

# Multi-hop Reasoning



## Multi-hop Query Example

Q: "Treatment for pneumonia in diabetic patients?"

1

Hop 1

Search: "pneumonia treatment"  
→ **Antibiotics: Amoxicillin, Azithromycin**



2

Hop 2

Search: "diabetes drug interactions"  
→ **Fluoroquinolones affect glucose**



3

Hop 3

Search: "safe antibiotics diabetes"

Synthesis →



## Evidence-Based Answer

**Amoxicillin** is recommended for diabetic patients with pneumonia. **Avoid fluoroquinolones** due to glucose control interference. Monitor blood sugar during treatment.