

CCBIO Opinion

Text: John Cairns, Ole F. Norheim & Roger Strand



Precision Fairness?

The concept of precision medicine emerged on US health policy agendas in the early 2010s and has since gained increasing prominence on both sides of the Atlantic, in part replacing the similar concept of personalised medicine. In the more optimistic imaginations of precision cancer care, every patient will receive uniquely tailored treatment on the basis of perfectly sensitive and specific biomarkers, thereby maximising clinical benefit and minimising the risk of adverse effects. Sometimes, even the old imaginaries of “the cure for cancer” and “winning the war on cancer” are invoked.

The reality of cancer, however, is also a matter of the success of hygiene, welfare and modern medicine: As fewer (affluent) people die from infectious diseases or malnutrition, more of us reach old age and get the opportunity to develop cancer. While modern medicine may reach the stage of curing some cancers sometimes, we should expect to also uphold the rest of the Hippocratic maxim: Relieving often and comforting always.

Life is not fair. Life simply *is*. Fairness, on the other hand, is a property of human decisions, practices and institutions. The Scandinavian welfare state emphasizes the value of fairness and distributive justice and is, at least in theory, less prone to accept inequalities in health as a fact of life or a matter of bad luck. May biomarkers help to identify those patients we can help the most and who need it more?

On a general level and in a short-term perspective, they might not. Many biomarkers relate to the health problems of the rich and rely on technically sophisticated healthcare systems to be of clinical relevance. In the long run, however, there is room for optimistic imagination. While the introduction of new medical technologies in general tends to increase healthcare costs, biomarkers could become the exception if they lead to less ineffective treatment. More fundamentally, biomarkers challenge the business models of the pharmaceutical industry and the political economy of a sector characterized by high profit margins, especially if innovative use

of biomarkers can revive the interest in older drugs that are off patent. Still, biomarkers, as they are conceived so far, are limited to biological information. They indicate what will happen to the patient if she or he is given (or not given) a particular treatment. The fairness of the healthcare system is supposed to be ensured by general guidelines. In the many public controversies over expensive cancer drugs, however, other unique features of patients are emphasized than their conventional biomarker profile. Media and citizens suggest, for example, that it may be unfair to treat a 40-year single parent of small children in the same (restrictive) way as an elderly person without similar responsibilities. In the era of precision medicine, could we imagine a similar development towards precision fairness, in which many more specific features of also the *needs*, e.g. the *severity of disease of a particular individual*, are taken into account? Would precision fairness secure the accountability, transparency and predictability of decisions, and would it indeed change our notion of what is fair? ••