

# DWI

## PI-RADS Assessment – DWI

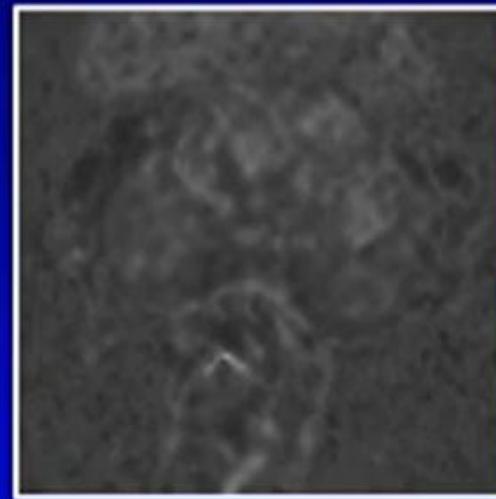
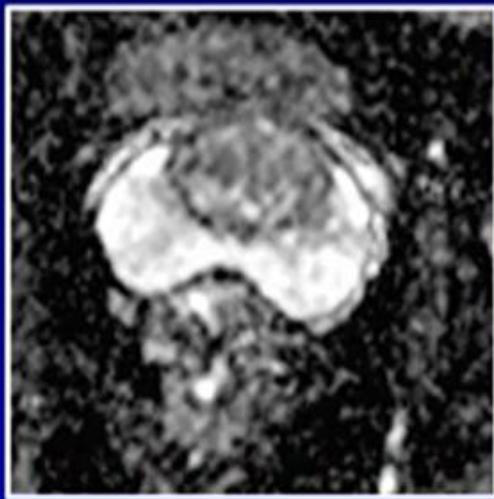
- ADC map from 2 or more b-values
  - Low 0-100s/mm<sup>2</sup>
  - High 800-1000s/mm<sup>2</sup>
- High b-value  $\geq 1400$ s/mm<sup>2</sup>
- ADC threshold of  $750-900\mu\text{m}^2/\text{sec}$  may assist differentiation between benign and malignant prostate tissues

- ADC at 50 and 800 at Hopkins
- Calculate B value at 1400
- Less artifact if calculated vs obtaining it at 1400

# PZ and TZ scored same on DWI

## PI-RADS Assessment – DWI PZ or TZ

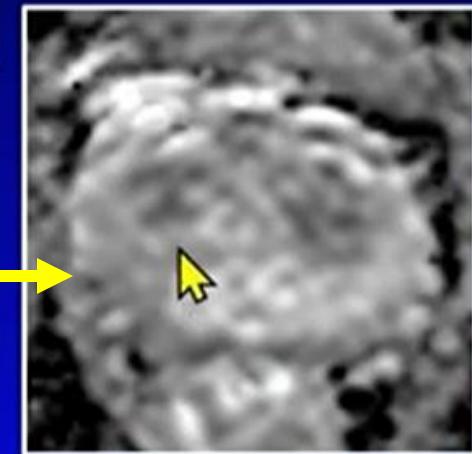
- Score 1:
  - No abnormality on ADC and high b-value DWI



## PI-RADS Assessment – DWI PZ or TZ

- Score 2:

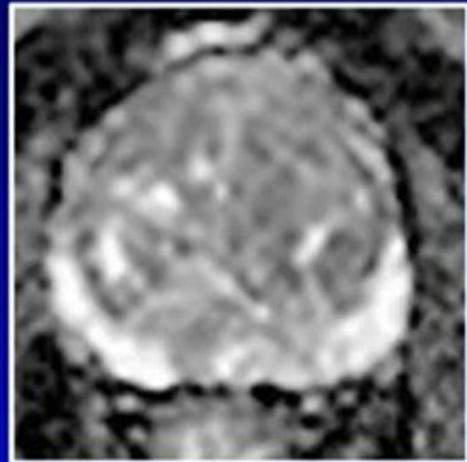
- Linear/wedge shaped hypointensity on ADC
- Linear/wedge shaped hyperintensity on high b-value DWI



## PI-RADS Assessment – DWI PZ or TZ

- Score 3:

- Focal hypointense on ADC
- Focal hyperintense on high b-value DWI
- Markedly hypointense on ADC or markedly hyperintense on high b-value DWI, but not both

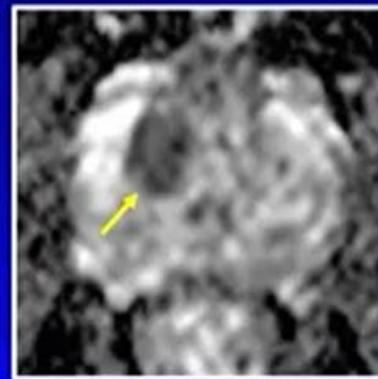
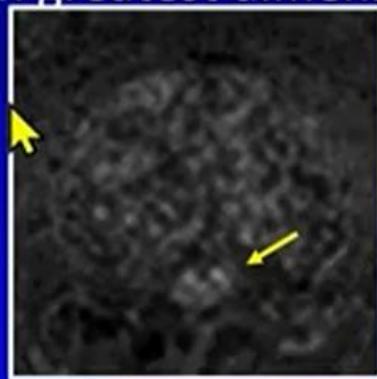


- Blood and Fibrosis: dark on both

# Different Patients

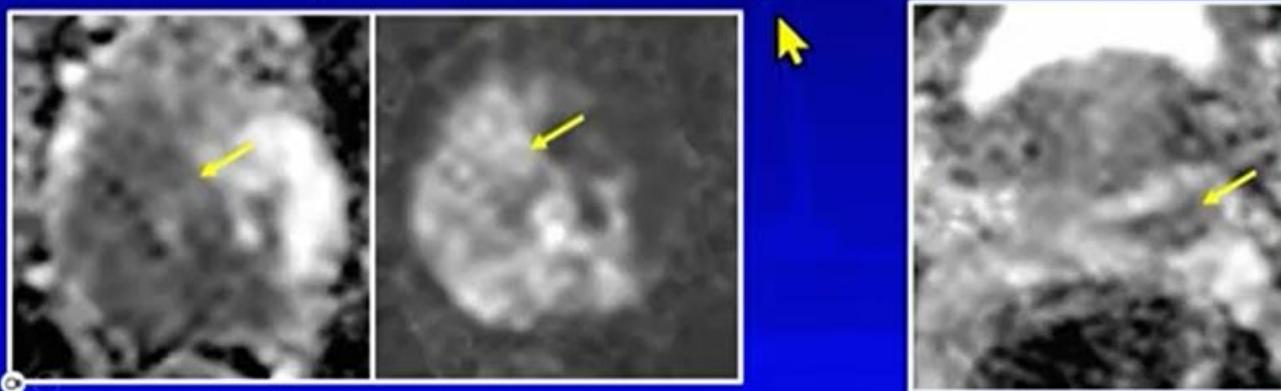
## PI-RADS Assessment – DWI PZ or TZ

- Score 4:
  - Focal markedly hypointense on ADC and markedly hyperintense on high b-value DWI
  - <1.5cm in greatest dimension

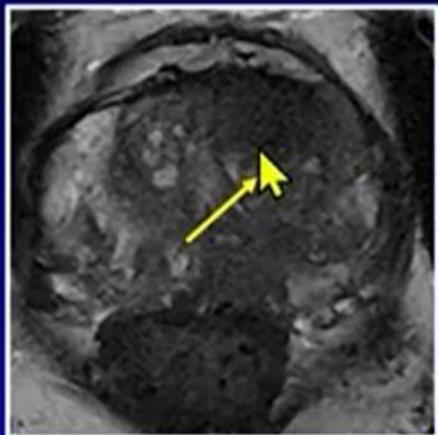


## PI-RADS Assessment – DWI PZ or TZ

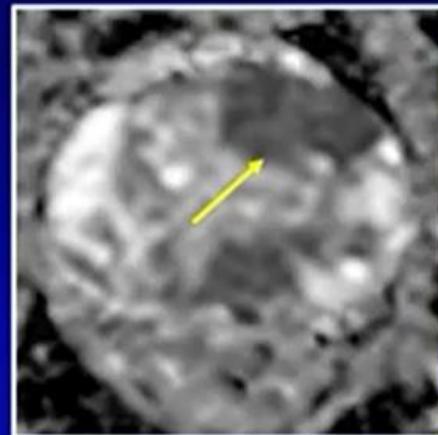
- Score 5:
  - Same as 4
  - $\geq 1.5\text{cm}$  in greatest dimension
  - Definite extraprostatic extension/invasive behavior



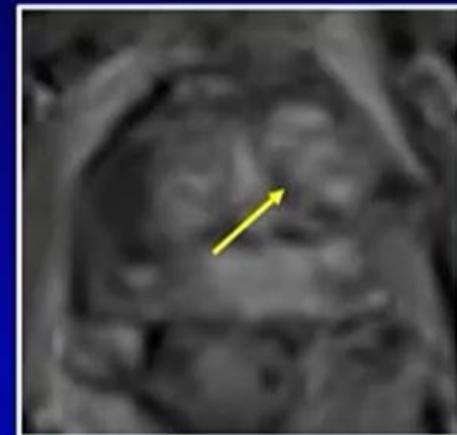
## PI-RADS 5 (TZ)



T2: 5



DWI: 5



DCE: +