**Supplementary Table 1.** Overview of the morphological criteria evaluated to establish consensus based criteria to separate NET G3 from NEC in patients with gastroenteropancreatic neuroendocrine neoplasms

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Architecture low mag** | **Vessel pattern** | **Stroma** | **Co-existing neoplasm** | **Architecture within nests** |
| **WD** | Solid nests/ organoid  Trabeculae/ small cores | Regular network, close to tumour cells | No/ little fibrosis  Hyalinised fibrosis | NET G1-2 | No |
| **PD** | Confluent growth  Infiltrative | Few, random, large | No/ little fibrosis  Prominent desmoplasia | Precursor of- or non-neuroendocrine carcinoma | Yes |
|  | **Palisading** | **Chromatin** | **Ratio N/C** | **Nuclear shape** | **Nuclear variation** |
| **WD** | Yes | Homogenous density | Low | Round/ ovoid | No/ minimal variation |
| **PD** | No | Variable density | High | Fusiform / classic small cell like | Pleomorphism |
|  | **Cytoplasm, amount** | **Necrosis** | **Intuitive gestalt** |  |  |
| **WD** | Abundant | Punctate necrosis | Well- differentiated |  |  |
| **PD** | Scant | Geographic necrosis | Poorly differentiated |  |  |

WD= well differentiated, PD= poorly-differentiated