



## **Peer review**

The Physician Vol. 6 No. 3 (2021) Kumar, D. The Genomic and Precision Medicine in Clinical Practice: Current perspectives and future directions. Published 2020-10-02 <a href="https://doi.org/10.38192/1.6.3.1">https://doi.org/10.38192/1.6.3.1</a>

## Dipender Gill, Clinical Pharmacology, St George's University Hospital, London, UK Submitted 29.09.2020

## https://doi.org/10.38192/1.6.3.1.pr1

This article offers a comprehensive overview of how genomic and precision medicine may be integrated into routine healthcare for the benefit of patient care and system efficiency. The work takes a high level overview, while also offering supporting examples that add substance to the arguments.

I have the following suggestions to help improve the work:

1. The article is currently rather long, and it may prove difficult to maintain the attention of the reader. I would suggest shortening the manuscript by removing duplication and areas of vagueness. Instead, priority should be given to statements that can be made more definitively with available supporting data that are cited.

2. The article currently offers an introductory overview to the general physician who may have no particular expertise in genomics. With this in mind, while I belive that it is useful to stress the advantages and potential benefits of the strategies that are discussed, I believe that more care could be taken to avoid over-stating the promises. Their are many critics of what genomic medicine has promised as compared to what it has delivered. Such limitations of genomic medicine should also be discussed, including areas where it has so far fallen short.

3. I think that more attention could be given to specific examples. Currently the vast majority of these are within the remit of cancer and particular adverse drug reactions. Are there existing examples that have proven generalisable and have indeed revolutionised patient care? Further, personalised medicine has existed for some time (otherwise we would call all medicine public health), so it is not strictly true to claim that personalised medicine is only a result of advances in genetics. An example of this is the QRISK score used to predict cardiovascular risk.

4. Currently, no mention is given to Mendelian randomization analyses, and genetic risk scores are mostly mentioned in passing. I think that more attention should be paid to these evolving fields.

Google cross ref

Conflict of Interest



