

Alshak et al. Optimizing ChatGPT: Applying prompt engineering to frequently asked questions in urologic oncology

Supplementary Table 1. List of frequently asked questions asked to ChatGPT4o in prostate, bladder, and kidney cancer
Prostate cancer
What is prostate cancer?
How do I know if I have prostate cancer? What are common symptoms?
How do you diagnose prostate cancer?
How do you do a prostate biopsy? What is the difference between transrectal and transperineal?
How is prostate cancer graded and staged?
How do you treat prostate cancer?
What are the risks and benefits between active surveillance, prostatectomy, and radiation therapy?
What is focal therapy for prostate cancer?
What are the benefits, risks and side effects of focal therapy?
What are the chances that my cancer will return after treatment - and if it does, what options for treatment do I have then?
How would I manage potential urinary dysfunction and for how long?
How would I manage potential erectile dysfunction and for how long?
What is hormonal therapy or androgen deprivation therapy (ADT) for prostate cancer?
What are the benefits, risks and side effects of hormone therapy?
What lifestyle changes can I make to help reduce my chance of prostate cancer?
Bladder cancer
What is bladder cancer?
How do I know I have bladder cancer? What are common symptoms?
How do you diagnose bladder cancer?
What is a cystoscopy?
How is bladder cancer graded and staged?
What is non-muscle invasive bladder cancer versus muscle invasive?
How do you treat bladder cancer?
What is a transurethral resection of bladder tumor (TURBT)?
What is intravesical therapy?
What is BCG and why is it used to treat bladder cancer?
What is a partial cystectomy?

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What is a radical cystectomy?
How do I pee after my bladder is surgically removed?
How will my sexual function change after having my bladder removed?
What is the difference between an ileal conduit or a neobladder? Which one is best for me?
Kidney cancer
What is kidney cancer?
What is a kidney mass? Is it always cancer?
What causes kidney cancer?
How do I know I have kidney cancer? What are common symptoms?
How do you diagnose kidney cancer?
How is kidney cancer graded and staged?
How do you treat kidney cancer?
What is active surveillance for kidney cancer?
What is ablation for kidney cancer?
What is a partial nephrectomy?
What is a radical nephrectomy?
What is recovery like after surgery for kidney cancer? What do I need to watch out for?
What is the difference between a robotic nephrectomy versus an open nephrectomy? What one should I get?
What lifestyle changes can I make to help reduce my chance of kidney cancer?
What is the chance that my kidney cancer will come back after I have treated it?

Supplementary Table 2. Major misinformation encountered in AI-generated responses
Incorrectly stating that a transperineal prostate biopsy requires a surgical incision, while implying that a transrectal biopsy does not
Recommending specific vitamins or nutrients as effective strategies to reduce cancer risk without supporting evidence
Describing “targeted therapy” as a treatment option for localized kidney cancer, without appropriate surgical context
Failing to distinguish between transurethral resection of bladder tumor (TURBT) and radical cystectomy when stating that surgery can treat bladder cancer
Omitting or incorrect discussion of important postoperative considerations for urinary diversion - including the potential need for clean intermittent catheterization after neobladder creation, increased risk of genitourinary infections, and need to change the conduit bag when full instead of emptying the contents