

active form, morphine," he says.

According to the specialist, about half-a-dozen genes have been identified that appear to be responsible for the metabolism of the vast majority of prescription and over-the-counter drugs. Variations within these genes lead to adverse reactions to medication.

"An adverse reaction to as much as 20% of common prescription drugs is not uncommon, especially if they are used in combination with other medicines," he says.

But while rapid advances in medical science have made a wide range of tests available, all initiated via a simple blood test, Gericke says genetic tests are still under-utilised due to a lack of knowledge about their availability on the part of both medical professionals and the public.

Gericke adds that although the field is in its infancy in some respects, especially with regard to testing for the genetic component of complex disorders like schizophrenia or autism, significant advances in genetic medicine are expected to occur during the next five years.

He says the role of genetic testing extends well beyond the prescription of gene-appropriate drugs.

"Genetic testing can provide far more accurate information on a disease and the patient's prognosis than physical or clinical tests", such as whether a cancer patient really is in remission.

■ [jillg@star.co.za](mailto:jillg@star.co.za)