

How is chemotherapy prepared in the pharmacy



Pharmacy@NCIS prepares chemotherapy orders for all outpatient and inpatient, adult and paediatric patients with cancer. It is also responsible for cytotoxic drug orders for patients in the NUH with non-cancer diagnoses.

How long does it take?

Steps 1-7 take about 1 hour per chemotherapy drug. If there is more than 1 drug involved, the preparation time will increase. This timeline is an estimate and does not include the additional time needed to attend to queries on the chemotherapy orders. Ultimately, your safety is of utmost importance and should never be compromised.

1



Order transcription

Drug order is received and transcribed into the pharmacy system.

2



Review of orders by two pharmacists

The drug order is reviewed by two pharmacists to ensure that the medications prescribed are the right dose, for the right indication and are devoid of any harmful interactions. This is a critical safety step.

3



Billing

Drug order charges are billed in the system.

4



Preparing pre-medications

Pre-medications (eg. drugs for nausea and allergy prevention) are identified, labeled and packed before they are sent to the infusion bay.

5



Identifying the right drug for preparation

Cytotoxic drugs are packed and sent to the clean room to be prepared. The pharmacists need to pick out the right chemotherapy drug and fluids (diluent) from their stock. There are more than 100 chemotherapy drugs to select from.

6



Chemotherapy preparation

Drugs are prepared in the cleanroom, which is a sterile environment, necessary for cytotoxic drugs which are hazardous.

Preparation of chemotherapy involves calculating and then diluting the chemotherapy in its diluent to ensure that the right dose is made. We have more than 400 types of chemotherapy regimens that can be prepared.

7



Quality checks

Quality checks are performed on the drugs and the ambulatory devices before they are sent to the patient at the chemotherapy centre.