

TESTING TREATMENTS

Chapter 12, 12.3.5

TESTING TREATMENTS MAKES FOR BETTER HEALTHCARE?

with that of the people in the studies. In general, patients with more severe illness have more to gain from treatment. So if severity is equal to or greater than those in studies that showed a treatment to be beneficial, we can generally be confident about the applicability of the evidence. If their illness is less severe (or if still well, they are at relatively low predicted risk) the key issue is whether a smaller benefit than that seen in the studies might still be considered worthwhile.

Question 5: Won't genetic testing – and 'personalized medicine' – mean doctors can work out the specific treatment needed in every individual and make all this unnecessary?

Although the idea of being able to work out the specific treatment needed in every individual is undoubtedly attractive, and may be possible for a few conditions, it seems very unlikely that this approach will become the main way of treating people. As we explained when discussing genetic tests in Chapter 4 (p43-44) most diseases depend not only on complex interactions involving several genes, but also on the even more complex interactions between genes and environmental factors.

The results of genetic analyses have been important in informing decisions in families and individuals with inherited disorders, such as Huntington's disease, thalassaemias (inherited blood disorders), and some other (mostly rare) diseases. This genetic information has been a great boon in counselling families with these conditions. However, as far as the more common diseases to which we are all subject are concerned, genetic analysis adds little to information already available from family history and clinical examination. Although this situation is likely to change, our limited current knowledge means that we need to be careful not to overinterpret risks for common diseases predicted on the basis of genetic analysis.

We should declare that none of the authors have had their genetic profiles done, nor are we reconsidering doing so. So it shouldn't surprise you that we would generally advise against genetic testing unless someone has (i) a family history that suggests a specific known genetic disorder, or (ii) one of the few currently known conditions in which a gene or genes clearly predicts who will respond to a treatment.