Prostate Acinar Adenocarcinoma
Gleason Grading

1. Circumscribed nodule of closely packed but separate, uniform, rounded to oval, medium-sized acini
   Should not be diagnosed regardless of the type of specimen, with extremely rare exceptions

2. Fairly circumscribed, yet at the edge of the tumor nodule there may be minimal infiltration
   Glands are more loosely arranged and not quite as uniform as Gleason pattern 1
   Very rarely diagnosed

3. Well-formed glands (with lumina)
   Separate, Non-fused
   Infiltration

4. Ill-defined, poorly formed glands
   Gland fusion
   ALL cribriform glands
   Hypernephromatoid
   Glomerulations (possibly)
   Ductal Adenocarcinoma
   Often Disqualifies from Active Surveillance

5. Essentially no glandular differentiation:
   - solid sheets
   - cords
   - single cells
   Comedocarcinoma with central necrosis
Gleason Scoring

Biopsies:

*Most common + Second most common = Score*

- No tertiary pattern assigned
- In the setting of high-grade cancer one should ignore lower-grade patterns if they occupy less than 5% of the area of the tumor. (e.g., 98% pattern 4 and 2% pattern 3 → 4+4=8)
- High-grade tumor of any quantity, as long as it was identified at low to medium magnification should be included. (e.g., 98% pattern 3 and 2% pattern 4 → 3+4=7)
- On needle biopsies with patterns 3, 4, and 5, both the primary pattern and the highest grade should be recorded. Consequently, tumors with Gleason score 3 + 4 and a tertiary pattern 5 would be recorded as Gleason score 3 + 5 = 8.

Prostatectomies:

*Most common + Second most common = Score, with tertiary pattern if present*

- In the setting of high-grade cancer one should ignore lower-grade patterns if they occupy less than 5% of the area of the tumor.

Grade Groups

<table>
<thead>
<tr>
<th>Grade Group</th>
<th>Gleason Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≤6</td>
</tr>
<tr>
<td>2</td>
<td>3+4=7</td>
</tr>
<tr>
<td>3</td>
<td>4+3=7</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>9-10</td>
</tr>
</tbody>
</table>

Active Surveillance

NCCN Inclusion Criteria:
Absolute (Low risk):
- Gleason Score ≤6
- PSA <10 ng/mL
- Clinical stage <T2a (Tumor involves one-half of one lobe or less)
  Especially if (Very low risk):
- Fewer than 3 prostate biopsy cores positive, all ≤50%
- PSA density <0.15 ng/mL/g

NCCN Progression Criteria: *(initiates transition to curative therapy)*
- Gleason grade 4 or 5 on repeat biopsy
- Prostate cancer found in a greater number of biopsies or greater extent of biopsies