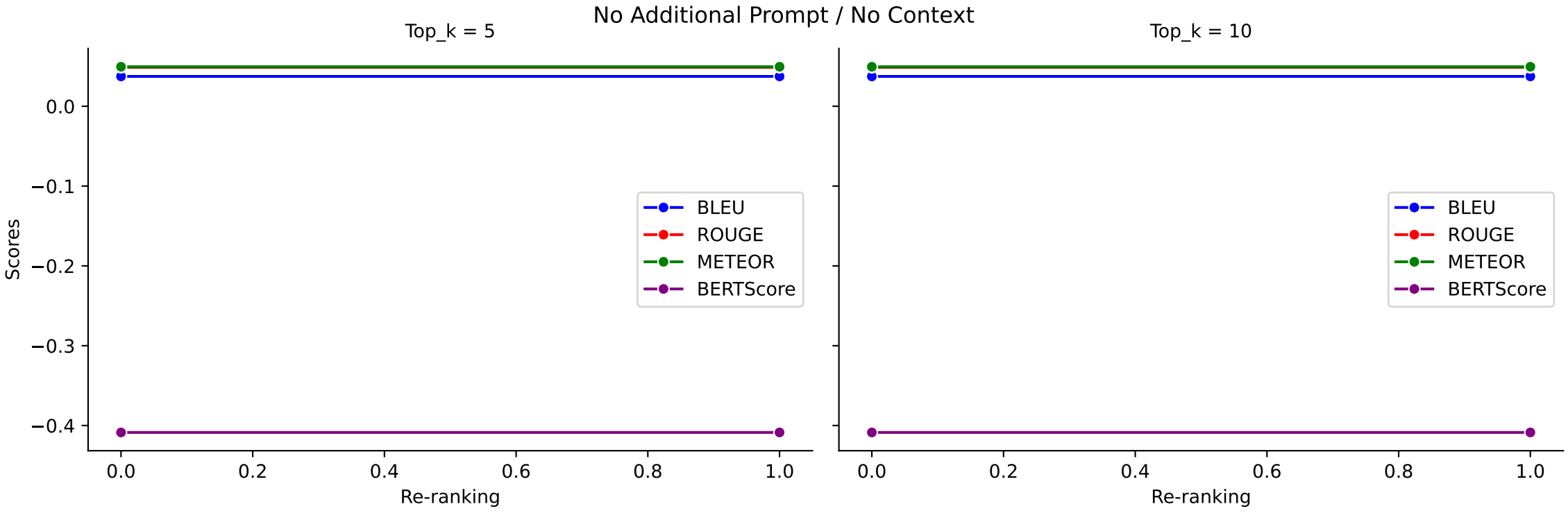
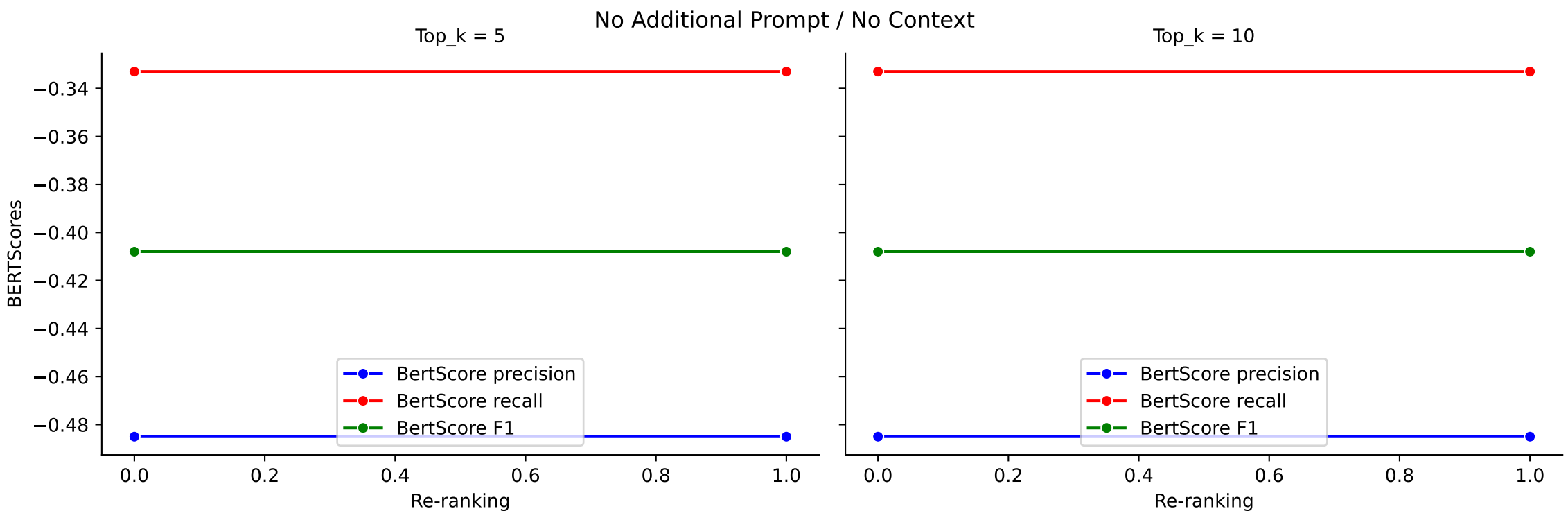
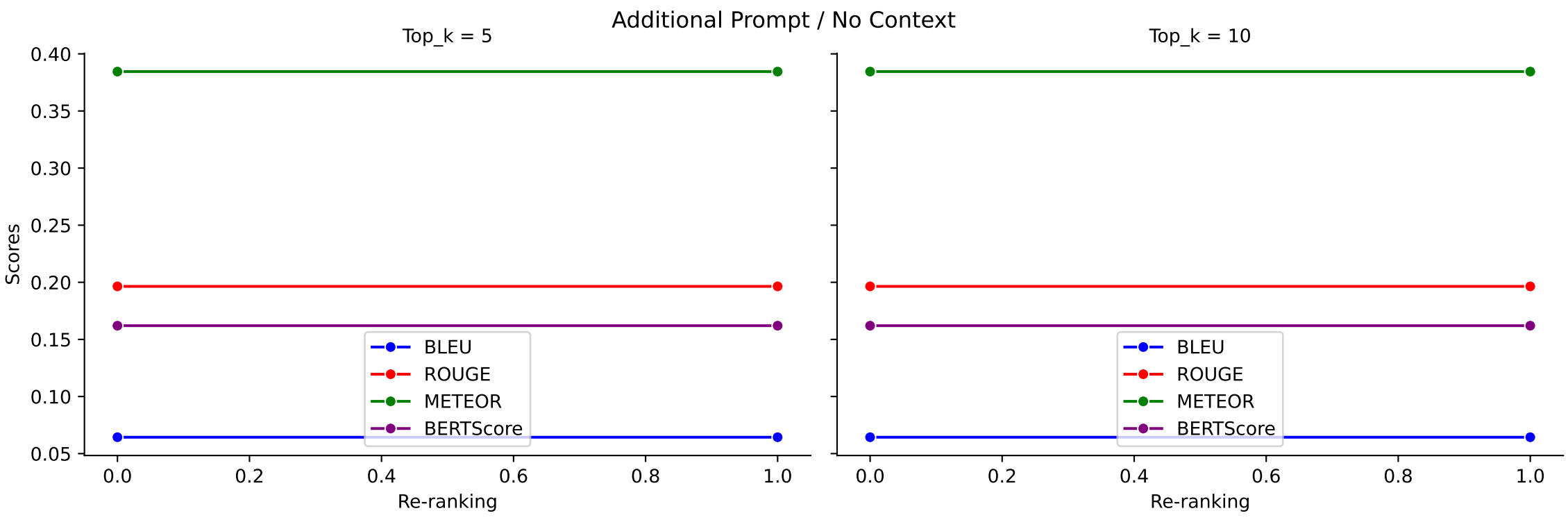
Constant Parameters:

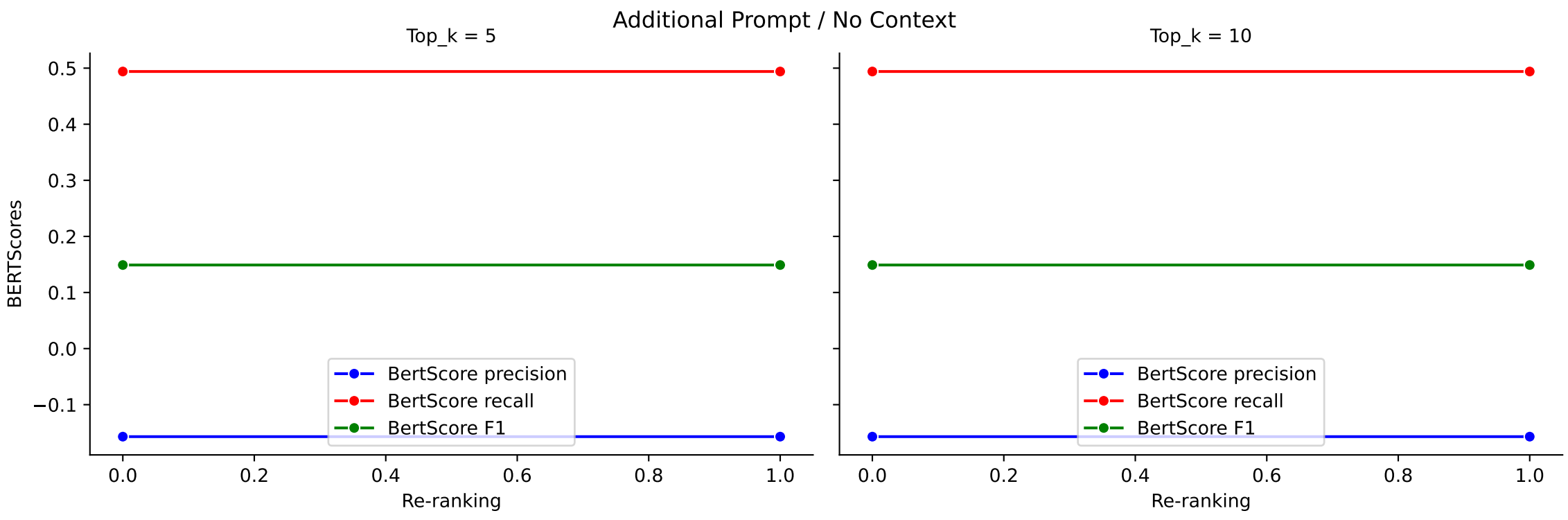
embedding model: BAAI/bge-small-en-v1.5
llm: TheBloke/Mistral-7B-Instruct-v0.2-GPTQ
splitting method: From scratch with Faiss vector store and SYNTACTIC splitter
chunk size: 256
overlap: 25
max new tokens: 100
top_n: 4

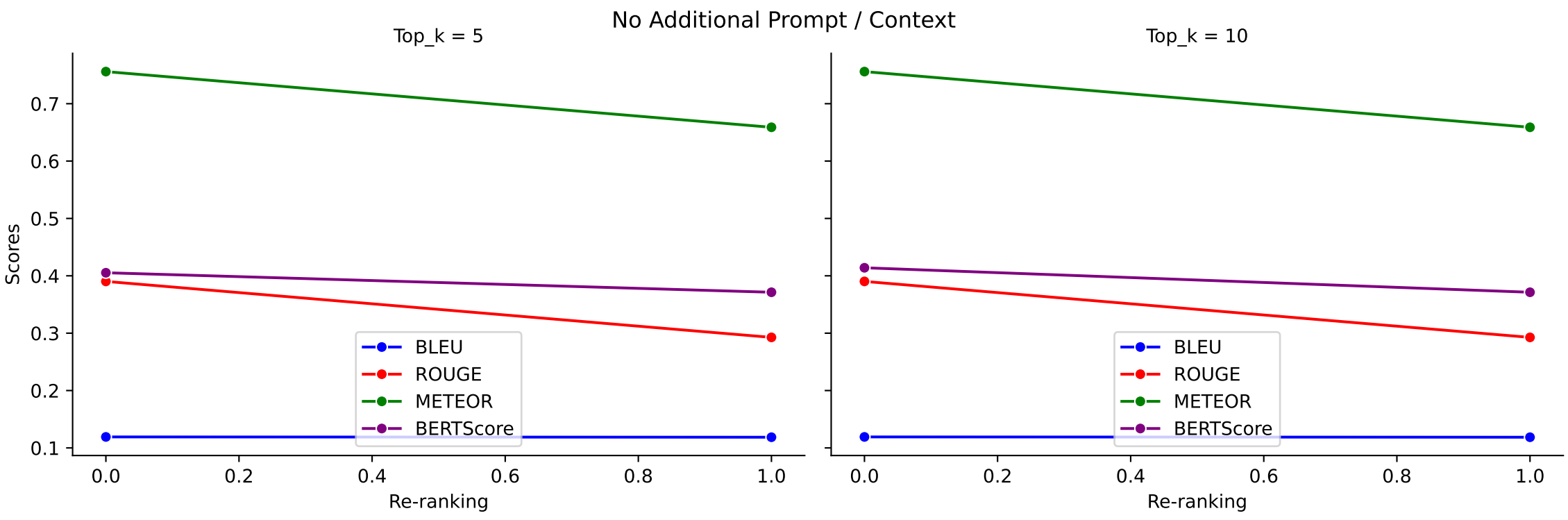
Query: What is the recommended targeted therapy for patients with BSI and severe infection due to 3GCephRE?

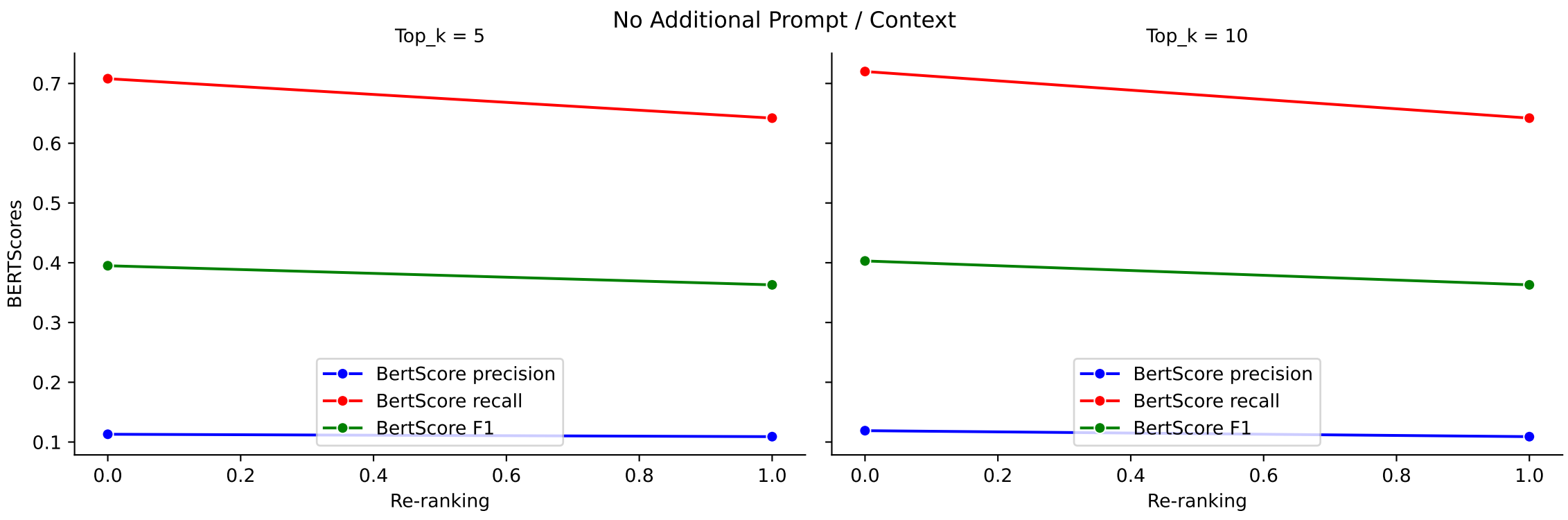

No Additional Prompt / No Context
Top_k = 5
Top_k = 10
Scores
0.0
−0.1
−0.2
−0.3
−0.4
0.0
0.2
0.4
0.6
0.8
1.0
Re-ranking
BLEU
ROUGE
METEOR
BERTScore

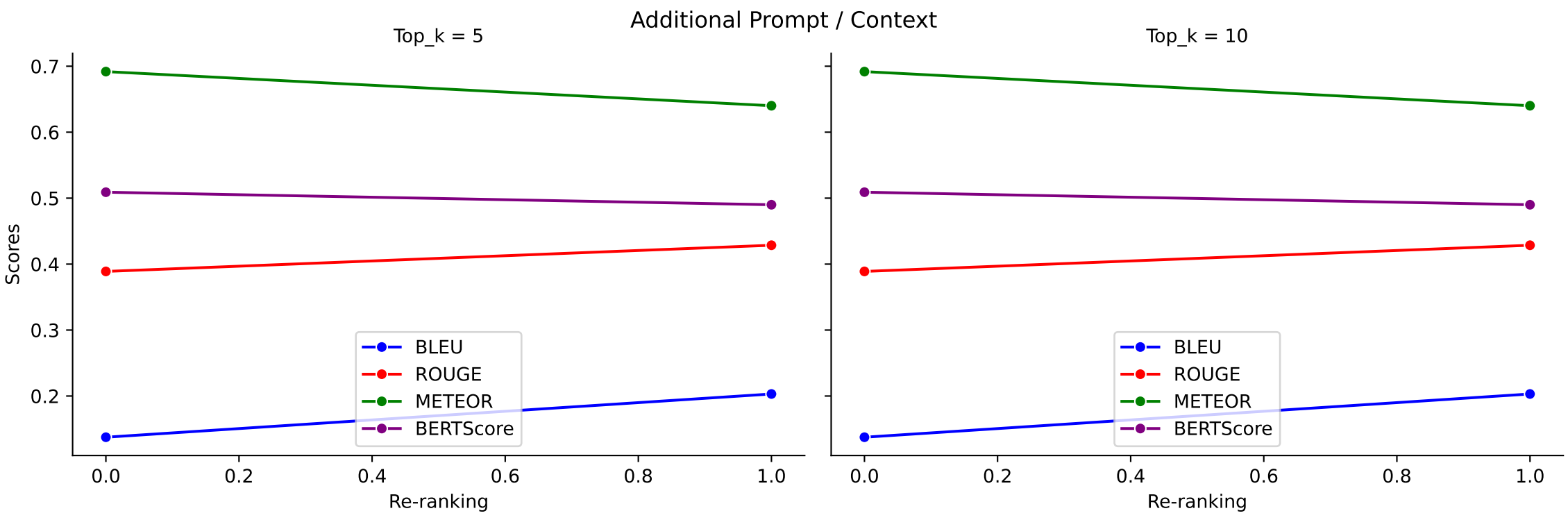

No Additional Prompt / No Context
Top_k = 5
Top_k = 10
BERTScores
−0.34
−0.36
−0.38
−0.40
−0.42
−0.44
−0.46
−0.48
0.0
0.2
0.4
0.6
0.8
1.0
Re-ranking
BertScore precision
BertScore recall
BertScore F1

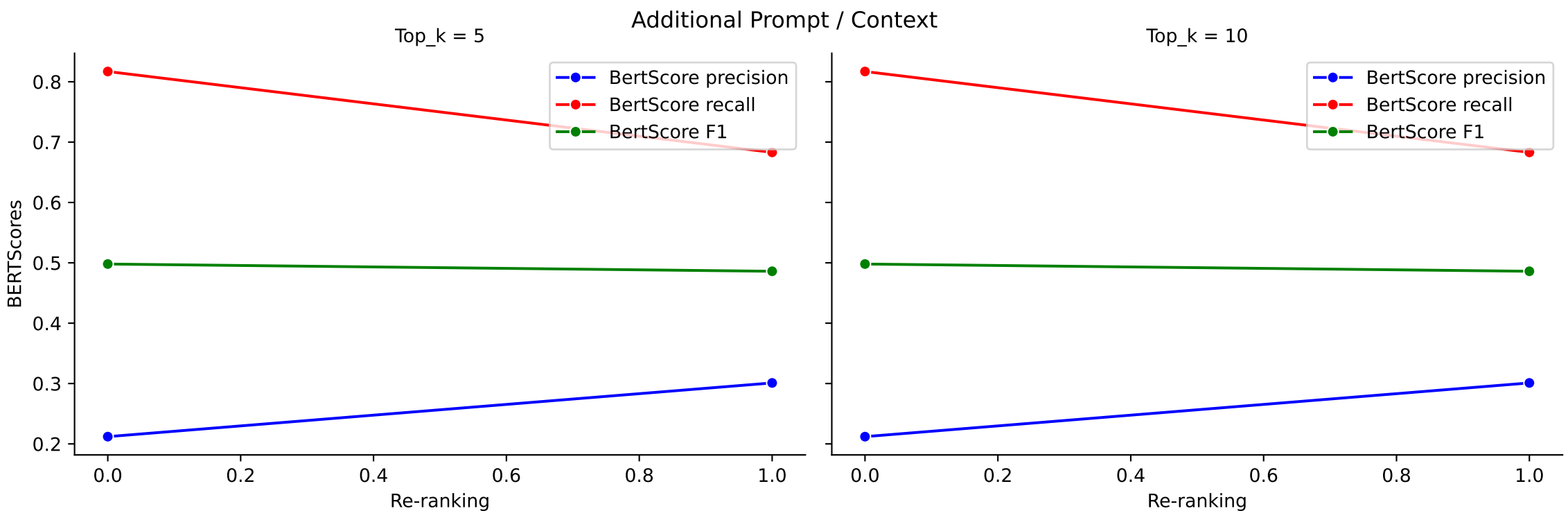

Additional Prompt / No Context
Top_k = 5
Top_k = 10
Scores
Re-ranking
Re-ranking
BLEU
ROUGE
METEOR
BERTScore
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.0
0.2
0.4
0.6
0.8
1.0


Additional Prompt / No Context
Top_k = 5
Top_k = 10
BERTScores
0.5
0.4
0.3
0.2
0.1
0.0
−0.1
0.0
0.2
0.4
0.6
0.8
1.0
Re-ranking
BertScore precision
BertScore recall
BertScore F1


No Additional Prompt / Context
Top_k = 5
Top_k = 10
Scores
Re-ranking
Re-ranking
BLEU
ROUGE
METEOR
BERTScore
BLEU
ROUGE
METEOR
BERTScore
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.0
0.2
0.4
0.6
0.8
1.0
0.0
0.2
0.4
0.6
0.8
1.0


No Additional Prompt / Context
Top_k = 5
Top_k = 10
BERTScores
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.2
0.4
0.6
0.8
1.0
Re-ranking
BertScore precision
BertScore recall
BertScore F1


Additional Prompt / Context
Top_k = 5
Top_k = 10
Scores
0.7
0.6
0.5
0.4
0.3
0.2
0.0
0.2
0.4
0.6
0.8
1.0
Re-ranking
BLEU
ROUGE
METEOR
BERTScore


Additional Prompt / Context
Top_k = 5
Top_k = 10
BertScore precision
BertScore recall
BertScore F1
BERTScores
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.0
0.2
0.4
0.6
0.8
1.0
Re-ranking