Understanding your Chemotherapy and the Pharmacy Process
Introduction

Have you ever wondered where your chemotherapy comes from, or why it seems to be such a long process when you go in for your treatment? This information may help you understand what is involved in preparing the chemotherapy you receive by an injection into your veins.

When it’s time for your treatment to begin, a prescription is given to the pharmacist who will prepare your chemotherapy according to your personal prescription. What happens after the pharmacy receives your prescription will generally be as follows.

1. A specially trained pharmacist checks your prescription to make sure that the treatment is suitable, and all the doses are correct for you. The pharmacist may need to look at the results of your blood tests, or other tests the doctor has ordered. They may also want to talk to you, or the doctor, about other medications you are taking, or about any allergies you may have to medications.

2. Once the pharmacist is satisfied your prescription is correct, your chemotherapy can be prepared in a sterile production pharmacy. Some sites may send an order for your chemotherapy to be prepared by a special external manufacturing facility.

3. The pharmacist or technician in the sterile production pharmacy will produce a record sheet showing details of the drugs to be made, which gives instructions for their preparation.

4. Records must be kept of all of the ‘ingredients’ used to make your chemotherapy. The medication vials and equipment are then sprayed with sterile alcohol before being passed into a sterile ‘clean room’ through a special hatch.

5. Chemotherapy is prepared in a special cabinet inside the sterile ‘clean room’. The person preparing the chemotherapy must wear special, clean protective clothing. This helps to ensure the chemotherapy you receive is not contaminated. It takes about 5-10 minutes to dress up in these special clothes and another 5-10 minutes to make sure the cabinet is cleaned and ready before making the first chemotherapy dose for the day.

6. The time taken to prepare some chemotherapy doses varies from 5 minutes to 45 minutes. After your chemotherapy is prepared, the finished product is labelled and packaged in plastic. It is rechecked by the pharmacist before being delivered to where your treatment is to be given. If your chemotherapy is ordered from a special manufacturing facility, the prepared chemotherapy then has to be delivered to where you are having your treatment.

7. Your treatment can begin as soon as your chemotherapy has been delivered and rechecked by your nurse.
Why do some treatments take longer to prepare?

- If this is your first treatment, the pharmacist needs to thoroughly check your treatment plan, dose and blood test results. It may also be necessary to confirm some information with the doctor, talk to you about other medications you may be taking and explain how to take any additional medications at home.

- It takes some time to clean and prepare the special room and cabinet at the beginning of the day and this may cause delays for you if your chemotherapy is among the first items to be prepared.

- If you are participating in a clinical trial or research study, there may be some extra paperwork or processes to be completed before preparation can begin.

- Sterile production pharmacies require regular cleaning and maintenance, some of which may delay the production of chemotherapy from time to time. However, this is an important part of our quality assurance program.

- All staff who make and supply chemotherapy are specially trained in checking your prescription and making up the chemotherapy. Occasionally, if a new trainee is working, extra time and supervision is required.

Can we make your chemotherapy in advance of your appointment?

Some treatments can be made in advance. This may depend on the medication cost, the type of treatment and the pharmacy’s workload.

It may be possible to prepare treatment in advance to be ready upon your arrival. This may be possible for medications scheduled at regular intervals that:

- can be stored for the necessary time without going out of date
- could be used for another patient if you are unwell and cannot have your scheduled treatment.

Many medications cannot be prepared before the doctor confirms you will be having your treatment that day. Occasionally your dose will have changed after you see the doctor and your chemotherapy may have to be re-made even if it has been made in advance.

Why all the precautions?

Chemotherapy can suppress your ability to fight infection. To prevent you developing a serious infection, it is important that products injected into your veins are sterile and clean. Great care is taken to make sure your chemotherapy is prepared using sterile ingredients and to ensure it does not become contaminated by allowing particles or bacteria to be introduced. The person making your chemotherapy must wear a coverall made of a special waterproof fabric, protective overshoes, a cap, mask and two layers of chemotherapy gloves.

Acknowledgements

Adapted from the Society of Hospital Pharmacists of Australia (SHPA) publication: “Finding Chemo: Out of Sight But Not Out of Mind”.

A specially trained pharmacist checks your prescription to make sure the treatment is suitable and all doses are correct for you.

All staff who make and supply chemotherapy are specially trained.
Icon Cancer Care locations

Adelaide
First Floor, Tennyson Centre
520 South Road
Kurralta Park SA 5037
P 08 8292 2333 | F 08 8292 2287

South Brisbane
Level 5, Mater Medical Centre
293 Vulture Street
South Brisbane QLD 4101
P 07 3737 4500 | F 07 3737 4701

Townsville
9–13 Bayswater Road
Hyde Park QLD 4812
P 07 4795 7100 | F 07 4795 7101

Chermside
Level 1, Chermside Medical Complex
956 Gympie Road, Chermside QLD 4032
P 07 3737 4500 | F 07 3737 4801

Southport
Level 9, Premion Place, 39 White Street
(Corner Queen and High Streets)
Southport QLD 4215
P 07 5657 6400 | F 07 5657 6401

Wesley
Level 1, Wesley Medical Centre
40 Chasely Street
Auchenflower QLD 4066
P 07 3737 4500 | F 07 3737 4601

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