Ideally, a decision maker's diagnostic probability judgments should not be affected by making predictive judgments before making diagnostic inferences. The purpose of this study is to investigate how experience-related knowledge and the inference presentation order affect a decision maker's diagnostic conjunction probability judgments. Specifically, when decision makers are asked to make diagnoses in different judgment domains with which they have different levels of experience, we examine how making predictions first affects their subsequent diagnostic judgments in a standard conjunction paradigm. Professional auditors with experience in the auditing domain and MBA students with little or no auditing experience participated in the experiment. The results indicate that when the task involves a domain with which people have experience, making predictions prior to diagnoses has a significant influence on their subsequent diagnostic conjunction probabilities. When auditors made diagnoses in a familiar audit task situation, they were strongly influenced by whether or not they were asked to make predictions in advance. However, there was no influence of inference order on auditors' diagnoses in a medical task, with which they do not have experience-related knowledge. Similarly, MBA students, having no experience-related knowledge in either audit or medical domains, were not affected by the inference order in making diagnoses. In the discussion of these exploratory results, we suggest that this inference order effect may be due to subjects' anchoring on the predictive probability and insufficiently adjusting it to yield the diagnostic probability judgment.