How do I know that my medicine won’t harm me?

No one can predict with certainty whether or not you will experience adverse reactions from a medication. The general rule is that when you take a medication, there is always a risk of adverse effects. Most cancer chemotherapies represent an exception to this rule, since all patients unfortunately develop various degrees of harmful effects. This is because they are given the highest tolerable dose with the hope of killing the maximum number of cancer cells.
How do I reduce my risk of experiencing adverse events?
A well-informed patient is always better off. If you are aware of potential adverse reactions, it is easier to detect them and cope with them. Although one would expect doctors to alert their patients about such reactions, this is not always the case. It is, therefore, always a good idea to read the package insert (see Chapter 35) and the Medication Guide if one is available. The package insert lists all known adverse reactions, as well as the frequency with which they have occurred. If the frequency is high, say one in 10, patients shouldn’t be surprised if they develop that particular reaction. You can expect more adverse reactions if you are prescribed a high dose. Early detection is one way of reducing the consequences of an adverse effect. In consultation with your doctor, this could lead to a dose reduction, or switching to an alternative medication. Another valuable source of information is your local pharmacist, who is trained to advise you about expected adverse effects, as well as to alert you about any possible drug interactions.

Why don’t patients always recognize adverse reactions?
There are at least three reasons why you may not recognize adverse reactions. First, the initial dose of a medication does not often cause any symptoms of an adverse reaction. It may take weeks or months for symptoms to develop, and when they do, their onset may be gradual. Heart medications containing digoxin (Lanoxin) may cause nausea and may alter color vision after weeks of treatment. Unless your doctor or pharmacist had alerted you to this risk or you read about it in the package insert, failure to attribute these symptoms to the medication would be easy. In addition, if the symptoms are mild, patients tend to unconsciously adjust to them.

Second, it may be difficult for a patient to link a symptom to their treatment. This is the likely explanation for the years it took before dry cough was recognized as an adverse effect of medications called ACE inhibitors, in spite of the fact that it was very common (10 percent to 15 percent of users).

Third, the adverse effects you may experience could be similar to the symptoms caused by your medical condition. Medications prescribed for irregular heart rhythms may themselves cause rhythmic disturbances. Similarly, psychiatric medications may cause symptoms similar to a patient’s existing psychiatric condition.

Can I always detect adverse effects?
No. Many adverse effects do not cause detectable symptoms and require special tests in your doctor’s office, such as tests for liver and kidney function. Medication-induced damage to these organs, if undetected over an extended period, can be very serious to your health. Therefore, it is very important that
regular monitoring of these functions takes place to detect problems early while they still may be reversible. Unfortunately, regular monitoring of potential adverse effects is often neglected in clinical practice.

Troglitazone (Rezulin), a treatment for type 2 diabetes, was found to cause liver damage. The package insert was changed to recommend liver function tests of patients prior to initiation of treatment, and then every month afterward. A later survey showed that only 45 percent had a test before treatment was started, and less than 5 percent of continuous users had the recommended liver function test after three months of treatment.

**Key messages**

✔️ It is difficult to predict who will suffer adverse reactions.
✔️ An informed patient is more likely to detect adverse reactions early.
✔️ Late and gradual onset of adverse effects complicates their detection.
✔️ Special tests or procedures may be needed for detection of adverse effects on vital organs.