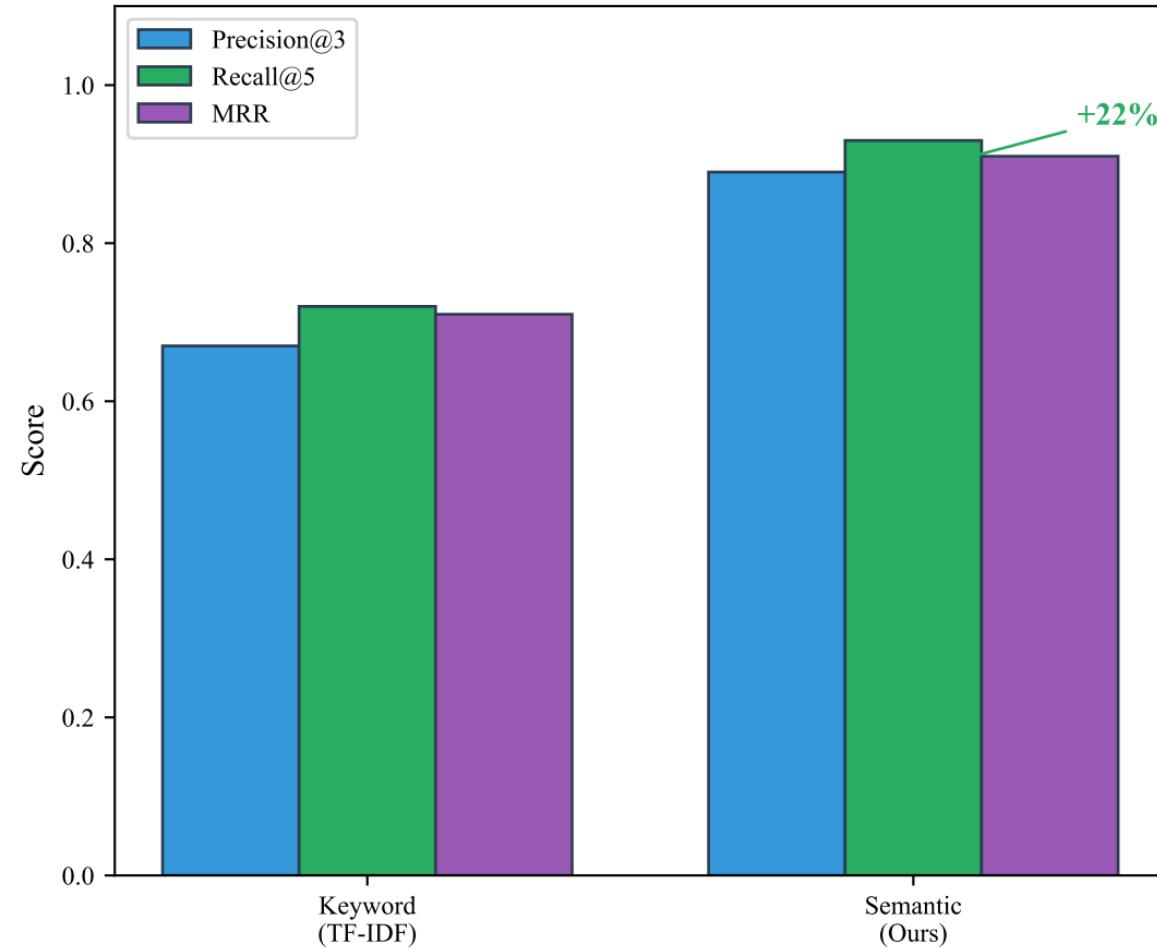


(a) Retrieval Quality Metrics



(b) Example Semantic Matches

Query: "tumor in outer lung"

Keyword: X No match

Semantic: + "peripheral adenocarcinoma" (0.65)

Query: "central airway mass"

Keyword: X Partial match

Semantic: + "squamous hilar location" (0.71)

Query: "hazy opacity on CT"

Keyword: X No match

Semantic: + "ground-glass opacity" (0.46)