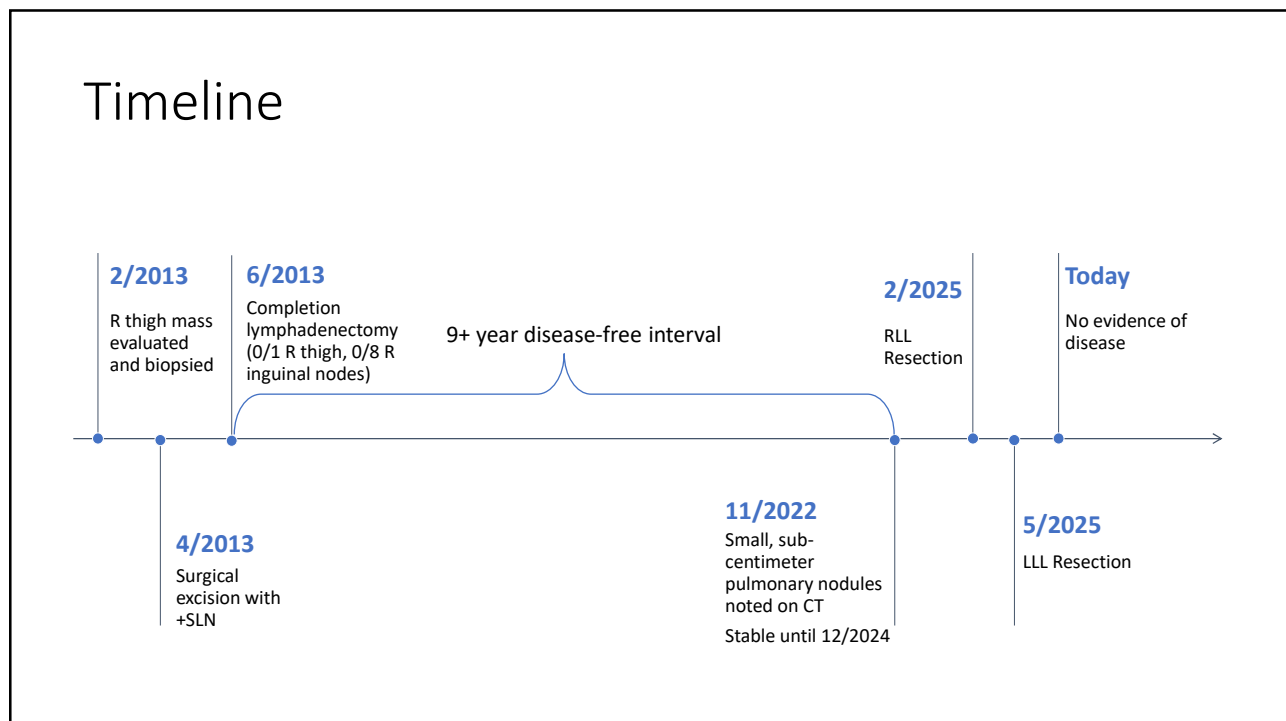
#ASDP25







13



14



**ASDP 62<sup>nd</sup>**  
Annual Meeting



**November 6-9, 2025**  
Hilton Baltimore Inner Harbor **Baltimore, MD, USA**



asdp.org

## Discussion

- NUT adnexal carcinoma was introduced as a new provisional entity in the WHO 5<sup>th</sup> Edition
- These malignant tumors are neoplasms of skin adnexa (hair follicles, sweat glands, etc.) and involve *NUT* gene fusions (ex. *BRD::NUT*, *NSD::NUT*, etc.)
- Distinct entities from extracutaneous *NUT* carcinoma and *NUT*-rearrangement porocarcinoma

#ASDP25

✕ f @ in

15



**ASDP 62<sup>nd</sup>**  
Annual Meeting



**November 6-9, 2025**  
Hilton Baltimore Inner Harbor **Baltimore, MD, USA**



asdp.org

## Primary cutaneous NUT adnexal carcinoma: morphologic, genetic and methylation analysis of seven new cases with comparison to extracutaneous NUT carcinoma and *NUTM1*-rearranged porocarcinoma

[Mélanie Legrand](#)<sup>1</sup>, [Baptiste Louveau](#)<sup>2,3,4</sup>, [Amélie Osio](#)<sup>5,6</sup>, [Anne Tallet](#)<sup>7</sup>, [Eduardo Calonje](#)<sup>8</sup>, [Jean-Yves Scoazec](#)<sup>9</sup>,  
[Arnaud de la Fouchardiere](#)<sup>10,11</sup>, [Franck Tirode](#)<sup>10,11</sup>, [Andreas Von Deimling](#)<sup>12</sup>, [Klaus Busam](#)<sup>13</sup>, [Ahmed Shah](#)<sup>14</sup>,  
[Ashley Flaman](#)<sup>14</sup>, [Fanélie Jouenne](#)<sup>2,3,4</sup>, [Samia Mourah](#)<sup>2,3,4</sup>, [Daniel Pissaloux](#)<sup>15</sup>, [Sylvie Lantuejoul](#)<sup>10</sup>, [Christopher A French](#)<sup>16</sup>,  
[Keisuke Goto](#)<sup>17,18,19,20</sup>, [Bernard Cribier](#)<sup>21,22</sup>, [Carina A Dehner](#)<sup>23</sup>, [Ahmed K Alomari](#)<sup>24</sup>, [Christopher DM Fletcher](#)<sup>25</sup>,  
[John Hanna](#)<sup>25</sup>, [Nicolas Macagno](#)<sup>21,26</sup>, [Maxime Battistella](#)<sup>5,21</sup>, [Thibault Kervarrec](#)<sup>1,21,27,28</sup>

#ASDP25

✕ f @ in

16

| Entity             | Most Common Gene Fusions                                         | Clinical Features                                                                               | Histopathologic Features                                                                                       | Patient Outcomes/Prognosis                                                                              |
|--------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| NUT Adnexal        | BRD4::NUTM1<br>BRD3::NUTM1<br>NSD3::NUTM1                        | Broad age range; primary cutaneous or adnexal sites; rare, may mimic other skin tumors          | Poorly differentiated carcinoma; variable squamous differentiation; strong nuclear NUT IHC positivity          | Aggressive, but may be less aggressive than extracutaneous NUT carcinoma; metastatic potential present  |
| Extracutaneous NUT | BRD4::NUTM1 (70-80%)<br>BRD3::NUTM1 (15-20%)<br>NSD3::NUTM1 (6%) | Adolescents/young adults; midline (thorax, head/neck, mediastinum), but any site possible       | Poorly differentiated/undifferentiated carcinoma; abrupt squamous differentiation; strong nuclear NUT IHC      | Highly aggressive, median OS 6–7 months; poor response to therapy; prognosis worse than cutaneous forms |
| Porocarcinoma      | YAP::NUTM1<br>YAP::MAML2                                         | Elderly adults; cutaneous, often on lower extremities or head/neck; may ulcerate or metastasize | Malignant eccrine neoplasm; ductal differentiation; variable NUT IHC positivity (esp. with YAP1::NUTM1 fusion) | Variable; can metastasize (LN, distant); 5-year survival ~56%; prognosis depends on stage and resection |

17





# Thank you!

## Questions?


#ASDP25

18