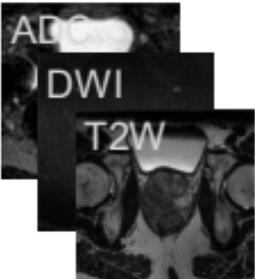


Rationale Dataset (Sec. 3)

mp-MRIs



Radiologist
Rationales



Rationale-Informed Optimization (Sec. 4)

Image
Encoder

f_{img}

Mask
Decoder

f_{mask}

Image-Text
Embedding Space

Text
Encoder

f_{txt}

"Lesion"

Align.

Segmentations (Sec. 5.3)

Lesion

Zone

Gland

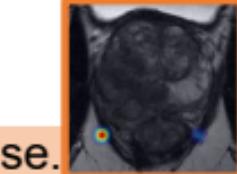
Rationales: Clinical Concepts + Visual Evidence (Sec. 5.4)

Lesion #1

Lesion is in PZ and TZ.

For the TZ lesion,
T2W is the primary modality.

T2W shows non-circumscribed,
homogeneous, moderate hypointense.



T2W score is 5

PI-RADS assessment category is 5.