Guidelines for the Blood Transfusion Services

15.1: Introduction

http://www.transfusionguidelines.org/red-book/chapter-15-molecular-typing-for-red-cell-antigens/15-1-introduction

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Genes for all of the blood group systems have been isolated and the molecular bases for most of the clinically important blood group antigens are known. So it is now possible to predict, with a high level of accuracy, most blood group phenotypes from genomic DNA.

This technology is generally applied when:

- we need to know a blood group phenotype, but do not have a suitable red cell sample
- molecular testing will provide more or better information than serological testing
- molecular testing is more efficient or more cost-effective than serological testing.