

MNS Questions:

1. What is the most common MNS phenotype?
2. Which antigens are on glycoporphin A and which are on glycoporphin B?
3. The MNS system show's dosage. What does this mean?
4. What happens to the M and N antigens on RBCs when they are treated with enzymes?
5. What happens to the S and s antigens on RBCs when they are treated with enzymes?
6. Approximately what percentage of individuals are negative for the M antigen? N antigen?
7. Are anti-M and anti-N immune or naturally occurring antibodies?
8. Are anti-M and anti-N most commonly IgG or IgM antibodies?
9. At which temperature do anti-M and anti-N react best?
10. Do anti-M and anti-N bind complement?
11. Does anti-M or anti-N commonly cause transfusion reactions or HDFN?
12. When it is said that anti-M can be pH dependent, what does this mean?
13. What does it mean for the anti-M antibody to be glucose dependent?
14. Why is anti-N less commonly seen than anti-M?

15. Which phenotype will make the most potent anti-N?
16. What happens to renal patients dialyzed on equipment that was sterilized with formaldehyde?
17. Approximately what percentage of individuals are negative for the S antigen? s antigen?
18. Are anti-S and anti-s immune or naturally occurring antibodies?
19. Are anti-S and anti-s usually IgM or IgG antibodies?
20. At what temperature do anti-S and anti-s react best?
21. Are anti-S and anti-s capable of causing transfusion reactions and HDFN?
22. Are anti-S and anti-s capable of binding complement?
23. If an individual lacks the U antigen, what is the rest of their MNS phenotype look like?
24. In what population is the S-s-U- phenotype more common?
25. Are the antibody characteristics of anti-U more similar to anti-S or anti-M?
26. If a patient has formed an anti-U and is transfused U positive units, will this cause a transfusion reaction?
27. The Ena negative phenotype results from what mutation?
28. What antigens does an individual with the En^a negative phenotype lack?

29. The Mk phenotype results from what mutation?

30. What antigens does an individual with the Mk phenotype lack?

31. Which MNS blood group antibodies are commonly found as autoantibodies?